Agenda Item 452 & 453 TESTIMONY 2:00 PM 183694

RIVER PLAN / NORTH REACH

IF YOU WISH TO SPEAK TO CITY COUNCIL, **PRINT** YOUR NAME, ADDRESS, AND EMAIL.

NAME (print)	ADDRESS AND ZIP CODE	Email
✓ Dan Rohlf	3546 SW Nevada Ct Portland 97219	rohlf@lclark.edu
✓ Darise Weller	9259 NW Germantown Rd Portland 97231	dweller972@comcast.net
✓ Donna Matrazzo	19300 NW Sauvie Island Rd 97231	matrazzo@msn.com
✓ Jeanne Galich	7005 SW Virginia, Portland	galich@europa.com
✓ Francie Royce	1854 NW Aspen Rd,	froyce@comcast.net
✓ Susie Lahsene	PO Box 3529 Ptld 97208	susie.lahsene
✓ Dave Harvey	Gunderson	
✓ Alan Sprott	Vigor	
✓ DICK SPRINGER	WEST MULTNOMAH SOIL & WATER CONS DIST	dick@wmswcd.org
✓ Travis Williams	1515 SE Water Ave Pdx 97214	travis@willamette riverkeeper.org
✓ John Mullin	CLF 107 SE Washington Portland 97214	jmullin@oregonlawcenter.org

Date 04-01-10

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RIVER PLAN / NORTH REACH

IF YOU WISH TO SPEAK TO CITY COUNCIL, PRINT YOUR NAME, ADDRESS, AND EMAIL.

NAME (print)	ADDRESS AND ZIP CODE	Email
✓ CURT SCHNEIDER	6904 N CHARLESTON AV 97203	dreamcj@comcast.net
~~ED JAMES~~	10250 NW 110TH	limitonlanduse@gmail.com
~~Ariana Langmeier~~	3577 SE Woodward St	apteryx1@gmail.com

Date 04-01-10

Working Waterfront COALITION

183694

200 SW Market St., Suite 150
Portland, OR 97201

April 1, 2010

Mayor Sam Adams
Commissioner Nick Fish
Commissioner Amada Fritz
Commissioner Randy Leonard
Commissioner Dan Saltzman
City of Portland
1221 SW 4th Avenue
Portland, OR 97204

Dear Council:

The River Plan is an ambitious and complex effort that attempts to address multiple objectives for the Willamette River. Years of effort precede the decision now before you.

While we recognize that limited development activity now subject to city review will be relieved of that obligation under the River Plan, the irony is that those business activities *unique to the Portland Working Harbor* will be subjected to more process and additional costs than they experience now under the present code.

As a practical matter, any significant new development that would increase the business capacity and job creation efforts of companies shipping or receiving product by water would be subject to the proposed River Review provisions, which we believe to be significantly more costly, time-consuming and vulnerable to appeal for any such potential projects. One estimate by an experienced consultant places the cost for additional environmental and biological assessments required by River Review at $150,000. Undoubtedly, there will be other additional costs associated with the complexity of these new regulations and associated time delays. These costs are inestimable but potentially daunting.

In our capacity as decision-makers with regard to future investment in the Working Harbor on behalf of our respective companies, we believe that the proposed plan, if enacted in its current form, will serve to force consideration of alternate locations where such investments are encouraged under a balanced policy approach. Quite simply, River Review is a deterrent to the full utilization of this unique industrially zoned land and will result in lost employment and economic opportunities for the Portland Metro area as a direct result of new development and expansion projects which will not be pursued in the face of such potential increases in economic costs and permitting delays.

To this end, we urge City Council to accept the 1.5% fee-in-lieu instead of River Review for those projects that will go through a Corps of Engineers and Division of State Lands Process. This fee would be paid to the River Restoration Fund and would guarantee that investments are made in the environment, not in an expanded regulatory process.

Sincerely,

Dee Burch
President
Advanced American Construction

T. Alan Sprott
Vice President
Vigor Industrial LLC

Owen Whitehall, SVP and Supply Manager
Gunderson General Manager
Gunderson LLC

Jamie Wilson
NW Director
Schnitzer Steel Industries

Working Waterfront

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Comments on River Plan North Reach

Submittal to Portland City Council

April 1, 2010

Working Waterfront
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Table of Contents

WWC Submittal

Appendix 1 – WWC Letters, Reports and Submittals

Table 1: Specific Recommendations to Improve River Review – Updated with City Responses 2/12 and 3/25

River Review = Cost + Uncertainty + Time = DISINVESTMENT, putting economic strategies at risk (see Table 2).

The WWC has evaluated the River Review process in more detail to identify specific improvements that, *if all are adopted as a package*, could address the major concerns with the River Review process. The specific issues and recommendations are presented below. This package of nine recommendations would retain the City's jurisdiction below ordinary high water and would also ensure local considerations are incorporated into avoid, minimize and mitigate decisions where they make a difference in environmental outcomes.

	Issue/Concern	Description of Issue/Concern	Recommended Solution	City Response 2/12/10, 3/25/10	Status 4/1/10
1.	Inaccurate Mapping and Unnecessary Process for Simple Redevelopment projects	River Review is triggered by the river environmental overlay zone. Aerial photography was basis for determining this overlay zone (the NRI), and in some cases it has resulted in misrepresentation of on the ground vegetation and habitat functions. *e.g.* The surface area on piers with no vegetation are identified as high or medium value natural resources and are subject to extensive environmental River Review.	Provide opportunity for **map corrections in two ways**: (1) before adoption/effective date of river plan, and (2) after adoption through an administrative process. Also establish a clear opportunity to ground truth the City NRI during river review.	City offers (1) Zoning map corrections after adoption but before effective date of River Plan (1/1/2011) (2) Zoning map corrections after adoption and after effective date. (3) A 5-year check for accuracy (4) Ground truth during river review	**Not Resolved.** BPS attempts to address concerns is appreciated but does not go far enough. City should provide opportunity to correct maps BEFORE zoning map and overlay adoption. Since the effective date is not until 1/2011, why is there a rush to adopt incorrect maps? • City Council should not adopt maps if they are in error or procedure was in error. • Issues regarding applicability of inventory criteria may come to light during map correction process. • Postponing correction to an informal process post-adoption unfairly limits legal options for challenge or appeal if map or zoning is in error.
2.	Complex and Costly City Application	Application requirements for development within River environmental zone have increased.	**Streamline Application**: Use same material from State and Federal applications only; streamline application	(1) City is going to pursue a combined City/State/Federal application form. (2) City also asserts it "does not generally require more information than the state and federal agencies require."	**Not Resolved**. (1) Requiring the state/federal agencies to change their application to accommodate the City requirements is not a solution. (2) Unclear why this is necessary if the City "does not generally require more information." This statement also contradicts 2/17/10 hearing and 3/25/10 statements that City information will be broader and include information about other species such as sturgeon and lamprey, which City claims is not required under state and federal.
3.	Uncertain and Potentially High City Mitigation Costs	HEP/HEA model will determine mitigation in lieu fees paid by development project. HEP/HEA model is complex and still under development by City. No models exist today where HEP combined with HEA have been used in this way. Thus, the economic impact of river review is unknown by staff, WWC	**Involve WWC in development of HEP/HEA and bring adoption back to city council** for approval so that City Council understands economic impact prior to implementation. River Plan is not effective until this Second	(1) City Council will hold hearing prior to 1/1/2011 to receive comments on mitigation in lieu fee and HEP/HEA model used to calculate fee. (2) Staff will hold meetings to brief	**Not Resolved.** (1) It's unclear whether City Council hearing will result in City Council decision. City Council should be accountable for economic impact of River Plan, and the

		and City Council until values are fixed and process is established.	Check-In with Council.	interested parties and keep stakeholders up to date. (3) 3/25/10 Solicitation of Advisory Panel	fee calculator is the key determinating factor. This should not be left to an "after the fact" administrative decision. (2) Briefing WWC is not the same as involving WWC in the development. (3) Scientific Advisory Panel – WWC appreciates opportunity to recommend members and this is more in line with including WWC in process.
4.	Expensive Process with little to no Environmental Gain Need flexibility to encourage business to redevelop	Where there is already dense existing river-dependent uses and structures, the applicant and City staff will spend time and money on paperwork and transactions with little to no environmental improvement. The T6 Honda Dock and BP Case Studies presented by the City are evidence of this (BP showed no additional mitigation $ required; T6 Honda Dock showed $2,000 in additional mitigation $ owed). As a result, existing businesses have less flexibility in redeveloping their existing facilities for changing market needs.	**<u>Add exemption</u>** for re-development that occurs at already developed in-water structures (docks, piers) below ordinary high water that are not adjacent to high or medium value upland resource. Include a fee in lieu based on project cost to put money toward habitat improvement. This is based on the following policies: state and federal agencies require the party to avoid, minimize and mitigate; City workshop examples demonstrated that additional mitigation above state and federal requirements is 0 to minimal where there are already existing highly altered banks and in-water structures; helps meet river plan goal of encouraging business to retrofit existing areas that are already highly altered and strengthen protection of existing industrial land uses; effectuates City's goal to "de-regulate" 4.5 miles of the working harbor.	(1) City looking at thresholds under which an applicant could mitigate off site without using the HEP/HEA model, but the applicant would still be required to demonstrate they have avoided and minimized impacts. (2) Note is also made that the case studies used should not be relied upon because there has not been any scientific review by the science review panel.	**<u>Not Resolved</u>**. (1) Requiring an avoid/minimize analysis for redevelopment at existing developed facilities does not make sense—more paperwork with little environmental benefit. (2) WWC is very concerned that there is still so much uncertainty with how River Review will or will not impact simple re-development and improvement projects at existing facilities. (3) Changes to exemptions in 3/25/10 amendment package were clarifications of City's intent not to regulate development on top of existing docks and paved areas because of low natural resource value. Requests by WWC to exempt other development, repair and replacement associated with existing facilities were rejected by staff based on direction that large policy changes were not subject to discussion.
5.	Predictability for Business to Encourage Redevelopment	Current standards in code are a good start, but they have one fatal flaw: the mitigation component is onerous rendering the utility of the standard meaningless. For example, mitigation is based purely on surface area of project and requires 3:1 mitigation off-site prior to implementation of the development project. There is no option for a fee in lieu. In addition, the list of standards are limited – more than	**<u>Improve and add standards.</u>** Add standards for some uses and modify existing standards to streamline review for certain projects. Improve existing standards by allowing for payment in lieu of mitigation for the projects that go through the "standards track" based on a percentage of project costs. While this	(1) Amendment is proposed to allow payment of a fee in –lieu of mitigation. (2) City willing to consider additional standards. (3) 3/25/10 – Standards were not accepted.	**<u>Not Resolved</u>** (1) Fee in lieu amendment is positive step, but until fee schedule is adopted the usefulness will remain uncertain. For example, if the fee is so great that it significantly overestimates impacts to natural resources, it is not a viable option for an

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		anywhere else in the City.	will require more upfront work by staff and WWC, WWC believes improved and increased standards would help provide more predictability. Standards can be evaluated and improved as necessary based on actual projects at the 2-year review.		applicant. Removal of 3:1 ratio for offsite mitigation is also positive. (2) & (3) Conversations with BPS staff regarding standards were done in good faith and the conversations were productive. However, standards were not added. It is our understanding that staff did not have the authority to incorporate standards that involved policy changes.
6.	Uncertain Process and Potential Delay	The additional process and uncertainty associated with river review adds time, cost and possible delays to projects. It also puts projects at greater risk of appeal.	**Improve administrative process** of river review. (*e.g.* impose time limits on City review, require City to provide option for enhanced permit review for all permit applications, provide option for Type III appeal, etc.)	City offers a Type IIx process.	**Not Resolved** Type IIx process does not address issues and is not something WWC requested.
7.	Code Places Limits on Mitigation Bank Opportunities (e.g. Demands Use of a HEP/HEA combo).	When adopted, an applicant will have two options for River Review: Mitigate On-site (preferred) or Pay Fee in Lieu. Ultimately, a multi-jurisdictional Mitigation Bank is the River Plan's Goal and WWC supports this. However, such a market is not yet established. For a multi-jurisdictional mitigation bank to work, it must be approved by multiple state and federal agencies. The code dictates that all banks use the City's HEP and HEA combined credit system—a combination that has NEVER been used by state and federal agencies for such a purpose. This may limit market opportunities. For example, Senate Bill 513 convened a state-wide Sustainability Board to work toward ecosystem market development, including mitigation and conservation banks. The City should remain open to coordinating with these other state, federal and private market led efforts.	Keep preference for HEP/HEA but **Provide flexibility in code in support of Mitigation Bank Markets** so that City staff can opt to approve a bank in the event other market-driven methodologies are approved by state and federal agencies in coordination with the City. The code could require that this alternative be equivalent to the HEP/HEA methodology. Also provide flexibility in code for City to approve similar methods for calculating in lieu fees.	City will not require that any particular model be used by a mitigation bank.	**Resolved**
8.	Accountability	Per staff discussion, River Plan Fees- are for the purposes of mitigating for impacts and/ or improving habitat in the North reach not general government uses.		Funds from in lieu fees will be deposited into BES sub account restricted for use for direct costs only (land acquisition, design, construction, and long-term maintenance)	**Resolved – But need code language to confirm**
9.	Cleanup Code	New issue raised 2/17/10 based on changes to code. See letter from Port of Portland to Commissioner Leonard dated2/28/2010.		See letter from City Attorney to Mayor Adams dated 3/16/2010. .	**Resolved**

12/16/09, updated 3/29/10

The City has articulated what it believes to be business advantages to the River Plan. The following is WWC's response to these alleged benefits based on November 2009 River Plan, updated with March 25, 2010 Amendments.

City Assertion	WWC Response
"**Providing certainty to industry by bolstering (sic) sanctuary policy and prohibiting conversion of industrial land to non-industrial uses**."	• This statement ignores the vegetation standard (15 % of Industrial land) and the River Review preference for on-site mitigation. Both requirements effectively convert industrial zoned land to non-industrial uses. • To the extent protections are provided, the City is simply implementing what it is already required to do under Metro's regulations. That is, Metro's regulations already require the City to prohibit quasi-judicial conversion of industrial land to non-industrial uses.
"**Strengthening the River Industrial Overlay Zone as a tool to reserve riverfront industrial land for river-dependent and river-related uses (such as beefing up nonconforming uses and land division provisions)**."	• The River Plan actually increases regulation specifically for river-dependent and river-related uses by adding River Review and making it more time-consuming, complex and expensive to invest and grow harbor related business. This does not strengthen the River Industrial Overlay Zone. • Any minor adjustments to nonconforming use and land division provisions are more than offset by the additional uncertainty, regulation and fees of the new River Review.
"**Improving regulations to increase predictability and flexibility for industrial development and expansion (such as standards for bulkheads, cargo conveyors, rail ROW)**."	• The standards for bulkheads, cargo conveyors and rail ROW were purposefully crafted by the City to have limited applicability. • While the standards may be more predictable, the usefulness will depend upon the fee schedule that is yet to be adopted. The in-lieu fee payment may overestimate actual impacts to the resource. If this is the case, the standards will not be a viable option for most business and they will be forced to do the more time-consuming, uncertain, and complex River Review. This is unknown until fee schedule is adopted. • The standards allow no room for flexibility.

"**Eliminating greenway setback in the River Industrial zone.**"	• Eliminating the greenway setback could be an advantage for businesses who intend to develop within the setback, but only if they are not located within either the new River Environmental Overlay zone or the new Environmental Conservation or Protection Overlay Zone. • River-related and river-dependent uses are located within the new River Environmental Overlay zone, and the regulations have been significantly increased by River Review. Thus any positive stimulus gained by eliminating the greenway setback are offset by River Review for all river-related and river-dependent uses, and for all sites in the newly designated Environmental Conservation and Protection Overlay Zones.
"**Fueling Harbor Reinvestment Strategy through coordinated public and private investments in infrastructure and land development.**"	• The River Plan provides no investments or funding for infrastructure and land development for the Harbor Reinvestment Strategy. • Many of the projects listed in the plan have already been funded or intend to be funded through other means. • The River Plan simply provides a way to keep track of and coordinate the various efforts by federal, state, Port, local and private investments that are already under way or planned. • In other words, the River Plan is not necessary to achieve the Harbor Reinvestment Strategy.
"**Integrating (sic) of local, state and federal permit reviews.**"	• The River Plan code does not provide any requirement to integrate local, state and federal permit reviews for development projects, nor does it provide any guarantees to do so. • Rather, the integration is simply a promise by the City. • In fact, the enhanced permit review process is subject to availability, staff, and resources. • Further, if the City is to achieve its goal to avoid duplication and redundancy of state and federal process, it must know what the outcome of that state and federal process is. Simultaneous review is, by definition, duplicative and redundant. • Local review also adds local procedural requirements, including opportunity for appeals. This creates cost, uncertainty and delay well above that associated with the federal and state process.

"**Providing options for off-site mitigation**."	• River Plan increases mitigation requirement over Greenway Review—more cost and regulation than exists today. • River Plan requires on-site mitigation first unless applicant can prove it is not feasible. • However, it is noted that additional off-site options added plus flexibility in methodology are improvements that have been made since the November 2009 version.
"**Allowing in-lieu fee options to meet vegetation requirements**."	• The in-lieu fee option is based on a requirement to vegetate 15% of the site. Although the amendment is better than prior versions, the notion that 15% of the industrial land should be vegetated is not an economic strategy.

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Working Waterfront
COALITION

200 SW Market St., Suite 150
Portland, OR 97201

February 26, 2010

Mayor Sam Adams
Commissioner Nick Fish
Commissioner Amanda Fritz
Commissioner Randy Leonard
Commissioner Dan Saltzman
City of Portland
1221 SW 4th Avenue
Portland, OR 97204

Dear Council:

We appreciate your attention to our interests in the River Plan. The Working Waterfront Coalition (WWC) is committed to the overarching goals of the River Plan to improve the river environment and strengthen the working harbor. The River Plan can be broken down to a simple formula: increased economic development yields environmental improvements. Stated another way, environmental improvements as outlined in the North Reach River Plan are reliant upon economic investment in the harbor. The City, businesses and environmental interests therefore have a common goal. We believe there are compromises necessary on all sides and we are committed to finding one that achieves this common goal.

It is noteworthy that WWC and the city support a 1 percent fee for habitat through the vegetation standard in the plan. We are also supportive of facilitating development of a North Reach mitigation bank to target habitat improvements in areas of greatest benefit. In addition, WWC is willing to pay another fee (1.5 percent with no cap) *plus* avoid, minimize and mitigate environmental impacts under state and federal law. All of this underscores our interest in improving habitat in the North Reach in the most expeditious manner; by providing dollars for habitat improvement immediately upon development.

We remain concerned that adopting the zoning code without resolving identified outstanding issues would send a message that the plan is about achieving milestones rather than improving habitat in the harbor. This is particularly true given the fact that under any circumstance, the code will not take effect until January 1, 2011.

The WWC is committed to providing information to Council and staff over the month prior to the next hearing. Our understanding of the information or action items requested by Council prior to the next hearing is summarized in the attachment. If there is any other information that Council members need from us in order to make an informed and complete decision, please let me know. We will do our best to provide it to you in a timely manner.

In closing, we are not trying to delay River Plan adoption and implementation. As you know, businesses need certainty. Having the River Plan linger indefinitely does not provide certainty for us. On the other hand, WWC must ensure that the zoning code that is adopted is the best it can be—because every detail matters. Ultimately, whether this happens in April or happens later this year will not change the scheduled implementation date of January 1, 2011.

Very truly yours,

T. Alan Sprott

T. Alan Sprott
Chair, Working Waterfront Coalition
Vice President, Vigor Industrial

TAS:alg

Attachment

Attachment 1. Information Requested by City Council Prior to the Next Hearing

1. Feedback on the February 12 City Response to the 8 amendments outlined in WWC letter to the Mayor dated February 5, 2010.
   - Overall WWC was encouraged by the responsiveness of City staff. Some items have been addressed, some appear promising, however some significant aspects appear to have been rejected or not addressed at all. Amy Ruiz with Mayor Adams office was extremely responsive and attempted to get us the clarifications on the responses and amendment package prior to the hearing February 17. We very much appreciate this commitment by staff. Unfortunately, there simply was not adequate time between Friday and Wednesday evening to make this happen, particularly with the holiday on Monday.
   - WWC will provide a summary of where there may be room for agreement, and where there may still be disagreement on these 8 items within the next week.

2. Response to Commissioner Leonard's Questions regarding the regulation below ordinary high water.
   - How is River Review different from what WWC does today under Greenway Review? Why is WWC willing to pay a fee under River Review? What is the cost to WWC members for going through the process and why?

3. Response to Commissioner Fritz on the fee in lieu:
   - What is the basis for 1.5 percent fee in lieu of river review and City mitigation?

4. Response to Commissioner Saltzman's Question regarding the interaction between the Superfund Site and the River Plan.

5. Identification of Problems with the Changes to the Cleanup Section.

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Working Waterfront
COALITION

200 SW Market St., Suite 150
Portland, OR 97201

February 5, 2010

The Honorable Sam Adams
Mayor, City of Portland
1221 SW Fourth Avenue, Room 340
Portland, OR 97204

Re: North Reach River Plan

Dear Mayor Adams,

The Working Waterfront Coalition (WWC) appreciates all the time and energy you and your staff have devoted to development of the North Reach River Plan. As we approach the first hearing on the River Plan scheduled for February 17, 2010, WWC is still working with your staff to reach an agreement our members would find workable for both environmental and economic sustainability. The WWC supports the goals of the River Plan, and we have a proposed approach to achieve these goals for your consideration.

Introduction
As our members testified at the December 16, 2009 Listening Forum, the businesses in the working harbor care about the environment and habitat, and we want to do our part to improve the river for generations to come. The disagreement is how best to do that.

How do businesses and the City work together to improve the river without sacrificing the City's core manufacturing and job sector? WWC offered to contribute up to 2.5 percent[1] of every project cost into the City's River Restoration Fund *plus* avoid, minimize and mitigate habitat impacts under state and federal environmental laws. The River Restoration Fund could then be used to invest in projects identified by the City, achieving meaningful habitat restoration results. The WWC believes it makes more sense to invest money in habitat, than to spend time and money on paperwork. The WWC's approach would also provide certainty for local permitting, helping to achieve the City's economic goals as well. We still believe that a fee in lieu of River Review would better serve both economic interests and environmental restoration.

However, we understand that this approach does not work for the City because all projects have the potential to bypass river review. The City needs to retain jurisdiction below ordinary high water, ensure businesses compensate for all habitat impacts, and be a local voice at the

[1] This is based on a 1% vegetation standard fee plus a 1.5% mitigation fee based on the natural resource inventory designation, for a total up to 2.5%.

table. While we may not agree with the City, we have worked hard to develop an alternative solution that achieves these City goals while also providing certainty for business.

Rather than providing a blanket bypass of river review, WWC proposes a package of code amendments to fix river review by expanding on existing exemptions and standards, clarifying procedures for map corrections, improving the river review process, and working collaboratively with WWC in development of the mitigation fee in lieu and bank system. Other amendments include providing accountability for the River Restoration Fund and finalizing prior resolutions through code language. We request that you direct staff to work with WWC members to amend the River Plan code as outlined in the proposal below. We understand that further delay is not desirable by the City, and we agree; businesses need certainty too. We recommend that you establish a 60-day period for the amendments to be completed. At the completion of the 60 days, the River Plan would be ready for final adoption by City Council.

Proposal

This proposal is presented as a package. That is, if only some of the elements are accepted, the WWC believes the River Plan will not go far enough toward achieving the economic and environmental goals and we will have no other option but to oppose it. We are hopeful that this proposal is acceptable so that we can move forward on River Plan adoption and implementation. Each component is addressed below.

1. **Amend River Review.**

   Issue: As currently drafted, River Review adds time, cost and uncertainty to local permitting, which is contrary to the stated economic goals. River Review also focuses on process rather than results, reducing opportunities to achieve habitat improvements.

   Solution: Amend River Review in the 7 ways identified in the attached *Table 1*.

   The WWC's major concern has been and continues to be the River Review process because it increases the uncertainty, expense and time for local permitting that, in many cases, exceeds the environmental benefit gained. This will hurt the river-dependent and river-related businesses and jobs that the River Plan is supposed to protect and enhance, and is in direct conflict with the City's stated economic goals (See *Table 2*). The River Review process also creates a risk that the City's habitat goals will not be achieved. Here's why:

   The majority of projects subject to river review will be re-tooling or improving existing waterfront structures and facilities, facilities that have been supporting Portland's economy for decades. For these projects, River Review will result in little to no additional money toward habitat restoration projects under the City's plan. Instead, the City and applicants will spend money on consultants and paperwork. This was demonstrated in two case studies presented by the City on January 28, 2010. By comparison, a simple percentage project fee would yield much greater results for the River Restoration Fund.

Case Study[2]	Construction Cost	Additional Mitigation Fee calculated by City's HEP/HEA above State/Federal Mitigation[3]	1.5% project fee
T6 Honda Dock Expansion	$3.2 million	$2,000	$48,000
BP Wall	$5.2 million	$0	$77,000
Total Amount to City Restoration Fund		**$2,000**	**$125,000**

With that said, these case studies do not represent a new construction project (e.g. a new dock). We understand that for new construction projects, the City may have more at stake in terms of guiding design and ensuring habitat losses are minimized and avoided. While we believe that the state and federal processes are adequate, we are willing to agree to disagree in an effort to move forward on adoption of a River Plan. The key is to ensure that WWC is a partner with the City on the mitigation in lieu fee and credit system, as the outcome of that process will determine whether a new construction project is economically viable or not.

Based on these case studies, we recommend amending River Review to include additional exemptions and standards for projects that occur in areas that are already heavily altered by industrial uses (like the T6 Honda Dock and BP examples above), in combination with a simple mitigation fee (based on percentage of project costs like the WWC fee calculator). This would focus City staff and business resources on habitat improvements rather than paperwork. Projects in areas that are less developed that do not meet the exemptions or standards would be subject to River Review. Under this approach, the City retains its local control and jurisdiction over activities below ordinary high water and habitat improvements can be made.

To address other issues of River Review, we propose map corrections, improvements to the administrative process, involving the WWC with development of the in lieu fee calculator and bank crediting system, streamlining the permit process, and providing flexibility in the code to facilitate mitigation banks. The complete package of 7 key amendments to River

[2] This does not include the Vegetation Standard fee, which could represent an additional 1% of project cost paid into the City's River Restoration Fund, adding $84,000 in total.

[3] City mitigation in lieu fee is required only if City's impact assessment requires more mitigation than state and federal law. Both the BP project and T6 Honda Dock project included habitat improvements already. For example, the T6 Honda Dock project did riparian mitigation pursuant to the state permit, totaling approximately $240,000 in habitat improvement construction costs (not including design and long-term maintenance and monitoring).

Review is described in Table 1. While not ideal, the WWC believes this package is a reasonable middle ground approach to amending River Review in a way that better balances all the River Plan goals.

2. **Ensure Accountability in Code**
   Issue: Vegetation fees and mitigation in-lieu fees are paid into a City-administered River Restoration Fund. In prior conversations, everyone agreed there needs to be transparency and accountability for how those funds are spent. However, the code does not impose any requirements or limitations on the use of those funds. Ultimately, the City will hold industry accountable for improved habitat results; likewise industry must hold the City accountable to use the money contributed into the River Restoration Fund to achieve results. We all want to see success at 2-year, 5-year and 10-year milestones.[4]

   Solution: Create a separate fund with "firewalls" restricting use to habitat improvements (land acquisition, design, construction, and long-term maintenance) at restoration sites in the North Reach; include restrictions in code language.

3. **Finalize Stakeholder Group Resolutions**
   Issue: Much progress was made during the meetings hosted by the Mayor, but WWC, City staff and other stakeholders have not seen the results in the form of final draft code language. Minor language changes may be necessary after WWC review, for example on the Vegetation Standard.

   Solution: Provide draft code language for review to confirm understandings prior to adoption; finalize code language, if necessary, during 60-day period.

The WWC appreciates your consideration of this proposal. We look forward to working with staff over the next 60-days to finalize the River Plan.

Sincerely,

Ann L. Gardner

Ann L. Gardner

Enclosures:
Table 1 and Table 2

[4] It is also important to note that WWC has made other recommendations to ensure habitat goals are achieved. For example, we believe that prioritizing on-site mitigation for all projects is contrary to the City's goal to invest in the habitat restoration sites. This is the way the Greenway Code works today, and based on opinions by stakeholders and the City, the paradigm has to change. We recommended that there not be a prioritization required in the code, but rather a menu of options that the City determines is appropriate based on site circumstances. We recommend that at the 2-year check-in, this issue be evaluated.

Table 2. Mayor's Draft Economic Strategies for the Working Harbor and Recommendations for Success

Economic Strategy/Goal for Working Harbor	Issue under River Plan/River Review	Recommendations for Success[1]
Reaffirmed industrial land policy: strengthened industrial sanctuary retention and improved overlay zoning for river-dependent and river-related uses.	Overlay zoning for river-dependent and river-related uses is more stringent, complex and onerous under new river environmental overlay zone and river review process.	Improve River Review process: • Establish process for map correction outside of river review • Improve administrative process • Streamline Permit Application
Regulatory improvements: increase predictability and flexibility for industrial redevelopment, such as replacing greenway setbacks with environmental overlays	Predictability and flexibility for industrial redevelopment will not increase. New environmental overlays are subject to River Review which is more complex and unpredictable.	Provide predictability and flexibility for projects subject to River Review by: • Add exemptions for activities at existing in-water structures (docks) where state and federal laws are likely adequate to protect habitat and species. • Improve and add standards
A balanced North Reach Plan: an integrated response to the working Harbor's contrasting environmental, access, and economic challenges, providing more certainty for long-term investment	North Reach Plan does not provide more certainty for long-term investment from perspective of Working Harbor businesses.	Provide more certainty under River Review through the following: • Involve WWC in development of HEP/HEA and bring adoption back to city council • Provide flexibility in code in support of Mitigation Bank Markets • Add exemptions • Improve and add standards • Improve administrative process

[1] Recommendations are described in more detail in **Table 1: Specific Recommendations to Improve River Review**

Table 1: Specific Recommendations to Improve River Review

River Review = Cost + Uncertainty + Time = DISINVESTMENT, putting economic strategies at risk (see Table 2).

The WWC has evaluated the River Review process in more detail to identify specific improvements that, *if all are adopted as a package*, could address the major concerns with the River Review process. The specific issues and recommendations are presented below. This package of seven recommendations would retain the City's jurisdiction below ordinary high water and would also ensure local considerations are incorporated into avoid, minimize and mitigate decisions where they make a difference in environmental outcomes.

	Issue/Concern	Description of Issue/Concern	Recommended Solution
1.	Inaccurate Mapping and Unnecessary Process for Simple Redevelopment projects	River Review is triggered by the river environmental overlay zone. Aerial photography was basis for determining this overlay zone (the NRI), and in some cases it has resulted in misrepresentation of on the ground vegetation and habitat functions. *e.g.* The surface area on piers with no vegetation are identified as high or medium value natural resources and are subject to extensive environmental River Review.	Provide opportunity for **map corrections in two ways**: (1) before adoption/effective date of river plan, and (2) after adoption through an administrative process. Also establish a clear opportunity to ground truth the City NRI during river review.
2.	Complex and Costly City Application	Application requirements for development within River environmental zone have increased.	**Streamline Application**: Use same material from State and Federal applications only; streamline application
3.	Uncertain and Potentially High City Mitigation Costs	HEP/HEA model will determine mitigation in lieu fees paid by development project. HEP/HEA model is complex and still under development by City. No models exist today where HEP combined with HEA have been used in this way. Thus, the economic impact of river review is unknown by staff, WWC and City Council until values are fixed and process is established.	**Involve WWC in development of HEP/HEA and bring adoption back to city council** for approval so that City Council understands economic impact prior to implementation. River Plan is not effective until this Second Check-In with Council.
4.	Expensive Process with little to no Environmental	Where there is already dense existing river-dependent uses and structures, the applicant and City staff will spend time and	**Add exemption** for re-development that occurs at already developed in-water

	Gain Need flexibility to encourage business to redevelop	money on paperwork and transactions with little to no environmental improvement. The T6 Honda Dock and BP Case Studies presented by the City are evidence of this (BP showed no additional mitigation $ required; T6 Honda Dock showed $2,000 in additional mitigation $ owed). As a result, existing businesses have less flexibility in redeveloping their existing facilities for changing market needs.	structures (docks, piers) below ordinary high water that are not adjacent to high or medium value upland resource. Include a fee in lieu based on project cost to put money toward habitat improvement. This is based on the following policies: state and federal agencies require the party to avoid, minimize and mitigate; City workshop examples demonstrated that additional mitigation above state and federal requirements is 0 to minimal where there are already existing highly altered banks and in-water structures; helps meet river plan goal of encouraging business to retrofit existing areas that are already highly altered and strengthen protection of existing industrial land uses; effectuates City's goal to "de-regulate" 4.5 miles of the working harbor.
5.	Predictability for Business to Encourage Redevelopment	Current standards in code are a good start, but they have one fatal flaw: the mitigation component is onerous rendering the utility of the standard meaningless. For example, mitigation is based purely on surface area of project and requires 3:1 mitigation off-site prior to implementation of the development project. There is no option for a fee in lieu. In addition, the list of standards are limited – more than anywhere else in the City.	**Improve and add standards.** Add standards for some uses and modify existing standards to streamline review for certain projects. Improve existing standards by allowing for payment in lieu of mitigation for the projects that go through the "standards track" based on a percentage of project costs. While this will require more upfront work by staff and WWC, WWC believes improved and increased standards would help provide more predictability. Standards can be evaluated

			and improved as necessary based on actual projects at the 2-year review.
6.	Uncertain Process and Potential Delay	The additional process and uncertainty associated with river review adds time, cost and possible delays to projects. It also puts projects at greater risk of appeal.	**Improve administrative process** of river review. (*e.g.* impose time limits on City review, require City to provide option for enhanced permit review for all permit applications, provide option for Type III appeal, etc.)
7.	Code Places Limits on Mitigation Bank Opportunities (e.g. Demands Use of a HEP/HEA combo).	When adopted, an applicant will have two options for River Review: Mitigate On-site (preferred) or Pay Fee in Lieu. Ultimately, a multi-jurisdictional Mitigation Bank is the River Plan's Goal and WWC supports this. However, such a market is not yet established. For a multi-jurisdictional mitigation bank to work, it must be approved by multiple state and federal agencies. The code dictates that all banks use the City's HEP and HEA combined credit system—a combination that has NEVER been used by state and federal agencies for such a purpose. This may limit market opportunities. For example, Senate Bill 513 convened a state-wide Sustainability Board to work toward ecosystem market development, including mitigation and conservation banks. The City should remain open to coordinating with these other state, federal and private market led efforts.	Keep preference for HEP/HEA but **Provide flexibility in code in support of Mitigation Bank Markets** so that City staff can opt to approve a bank in the event other market-driven methodologies are approved by state and federal agencies in coordination with the City. The code could require that this alternative be equivalent to the HEP/HEA methodology. Also provide flexibility in code for City to approve similar methods for calculating in lieu fees.

Response to the Working Waterfront Coalition's Table 1: Specific Recommendations to Improve River Review
February 12, 2010

WWC Issue /Concern	City Response
1.Inaccurate Mapping and Unnecessary Process for Simple Redevelopment projects	It will be the City's responsibility to correct zoning map errors at the request of a property owner. This work can be done before or after the River Plan is implemented. The example listed in the WWC table needs some clarification. Docks and piers that are located above the water do not provide natural resource functions per the City's NRI, however the water under the dock or pier does provide multiple riparian functions and wildlife habitat. The construction of accessory structures (no larger than 24 feet by 24 feet) is allowed on a dock or pier without being subject to river environmental zone standards or river review. If there will be impacts below ordinary high water, then river review would be required. **Zoning Map Corrections before adoption/effective date of River Plan.** Property owners can request site visits at the City Council hearing on the River Plan. In their testimony the property owners should indicate why they believe the resource features in the NRI are incorrectly mapped. Staff will conduct site visits prior to September 30, 2010 and, if a revision is warranted, bring back revised zoning maps for an additional council hearing prior to implementation of the River Plan. **Zoning Map Corrections after adoption.** After the River Plan is implemented map corrections can occur though the existing zoning code process for correcting the official zoning maps. The process is a Type II review and it is initiated and paid for by the Bureau of Development Services. Through this process an error can be corrected when a map line that was intended to follow a topographical feature does not do so. Topographical features include the tops and bottoms of hillsides, the banks of water bodies, and center lines of creeks or drainage ditches. ' **A new service the City plans to offer after adoption.** Five years from the date of implementation of the River Plan a property owner can request an NRI accuracy check paid for by the Bureau of Planning and Sustainability. While property owners will not be required to provide the City with a reason for requesting the accuracy check, information about why they think the NRI is inaccurate will be helpful. **Ground truth NRI during river review.** During the course of a river review applicants may submit a site specific environmental assessment prepared by a qualified consultant to more precisely determine the location, type, extent and quality of the natural resources on the site. This assessment may verify or challenge the site feature information in the NRI for the purpose of informing the impact evaluation and identifying the mitigation obligations. (Also see Volume 1B, page 197, item 3.) **Background on the NRI process.** The Willamette River Natural Resource Inventory for the North Reach is an update to the City's adopted natural resource inventory for the Willamette Greenway, which was adopted more than 20 years ago. The new natural resource inventory was developed using a consistent, science-based, replicable methodology to map the riparian corridors and wildlife habitat areas in Portland and assess their relative quantity and functionality. The NRI project is based on the science and approach Metro used to develop an inventory of regionally significant riparian corridors and wildlife habitat.

WWC Issue /Concern	City Response
	Metro's regional inventory was produced and reviewed by experts in various ecological science fields and the public. It was adopted in 2005 as part of the Title 13 Nature in Neighborhoods program. The City has, in consultation with technical experts, updated and refined the natural resource data and model criteria that Metro used to reflect more current information, scientific studies, and targeted field visits. The City conducted additional research and site visits, and further refined the inventory models and special habitat information in preparation of the Willamette River Natural Resources Inventory. The process of developing the North Reach NRI had multiple steps each of which included site visits to ground truth and correct mapping information. Beginning in 2003, BPS staff conducted site visits in the North Reach as part of a stream mapping project. This project refined the City's existing stream data; additional refinements have been made as appropriate, the most recent occurring summer 2009. Aerial photographs were used to map and classify vegetation in the city. Vegetation mapping began in 2004, and the data is updated at least yearly based on new aerials. Some site visits were conducted as part of the original 2004 mapping, and over the years additional site visits have been performed to verify new data. Specifically in the North Reach, staff conducted site visits to refine the protocol for mapping grasslands. When BPS started the River Plan/North Reach NRI, staff (BPS, BES and Parks) conducted a series of site visits to verify data and develop narratives. Staff filled out forms for each site visit, and the forms are included as an appendix to the NRI report. Over the past 3 years staff have continued to go into the field and collect information. While on boat tours of the North Reach, staff have verified bank conditions. Staff have also visited specific sites including the University of Portland, Schnitzer Steel, Siltronic, the south rivergate corridor, the Linnton Community Center, PGE/Harborton, and other sites. When the formal notice regarding the first Planning Commission hearing was sent out several property owners contacted River Plan staff to request a site visit. Staff conducted six site visits in response to these requests. Staff also conducted additional site visits along the Willamette Bluff to refine data during the Planning Commission process. The site visits resulted in either a verification of existing mapping, or changes to the data and/or the narratives contained in the NRI. Overall, staff have visited industrial, residential, open space and commercial sites in the North Reach. *See attachment 1: Environmental Overlay Zone Map Error Corrections Summary*
2.Complex and Costly City Application	The City is going to pursue a combined application form for projects that require approval from City/State/Federal governments. The City does not generally require more information than the state and federal agencies require, however the City does require a written narrative explaining how the application meets the City approval criteria. The narrative is the applicants opportunity to present their case as to why they believe the application meets the City's approval criteria. All City land use reviews require a similar narrative. *See attachment 2: A Comparison of Federal, State and City application Submittal Requirements* *See attachment 3: LUR Application Form*

WWC Issue /Concern	City Response
3. Uncertain and Potentially High City Mitigation Costs	The City Council will hold a hearing prior to the implementation date of the code to receive comments on the mitigation in lieu fee and HEP/HEA the model used to calculate the mitigation fee. In addition, staff will continue to hold meetings over the next year to brief interested parties about the results of the science review panel, and to keep stakeholders up to date on the development of the mitigation in-lieu-fee.
4. Expensive Process with little to no Environmental Gain Need Flexibility to encourage business to redevelop	The City is exploring thresholds under which an applicant could mitigate off site without using the HEP/HEA model. The applicant would still need to show that, to the extent practicable, they have avoided and minimized impacts to the resources. Avoid and minimize is in keeping with River Plan policy. FYI, the case study examples used at the meeting on 1/28/10 were paper exercises conducted without the benefit of a field visit. The method used at the meeting has not been reviewed by the science panel. The science panel may refine the methodology.
5. Predictability for Business to Encourage Redevelopment	The Mayor is recommending an amendment that will allow payment of a fee in-lieu of meeting the river environmental overlay zone development standard that requires mitigation planting. We understand that the Port is going to send us some revised standards and we will review them.
6. Uncertain Process and Potential Delay	The City continues to be committed to improving the administrative process and avoiding any unnecessary delays. **The WWC suggests several ways to improve the administrative process.** These include: A. Imposing a time limit on City review. **Response:** State law and City Zoning Code limit the time within which the City must make a decision on a land use case. In a Type IIx process, the City must make a final decision on the case within 42 of the day the application is deemed complete, and the City can not make a final decision until at least 30 days after the application is complete. If an applicant chooses to participate in the Early Review Process (see attachment 4), they may want to put the application on hold by extending the review period (see attachment 5). This will offer the opportunity for more coordination with other agencies, and allow for the final decision to be informed by the Biological Opinion. The applicant is required to set the amount of time that the application is on hold, however it can not be on hold for more than 245 days. Once the applicant submits the Biological Opinion to the City and takes the City review off hold, the maximum amount of time before a final decision is rendered will be 42 days. As part of the Early Review procedures, City staff will commit to processing the review and rendering a final decision as fast as possible within the bounds of City code. B. Require applicant to opt for enhanced permit review process. **Response:** Not all applicants would benefit from the enhanced process; therefore we prefer to leave the process voluntary at this time. C. Provide option for a Type III appeal. **Response:** Staff does not think that it would be appropriate for river review cases to be decided by the City Council. Type III cases are those that require a substantial amount of discretion and that have a high

WWC Issue /Concern	City Response
	impact on the overall city (e.g. a zone change or land division that will impact lots of people) where discussions such as carrying capacity would be necessary. While a river review is significant for that property owner, the impacts to the broader community are not as significant. **Mayor's proposed amendment:** The Mayor recommends that River Review be a Type IIx process to try to ensure that the applicant gets complete and timely information from the City. The Type IIx process requires notification and information from bureaus before the letter of completeness goes out. The Bureau comments are then included in the incomplete letter. (*see attachment 6*) **Existing process will continue:** If an applicant feels like they are being asked for too much information or staff is not responding in a timely way, they can demand that the City issue a decision. If the City denies the application due to the lack of information the applicant can appeal to the hearings officer. The hearings office could find that the City did not have good reason to ask for the information and reverse staff's decision. If the City Council or the North Reach Advisory Committee believes that provisions in the River Plan are leading to frivolous land use appeals, City Council will request that the Bureau of Planning and Sustainability address the concerns. *See attachment 4: Proposed Coordinated Review Process for Projects below the Ordinary High Water Mark* *See attachment 5: Request for Extension of 120 Day Review Period* *See attachment 6: Type IIx process*
7. Code Places Limits on Mitigation bank Opportunities (e.g. Demands Use of a HEP/HEA combo)	The City will not require that any particular model be used by a mitigation bank. However, the City wants to be sure that whatever model is used is scientifically based and accounts for the loss of resources over time. In addition, the City wants a model that the state and federal agencies can agree to use collectively to determine the required mitigation requirements for a project. This is what we have called "one-stop shopping".
8. Accountability	The funds from in-lieu-fees will be deposited into a BES sub account. The City will restrict the use of the funds to activities directly associated with restoration (e.g., land acquisition, design, construction, and long-term maintenance).

Attachment 1: Environmental Overlay Zone Map Error Corrections Summary
Attachment 2: A Comparison of Federal, State and City application Submittal Requirements
Attachment 3: LUR Application Form
Attachment 4: Flowchart 1: Proposed Coordinated Review Process for Projects below the Ordinary High Water Mark
Attachment 5: Request for Extension of 120 Day Review Period
Attachment 6: Type IIx process

Attachment 1
River Plan / North Reach
Environmental Overlay Zone Map Error Corrections
February 8, 2010

The zoning code includes a process for correcting the official zoning maps. The process is a Type II review, and it is initiated and paid for by the Bureau of Development Services. The types of map errors that can be corrected this way are:

1. A map line that was intended to follow a topographical feature does not do so. Topographical features include the tops and bottoms of hillsides, the banks of water bodies, and center lines of creeks or drainage ditches;

2. When there is a discrepancy between maps and there is clear legislative intent for where the line should be located.

Corrections to the environmental overlay zone lines are typically made based on the first criterion.

The environmental overlay zone lines correspond with physical features on the ground that serve as proxies for natural resource functions. For example, woodland vegetation in the floodplain adjacent to a stream, wetland, or the river is identified as significant natural resource area, and subsequently mapped as an environmental zone, because the area is presumed to provide all of the riparian functions that the inventory is intending to map. If the physical features on the ground, which singly or in combination provide natural resource functions, are not accurately located in the inventory, and therefore on the zoning maps, the zoning maps can be corrected to accurately align with the features. In the same way, if the feature doesn't exist, then the map can be correct to reflect that as well.

The property owner does not have to pay for this type of correction. If a property owner believes that the physical features that represent natural resource function are incorrectly mapped on the their site, they can request in writing or over the phone that the City investigate the error and make a correction if one is found. The Bureau of Development Services asks the property owner to provide a reason why they believe the map is incorrect. It is typically not acceptable to simply say there is an error; the property owner would need to provide a survey, photo or other documentation to support the claim.

Once a map error request is filed, staff from the Bureau of Planning and Sustainability review the request, and review the legislative history of the project that placed the zoning on the site including inventory and all the maps of physical features that were the basis for the zoning. Staff then determines whether the line on the zoning map correctly or incorrectly follows the physical features that City Council intended to include in an environmental zone.

A map error correction can not be used to re-evaluate the scientific justifications that are the basis for the inventory mapping methodology. For example, using the same scenario described above, while a property owner can question where exactly the wooded floodplain is located on their site, they can not argue that an error exists because they do not believe that this particular wooded floodplain provides functions because there are blackberries growing within it.

If a natural resource feature located within an environmental overlay zone is removed without the necessary permits, it would be treated as a violation of the zoning code.

Attachment 2: A Comparison of Federal, State and City Application Submittal Requirements

February 8, 2010 draft

The Corps and DSL utilize a joint application form, but issue decisions individually. Both the Corps/DSL and the City application requirements consist of three main components: Application form, written analysis of project and site plans. The requirements of the two application submittals are detailed below.

The information submitted for the Joint Permit Application form may include most of the information that will be needed to prepare the written findings for the River Review approval criteria. The River Review approval criteria require evaluation of the impacts only to the resources and functional values identified as significant in the City's Willamette River Natural Resources Inventory. The information provided in the joint application form may need to be modified to address the impacts to the City-identified resources and functional values.

Corps/DSL Joint Application	City of Portland – River Review
Application Form: A detailed 8-page form with a combination of check boxes for specific project information and space for written descriptions required to describe project impacts. Form includes: • Applicant/property owner information • Project location information • Specific questions to describe proposed project	**Application Form:** A standardized 2-page form used for all land use review types and proposals. Detailed project information is provided through submittal of site plans and written narrative information. Form includes: • Applicant/property owner information • Site location • Brief project description

Required Written Analysis:
• Project Purpose and Need
• Description of Project, including:
  • Volumes and acreages of all fill and removal activities in waterway or wetland separately
  • Permanent and temporary impacts
  • Types of materials (e.g., gravel, silt, clay, etc.)
  • How the project will be accomplished (i.e., describe construction methods, equipment, site access)
  • Describe any changes that the project may make to the hydraulic and hydrologic characteristics (e.g., general direction of stream and surface water flow, estimated winter and summer flow volumes.) of the waters of the state, and an explanation of measures taken to avoid or minimize any adverse effects of those changes.
• Alternatives analysis – alternative sites and designs evaluation, description of how selected design avoids or minimizes impacts
• Minimizing impacts – identify measures to minimize impacts during and after construction
• Project site resource description – description of physical and biological characteristics specific to wetlands and waterways
• Site Restoration/rehabilitation – for temporary disturbance, restoration of area after construction
• Mitigation – describe reasonably expected adverse effects of the development project and how the effects will be mitigated.
	Required Written Analysis:
	• Description of the project and site
	• **Supplemental narrative** and **Written findings** for each applicable approval criterion (approval criteria for each review type are located within the Zoning Code), including:
	  • Resource site identified from City of Portland Natural Resource Inventory, and description of resources and functional values present on the property
	  • Evaluation of alternatives to the proposal considered to minimize impacts (project locations and designs)
	  • Potential development impacts identified
	  • Mitigation proposed for unavoidable impacts
	  • Monitoring plan for mitigation plantings

Corps/DSL Joint Application	City of Portland – River Review
Required Site Plans: • Location map (with project site indicated) • Project site and activity areas • Existing and proposed contours • Identification of temporary and permanent project impact areas • Location of construction staging and access • Mitigation area, if applicable – work site restoration plan, compensatory mitigation plan (varies depending on whether impacts are to wetland, waterway or riparian areas, or estuarine resources) • Cross section drawings • Recent aerial photo	**Required Site Plans:** • Existing Conditions • Proposed Development • Construction Management • Mitigation
Supplemental Information Required in Certain Situations: When ESA listed species are in the area, the Corps must determine whether a project will affect the listed species. Section 7 ESA requires consultation with NOAA (informal or formal) if the Corps determines that listed species may be affected. The application must include sufficient project information to evaluate the impacts to listed species. Supplemental materials such as a Biological Assessment or other supporting documents may be necessary for adequate analysis.	**Supplemental Information Required in Certain Situations:** If the proposal includes off-site mitigation through the City's mitigation fee-in-lieu option or the purchase of credits from a City certified mitigation bank then the Impact evaluation must include the Habitat Evaluation Procedure (HEP) and Habitat Equivalency Assessment (HEA) scores and all of the data that was produced in order to obtain the scores.

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THE GREENBRIER COMPANIES

The Greenbrier Companies, Inc.

One Centerpointe Drive Suite 200
Lake Oswego Oregon 97035
503 684 7000 Fax 503 684 7553

December 7, 2009

Mayor Sam Adams
City of Portland
Suite 340
1221 SW Fourth Avenue
Portland, OR 97204-1995

Re: City of Portland Proposed River Plan, North Reach

Dear Mayor Adams:

As Chief Executive Officer of The Greenbrier Companies, I am writing to you to express concern regarding the City's proposed River Plan, North Reach and its potential negative impacts on our Gunderson LLC facility that employs, on average, almost 1000 people with family wage jobs. Both individually and as part of the Working Waterfront Coalition, we have actively provided input regarding the proposed River Plan for well over a year.

We appreciate your recent facilitation of meetings that have attempted to bridge the gap between the Bureau of Planning and Sustainability's proposed code and our concerns that it will delay projects, substantially increase project costs, and will not clearly achieve the desired habitat improvements in the North Reach. This letter summarizes our concerns with the proposed River Plan and suggests high level changes to the plan that will achieve marked habitat improvement at a reasonable cost.

At Gunderson/Greenbrier, we support the stated objective of a sustainable, healthy, working harbor. We believe these are not mutually exclusive. With the right approach, the proposed River Plan can be environmentally beneficial, economically viable and socially responsible.

The economic viability of our Gunderson facility—like many others on the Portland waterfront—requires that Portland provide businesses with the tools to be successful; the ability to react quickly to changing market needs and the ability to compete effectively with similar operations in other communities. To accomplish this, we need a permitting process that contains predictability, expeditious review, and certainty. Adding process review time, significant transaction costs and substantial fees will not promote further investment.

We are particularly concerned with the following items:

- The complexity and additional review time required for River Review--for instance, the duplication of permit review considerations for projects that impact the facility below the Ordinary High Water Mark
- The increase in transaction costs and process application costs (estimated five to ten times higher) due to unnecessary use of complex models such as the Habitat Evaluation Procedure
- The extraordinarily high project implementation costs--particularly the mitigation fee structure
- The conversion of substantial areas of productive industrial land to non-productive uses due to the 15% vegetation standard
- The consequent loss of efficiency and flexibility for industrial use at existing and future sites, potentially taking hundreds of acres out of service in the industrial sector at a time when community leaders are concerned about availability of suitable sites for development in Portland
- We believe the Plan is inconsistent with the original concept of a Northwest Industrial Sanctuary, where business would be protected from gradual gentrification and erosion of Portland's industrial core of facilities and capability

At Gunderson/Greenbrier, we understand the importance of Portland's quality of life and the importance of a healthy ecosystem. We live here too. We are willing to contribute our fair share to achieving this objective. Helping the businesses in the harbor area be economically successful will improve ecosystem health by providing a funding mechanism for improvements.

Our proposal is simple: revise the proposed River Plan to streamline the process, reduce duplication of effort, provide for a reasonable and clear fee structure, and avoid the conversion of industrial land. Detailed proposals for a workable River Plan have been proposed by the Working Waterfront Coalition and we support those (see Enclosure 1). Please, do not push ahead with a River Plan that is not completely developed. This will make Gunderson/Greenbrier and other North Reach companies less competitive and will not result in the mutually hoped for improvement in the North Reach ecosystem.

Very truly yours,

Bill Furman

Bill Furman

Chief Executive Officer

Enclosures
cc: City Commissioners

Enclosure 1: Summary of Issues from the Working Waterfront Coalition

November 30, 2009

Working Waterfront Coalition (WWC) members have participated in stakeholder meetings over the past several months regarding the City of Portland River Plan for the North Reach (River Plan). The WWC appreciates the time you have spent listening to our concerns and attempting to address them. While the meetings have been productive, the River Plan continues to present significant issues such that we believe it will not achieve the City's stated goals. Specifically, the River Plan does not establish a viable system to enhance natural resources and support a prosperous working harbor. As we approach our last stakeholder meeting, and just two weeks away from the City Council hearing, we thought it would be helpful to provide a concise summary of our position. WWC remains committed to working with the City on a balanced and thoughtful plan for the North Reach.

River Plan Goals Require Balance

The River Plan has several goals. Two primary goals are as follows:

(1) Enhance and preserve natural resources in the Willamette Greenway in a way that supports watershed health; and

(2) Support economic prosperity in the working harbor.

These goals stem primarily from Statewide Planning Goal 15, The Willamette Greenway, as well as Goal 9. The WWC supports both of these goals and desires to achieve a balanced approach. The River Plan as written (November 18, 2009 Version) will not achieve these goals. Even with the proposed amendments being discussed in the stakeholder meetings, the River Plan will still fall short.

<u>Enhance Natural Resources</u>

We have heard from the City that river health is declining, and significant action is required to reverse this trend. The City has also stated that preservation alone will not improve river health. In order to reverse the trend and enhance natural resources, the River Plan provides for two funding mechanisms from business: (1) when a business develops, it will pay fees to the City's restoration fund (through the vegetation standard); and (2) a business will also be required to mitigate unavoidable impacts to habitat by doing mitigation projects onsite or buying mitigation credits from the City. The money collected through fees and mitigation credits will fund large enhancement projects in the North Reach that identified in the River Plan. Therefore, the City needs investment by businesses in the form of permit fees and mitigation to achieve the River Plan's natural resource goals. Unfortunately, the River Plan discourages businesses from development. This, in turn, decreases the amount of money available for fees and mitigation, significantly slowing down any hope of meaningful and timely progress for natural resources. Moreover, the mitigation credit system is not yet established. If onsite mitigation is not feasible and a business wants to buy mitigation credits to fund a larger, more meaningful project, there are no credits available for purchase.

Economic Prosperity

To achieve economic prosperity in the working harbor, the City must provide Portland businesses with the tools to be successful—the ability to react quickly to changing market needs and the ability to compete with other Northwest communities. Competition even resides internally within a company; Portland facilities that are part of a larger national corporation must compete for limited corporate funds to maintain and expand Portland operations. The uncertainty, time and expense of the City's local permit process as compared to other communities drives whether Portland can capture these market growth opportunities. That is the simple fact of doing business. Portland needs a local permit process that is certain, expedient, and at a reasonable cost. We would be happy to have WWC members meet with you to provide specific examples of how the City's permit process can make or break a growth opportunity for Portland.

With that said businesses here recognize the importance of Portland's quality of life and are willing to contribute money toward enhancement of natural resources. Businesses are even willing to pay more than they are paying today under the current Greenway code. The City's goal, therefore, should be to find the right balance that enhances and preserves natural resources, while also supporting market and job growth opportunities. In so doing, the City must make a policy decision that achieving one hundred percent perfection for one goal would not be balanced, and would not meet the multiple purposes of the River Plan.

While there are many aspects to the River Plan that are problematic, the major impediment to achieving both economic prosperity and natural resource enhancement is River Review. Other issues include Mitigation Banking and the Vegetation Standard. We address each of these issues below.

River Review

Problem

River Review replaces Greenway Review for all areas that were inventoried by the City as high or medium natural resource value (called the River environmental overlay zone). As you can see from the map, the primary focus for River Review are projects that are directly adjacent to or on the river. Areas previously regulated by the Greenway code that are further from the River (low or no value) no longer require review. In that sense, the City claims that the River Plan lessens the regulations for industrial zoned land, thereby achieving the economic prosperity goal. There are several problems with this claim, however.

First, for those activities still subject to review, regulations will increase. River Review is more onerous, expensive, complicated, uncertain and time consuming than the Greenway Review that exists today. The current Greenway Review provides the City with minimal review authority, requires less information and analysis, and has a relatively focused purpose. By contrast, the proposed River Review has a dramatically different purpose that assumes substantially more regulatory authority for the evaluation of environmental impact and mitigation, even in the case where such a review already occurs under federal and state law. River Review requires extensive additional analysis based on a system yet to be developed by the City, creating significant uncertainty, additional time and increased cost over what is required today. To assess

the River Plan's real world impacts, Schnitzer Steel Inc. (SSI) requested a consultant (Floyd Snider) to use SSI's proposed $20 million dock project as an example. The results were staggering. The River Plan would add 1.5 years to project permitting (for a total of 4 years including state and federal permits), and add approximately $250,000 for assessment costs plus $105,000 to $2.5 million in additional mitigation costs for a total increase of $355,000 to $2.85 million. This does not include the Vegetation Standard fee (discussed below), which is another $200,000. As you can understand, the additional time, uncertainty and potential cost of River Review makes it difficult for harbor businesses to be nimble and competitive.[1]

Time, uncertainty and cost of the local permitting process are critical to getting economic development projects and jobs in Portland. This was recognized by the City as a problem over three years—a problem that was supposed to be addressed by the River Plan. On May 16, 2006, the City presented the regulatory issues that need to be addressed through the River Plan code re-write. The City concluded that they "need regulations that provide consistency in interpretation and implementation, predictability, expediency, certainty and inspired design guidelines." (May 16, 2006 Power Point and Meeting Minutes.) Unfortunately, however, the River Plan will increase the complexity of the regulation and decrease certainty for business. The River Plan does not solve the regulatory problem; it simply creates a more significant problem.

Second, River Review increases regulation specifically for water-dependent and river related uses—the very uses that Statewide Planning Goal 15 was intended to protect. As the map shows, the Environmental overlay zone includes all shoreline areas within the North Reach with the exception of bulkheads or sheetpile walls, regardless of current river-dependent uses. Because the medium and high natural resource areas (River Environmental overlay zone) are on or adjacent to the River, water-dependent and river related development will almost always trigger this review. The North Reach is the heart of the City's manufacturing, transportation and maritime trade corridor. River-related jobs—both direct and indirect—are the types of jobs the City wants to keep and grow. Why, then, would the City use the River Plan to increase regulation for these facilities, and then claim that the River Plan will help achieve economic prosperity for these same facilities? This is not good policy and does not support a sustainable working harbor.

In response, City staff have stated that the River Plan provides standards for certain river activities in lieu of River Review, e.g. for pile replacement, and therefore does, in fact, decrease regulation for harbor businesses. This is not the case. The standards are very limited and would not apply to situations where significant opportunities for growth exist. The River Plan states:

> "Rather, the standards in the River Environmental overlay zone have been written to apply only to a narrow set of development types and actions. This means that more development in the River Environmental overlay zone will trigger discretionary review than triggers environmental review in the rest of the city." 33.475.420 Commentary, Volume 1B XXXX.

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[1] For a more detailed comparison of the review required for water-dependent and river related uses today under the Greenway Review to the new requirements proposed under River Review, see Floyd Snider, Technical Memorandum (November 17, 2009).

Even for the limited circumstances that exist, the standards are very stringent, and do not provide a timely and cost-effective option for businesses. For example, all of these standards require 3:1 mitigation based on project area if mitigation cannot be conducted on-site, and there is no opportunity for business to pay a fee in lieu of mitigation. So, before an existing water-dependent business can do a simple pile or bulkhead replacement, it has to find, pay for and implement a mitigation project on a scale of three times the size of the replacement piles or bulkheads. It would also get no consideration for environmentally friendly designs for purposes of determining the mitigation required. City mitigation is a new requirement that does not exist today. (See Floyd Snider, 2009 for further detail.)

Third, the River Plan cannot be said to deregulate industrial activity when one considers the new Vegetation Standard. The Vegetation Standard (discussed further below) applies to all property within the North Reach (high, medium, low and no natural resource value) and represents an additional cost and requirement for all properties in addition to the River Review. It also adds regulation and cost to properties that do not have Greenway review today.

Solution

The WWC believes there is a better way to balance all of the City's goals—to enhance the River and to encourage investment by providing a certain and timely permit process. The WWC presented a tiered fee proposal to the City in February 2009, and again in October 2009. The proposal provides for the following:

- Applicant has the option to either (a) go through River Review to avoid, minimize and mitigate; or (b) pay a fee in lieu of River Review and City mitigation.
- The fee system is based on the City's natural resource inventory. The fee is calculated as a percentage of the total project cost, with a higher fee assessed for projects in high natural resource areas and a lower fee assessed in medium natural resource areas.[2]
- If applicant chooses to pay the fee in lieu to the City, this fee would not be counted toward mitigation required by the federal Clean Water Act and state removal fill laws. In other words, for projects that include work below ordinary high water, applicant will still be required to obtain federal and state permits and avoid, minimize and mitigate impacts to habitat. If mitigation is required by state and federal agencies, the City payment would not be used to meet the required mitigation. The City fee represents something in addition to the federal and state required mitigation.
- The fees collected would be pooled and used by a third-party (accredited and approved by the City) to implement large enhancement projects identified by the North Reach River Plan.

City staff has rejected the WWC proposal because it would not ensure that impacts are minimized or mitigated. If the City's only goal were to preserve and protect the natural resources along the river with one hundred percent accuracy, rejecting WWC's proposed solution would make sense. Likewise, if the

[2] Note that the proposal also provides for a fee in low natural resource areas, not currently regulated under River Review. This was intended to address the enhancement issues. This should be discussed in conjunction with the vegetation standard and fee.

183694

City's only goal was to encourage a prosperous working harbor to the greatest extent possible, there would be no review and no fees for businesses. But City planning is not that simple; there have to be trade-offs and balancing to meet competing goals.

During the last stakeholder meeting, you listened very carefully and recognized that WWC has a valid concern with respect to wanting a certain and timely permit process. We appreciate your ability to evaluate the issues fairly, and urge you to reconsider the WWC proposed solution, based on the following:

- The River Review approach focuses on process and bureaucracy to preserve natural resources. To really enhance the natural resources on the Willamette River and reverse the trends, the City does not need more process and review. What is needed is a system to pool various resources to put toward larger, more meaningful projects.

- If the City proceeds with the new River Review, the City will discourage, rather than encourage, new and continued investment in the working harbor. SSI's dock project is just an example of the real world impacts River Review will have, and the City cannot discount the impact this type of uncertainty and expense will have on economic growth and job opportunities for Portland.

- The trade-off seems worth the gain. Staff has stated that the WWC proposal will allow business to impact natural resources without a requirement to avoid or mitigate for those impacts; however, the facts are not that straightforward.

    - First, most projects performed in the high and medium natural resource areas will also trigger state and federal requirements to avoid, minimize and mitigate for resource impacts.

    - Second, while the state and federal process focuses on threatened and endangered species, these are often keystone species that provide a reasonable surrogate for assessing overall ecosystem impacts. (See Windward Memo).

    - Third, even to the extent there are "additional" habitat impacts over what the state and federal government have assessed, this is addressed by the WWC proposal on a relative basis by using the City's natural resource inventory to assess a fee. Again, the applicant will get no credit for the mitigation performed and will have to pay the full fee to the City. So, under the WWC proposal, the City will get mitigation plus a fee. This, with the vegetation standard fee, can go a long way toward making meaningful natural resource improvements in the North Reach.

    - Essentially, under the WWC proposal, the City is giving up assurance of one hundred percent accuracy on the habitat mitigation determination in exchange for two gains: (1) generate funds to put toward larger enhancement projects, and (2) provide a streamlined, certain and reasonably priced permit process to encourage investment by businesses.

Good policy decisions are balanced; the current proposed River Review approach is not.

183694

Mitigation Bank.

WWC supports development of a multi-purpose North Reach mitigation bank that could be used to address Clean Water Act, state removal-fill laws, Endangered Species Act requirements, and local City requirements. WWC has concerns, however, that the River Plan as written will not achieve this goal. We have discussed our concerns with you in the stakeholder meetings, and the City's proposed amendments appear to be going in the right direction. Due to the limited time, the discussions have been ambiguous as to specifically how the new phased approach would work. It is also unclear to us how the amendments are to be included in a package that is presented to City Council for adoption. Until the WWC sees written code language, we cannot express agreement or consent to any specific approach.

To help City staff as they draft the amendments, we thought it would be helpful to summarize the issues we discussed in the meetings:

- The WWC does not support a system based on a City administered and controlled mitigation bank. Any restoration fund or bank should be administered by a third party to ensure transparency, cost-effectiveness, and unbiased crediting system.
- The City will provide a certification process for third-party administered banks.
- The code should allow the City flexibility in approving the credit system presented by the third-party. The code should not be limited to only approving banks that use HEP and HEA. This area is emerging and developing, and the City should have the ability to approve banks that use other methods that are otherwise approved by state and federal agencies.
- The WWC supports a phased approach, but we need more clarity on the City's plan. The City should not establish new requirements without a system in place to support it. The WWC's in-lieu fee payment could be part of Phase I to help generate funds to create projects, and we would be interested in discussing specifics on how this could work.
- Any mitigation obligations should allow for multiple options including on-site, off-site, and third-party banks. The code should not be prescriptive and inflexible, as it could have unintentional results such as hindering the ability of the City and businesses to invest in large natural resource enhancement projects.

Vegetation Standard

The Vegetation Standard in the code, as written, requires an applicant to vegetate 15 percent of its entire site or pay a fee in lieu of vegetation. Although perhaps not intended, this sends a clear signal to business that Portland does not really want industrial jobs, because nowhere else would consider applying such a standard to industrial land. As we have discussed, the basis for this fee is unacceptable to WWC because it has as its foundation a requirement to convert significant amounts of industrial land into vegetated land that is no longer useful for economic purposes. WWC believes this is inconsistent with Goals 15 and 9. The City's amendment presented at the last meeting is a better approach, and again, we appreciate your recognition of our concerns. Our members are still evaluating how it will impact their specific site, and frankly, some members are still having difficulty understanding and accepting the ultimate goal to vegetate (or pay the equivalent to vegetate) fifteen percent of their industrial site, particularly if no consideration is given for vegetation that may exist on their site for other purposes.

With that said, the primary issue of concern for our members is the River Review, as explained in detail above. If we can come to a reasonable resolution on the River Review issue, our members would likely be more willing to accept the amended vegetated standard with a few minor changes.

Process Issues

We really appreciate the time and energy you have personally invested to ensure that the River Plan is good policy, today and for years to come. We are unclear, however, as to the issues that will be discussed at City Council on the 16th, and how code language is intended to be amended and ultimately adopted. We request that WWC have adequate time to review any new code versions prior to plans for City Council adoption, as the documents are voluminous and very detailed.

On that note, we have gone through the June 2009 version of the code in great detail and we have suggested edits on the less significant issues. We will submit these suggested edits to staff prior to the City Council hearing on the 16th.

Conclusion

WWC is truly committed to finding a solution that achieves coordinated habitat enhancement and a prosperous working harbor. If there are any follow-up questions or clarifications that you need, please do not hesitate to contact me.

183694

KINDER MORGAN
LIQUIDS TERMINALS LLC

Pacific Northern Region - Northwest
5880 N.W. St. Helens Rd., Portland, OR 97210
503-220-1240 PHONE
503-220-1249 FAX

Sam Adams, Mayor
Commissioner of Finance and Administration
City Hall – Room 340
1221 SW 4th Avenue
Portland, OR 97204

December 10, 2009

Dear Mayor Adams,

Kinder Morgan Liquids Terminals LLC (KM) owns & operates two petroleum terminals along the North Reach of the Willamette River in Portland. These facilities are part of the energy cluster in Willbridge & Linnton that handles more than 95% of the total volume of liquid fuels used in Oregon. As you know, Oregon has no petroleum refineries (other than a small asphalt plant) and must therefore "import" virtually all of the liquid fuels consumed in the state.

KM also owns & operates two pipelines in Oregon: a 114-mile line used to transport gasoline & diesel-fuel from Portland to Eugene (with an additional terminal in Eugene); the other an 8.5-mile line used to deliver jet fuel from the Willbridge area through North Portland to Portland International Airport (PDX). The company also conducts several dry-bulk handling operations in Portland and the surrounding area.

The two petroleum terminals have been in operation for many years. Since acquiring the facilities in 2001, KM has invested more than $30 million for connectivity, asset-integrity and renewable-fuels' handling improvements (with no city, state or federal subsidies or credits). The Oregon Line (Portland to Eugene) is one of the few multi-product pipelines in the U.S. used to transport finished biodiesel (B2). This allows fuel suppliers to comply with state-wide biodiesel requirements in a relatively efficient & cost-effective manner.

More investment & additional improvements to this critical infrastructure are needed. KM and others are willing to undertake such investments & improvements if it's economically justifiable to do so.

We understand that a strong desire exists to move away from the use of fossil fuels, and that the City of Portland has adopted a Climate Action Plan (CAP). We believe that most targeted goals are ultimately achievable, but that it's likely to take longer to meet some of the targets than currently envisioned. The continued use of certain fossil fuels, especially natural gas, cleaner-burning gasoline, and ultra low sulfur diesel fuel, provides a bridge to

the future. The city (and state/region) thus necessarily remains dependent upon a well-functioning, constantly-renewing energy sector to attain its CAP goals.

KM supports natural resource restoration along the Willamette River. The company is willing to pay more in up-front development costs to help make this happen. What KM is not willing to do is to pay unreasonable & unjustifiably-high additional development costs for this purpose. We likewise need a permitting-environment that's not more cumbersome & complex. We also believe that the city needs to eliminate, not increase, conflicting land-uses in heavy industrial areas along the working waterfront.

The River Plan for the North Reach, as proposed today, does not meet balanced criteria with respect to additional fees, a clearer, more-streamlined permitting process, or avoidance of land-use conflicts. Unfortunately, as proposed today, River Plan's cost is far too burdensome; the River Review process is duplicative (especially for in-water development) & way too uncertain; and conflicting-use is actually promoted (e.g., a proposed greenway trail immediately adjacent to our Linnton terminal; a restoration site right next to our marine dock in the Willbridge tanker basin). As proposed today, River Plan will **discourage** investment in industrial & energy infrastructure along the North Reach, and, ironically, will **undermine** the city's efforts to improve natural resource habitat in the area.

We've participated throughout the River Plan process to help achieve balance, and will continue to do so. However, despite the professed openness by city officials to consider a more balanced approach to River Plan, it appears that natural resource enhancement is the only real driving-force behind River Plan...this for the industrial North Reach. We agree that Portland can be both green and prosperous. But you and other city officials must insist that more pragmatism be forged into River Plan if it's to work. Otherwise, it will backfire on the city in terms of investment, job growth and sustainability.

We respectfully urge re-consideration and modification of key elements of River Plan before the city adopts any code amendments. In this regard, the Working Waterfront Coalition has offered many useful suggestions and compromises throughout the River Plan development process. Please re-consider these to arrive at a policy that's realistic.

Sincerely,

KINDER MORGAN LIQUIDS TERMINALS LLC

R. H. Mathers
Director Business Development – Northwest Terminals

Cc: Amanda Fritz
Nick Fish
Randy Leonard
Dan Saltzman

183694

Working Waterfront
COALITION

November 30, 2009

VIA EMAIL

Mayor Sam Adams
City of Portland Mayor's Office
Suite 340
1221 SW Fourth Avenue
Portland, OR 97204-1995

Re: City of Portland River Plan, North Reach

Dear Mayor Adams:

Working Waterfront Coalition (WWC) members have participated in stakeholder meetings over the past several months regarding the City of Portland River Plan for the North Reach (River Plan). The WWC appreciates the time you have spent listening to our concerns and attempting to address them. While the meetings have been productive, the River Plan continues to present significant issues such that we believe will not achieve the City's stated goals. Specifically, the River Plan does not establish a viable system to enhance natural resources and support a prosperous working harbor. As we approach our last stakeholder meeting, and just two weeks away from the City Council hearing, we thought it would be helpful to provide a concise summary of our position. WWC remains committed to working with the City on a balanced and thoughtful plan for the North Reach.

River Plan Goals Require a Balanced Plan

The River Plan has several goals, guided by Statewide Planning Goal 15, The Willamette Greenway, and other goals such as Goal 9. It is also guided by The River Concept, endorsed by City Council in 2006:

> "The North Reach will continue to provide Oregon with access to global markets and support the region's economy as a West Coast distribution hub and heavy industrial area. Environmental cleanup, recreational access, and watershed health actions will contribute to the harbor's long-term vitality."

Based on that, two primary goals of the River Plan are as follows:

(1) Enhance and preserve natural resources in the Willamette Greenway in a way that supports watershed health; and

(2) Support economic prosperity in the working harbor.

The WWC supports these goals and desires to achieve a balanced approach. Unfortunately, the River Plan as written (November 18, 2009 Version) will not achieve these goals. Even with the proposed amendments being discussed in the stakeholder meetings, the River Plan will still fall short.

Enhance Natural Resources

We have heard from the City that river health is declining, and significant action is required to reverse this trend. The City has also stated that preservation alone will not improve river health. In order to reverse the trend and enhance natural resources, the River Plan provides for two funding mechanisms from business: (1) when a business develops, it will pay fees to the City's restoration fund (through the vegetation standard); and (2) a business will also be required to mitigate unavoidable impacts to habitat by doing mitigation projects onsite or buying mitigation credits from the City. The money collected through fees and mitigation credits will be optimized by funding larger projects in the North Reach that improve fish and wildlife habitat. Therefore, the City needs investment by businesses in the form of permit fees and mitigation to achieve the River Plan's natural resource goals. Unfortunately, the River Plan as currently envisioned discourages businesses from development. This, in turn, decreases the amount of money available for fees and mitigation, significantly slowing down any hope of meaningful and timely progress for natural resources. Moreover, the mitigation credit system is not yet established. If onsite mitigation is not feasible and a business wants to buy mitigation credits to fund a larger, more meaningful project, there are no credits available for purchase.

Economic Prosperity

To achieve economic prosperity in the working harbor, the City must provide Portland businesses with the tools to be successful—the ability to react quickly to global, regional and local market conditions and the ability to compete with other Northwest communities. Competition even resides internally within a company; Portland facilities that are part of a larger national corporation must compete for limited corporate funds to maintain and expand Portland operations. The uncertainty, time and expense of the City's local permit process as compared to other communities drives whether Portland can capture these market growth opportunities. That is the simple fact of doing business. Portland needs a local permit process that is certain, expedient, and at a reasonable cost. We would be happy to have WWC members meet with you to provide specific examples of how the City's permit process can make or break a growth opportunity for Portland.

With that said, businesses here recognize the importance of Portland's quality of life and are willing to contribute money toward enhancement of natural resources. Businesses are even willing to pay more than they are paying today under the current Greenway code. The City's goal, therefore, should be to find the right balance that enhances and preserves natural resources, while also supporting market and job growth opportunities. In so doing, the City must make a policy decision that achieving one hundred percent perfection for one goal would not be a balanced approach, and would not meet the multiple purposes of the River Plan.

While there are many aspects to the River Plan that are problematic, the major impediment to achieving both economic prosperity and natural resource enhancement is River Review. Other issues include Mitigation Banking and the Vegetation Standard. We address each of these issues below.

River Review

Problem

River Review replaces Greenway Review for all areas that were inventoried by the City as high or medium natural resource value (called the River environmental overlay zone). (Maps of those areas are included for your convenience: Map 1 (Current Overlay), Map 2 (Proposed Overlay), and Map 5 (Natural Resource Areas).)[1] As you can see from the maps, projects that would be directly adjacent to or on the river would be the primary focus for River Review. Many areas previously regulated by the Greenway code that are further from the River (low or no value) no longer require review. In that sense, the City claims that the River Plan lessens the regulations for industrial zoned land, thereby achieving the economic prosperity goal. There are several problems with this claim, however.

First, for those activities still subject to review, regulations will increase. River Review is more onerous, expensive, complicated, uncertain and time consuming than the Greenway Review that exists today. The current Greenway Review provides the City with minimal review authority, requires less information and analysis, and has a relatively focused purpose. By contrast, the proposed River Review has a dramatically different purpose that assumes substantially more regulatory authority for the evaluation of environmental impact and mitigation, even in the case where such a review already occurs under federal and state law.[2] River Review requires extensive additional analysis based on a system yet to be developed by the City, creating significant uncertainty, additional time and increased cost over what is required today.

To assess the River Plan's real world impacts, Schnitzer Steel Inc. (SSI) requested a consultant (Floyd Snider) to use a hypothetical $20 million dock project at SSI as an example. The results were staggering. The River Plan would add 1.5 years to project permitting (for a total of 4 years including state and federal permits), and add approximately $250,000 for assessment costs plus $105,000 to $2.5 million in additional mitigation costs for a total increase of $355,000 to $2.85 million. This does not include the Vegetation Standard fee (discussed below), which is another $200,000. As you can understand, the additional time, uncertainty and potential cost of River Review makes it difficult for harbor businesses to be nimble and competitive.[3]

Time, uncertainty and cost of the local permitting process are critical to getting economic development projects and jobs in Portland. This was recognized by the City as a problem over three years ago—a problem that was supposed to be addressed by the River Plan. On May 16, 2006, the City presented the regulatory problems that need to be addressed through the River Plan code re-write including "the number

[1] Note that Map #2 appears to focus on land areas adjacent to the river; however, zoning on the river is not included on the map and one must look at the specific site map to determine the complete zoning designations. Generally, the river itself is included in the River Environmental overlay zone. See, e.g. Map ¼ Section 1819 (attached). Based on this Section 1819 map, it appears that some upland areas are not included as part of the River environmental zone. This discrepancy is an area of ambiguity that makes it difficult for business to have certainty on what will or will not be regulated by River Review.

[2] Generally, state and federal permits are already required for work performed below the ordinary line of high water.

[3] For a more detailed comparison of the review required for water-dependent and river related uses today under the Greenway Review to the new requirements proposed under River Review, see Floyd Snider, Technical Memorandum (November 17, 2009), provided at the November 19, 2009 Stakeholder meeting.

of regulatory processes and lack of coordination among local, State, and Federal agencies; regulatory complexity, redundancy and inconsistency; outdated provisions and irrelevancy to current situations; lack of objective goals; and lengthy, expensive and cumbersome procedural hurdles." The City concluded that they "need regulations that provide consistency in interpretation and implementation, predictability, expediency, certainty and inspired design guidelines." (May 16, 2006 Power Point and Meeting Minutes, available at http://www.portlandonline.com/bps/index.cfm?c=42579&a=119898.) Unfortunately, however, the River Plan will increase the complexity of the regulation and decrease certainty for business. The River Plan does not solve the regulatory problem; it simply creates a more significant one.

Second, River Review increases regulation specifically for water-dependent and river related uses—the very uses that Statewide Planning Goal 15 and the North Reach River Plan was intended to protect. As the maps show, the Environmental overlay zone includes the entire river and all shoreline areas within the North Reach with the exception of bulkheads or sheetpile walls—regardless of current river-dependent uses. Because the medium and high natural resource areas (River Environmental overlay zone) are in, on or adjacent to the River, water-dependent and river related development will almost always trigger this review. The North Reach is the heart of the City's manufacturing, transportation and maritime trade corridor. River-related jobs—both direct and indirect—are the types of jobs the City wants to keep and grow. Why, then, would the City use the River Plan to increase regulation for these facilities, and then claim that the River Plan will help achieve economic prosperity for these same facilities? This is not good policy and does not support a sustainable working harbor.

In response, City staff have stated that the River Plan provides standards for certain river activities in lieu of River Review, e.g. for bulkhead replacement and storm water outfalls, and therefore does, in fact, decrease regulation for harbor businesses. This is not the case. The standards are very limited and would not apply to situations where significant opportunities for growth exist. The River Plan states:

> "Rather, the standards in the River Environmental overlay zone have been written to apply only to a narrow set of development types and actions. This means that more development in the River Environmental overlay zone will trigger discretionary review than triggers environmental review in the rest of the city." (33.475.420 Commentary, Volume 1B at page 40.)

Even for the limited circumstances that exist, the standards are very stringent, and do not provide a timely and cost-effective option for businesses. For example, all of these standards require 3:1 mitigation based on project area if mitigation cannot be conducted on-site, and there is no opportunity for business to pay a fee in lieu of mitigation. So, before an existing water-dependent business can do a simple bulkhead replacement, it has to find, pay for and implement a mitigation project on a scale of three times the size of the replacement piles or bulkheads. It would also get no consideration for environmentally friendly designs for purposes of determining the mitigation required. (See Floyd Snider, 2009 for further detail.)

Third, the River Plan cannot be said to deregulate industrial activity when one considers the new Vegetation Standard. The Vegetation Standard (discussed further below) applies to all property within the North Reach (high, medium, low and no natural resource value) and represents an additional cost and requirement for all properties in addition to the River Review. It also adds regulation and cost to properties that do not have Greenway review today.

Solution

The WWC believes there is a better way to optimize all of the City's goals—to enhance the River and to encourage investment by providing a certain and timely permit process. The WWC presented a proposed solution to the City in February 2009, and again in October 2009. A copy of the proposed fee approach is attached for your convenience. The proposal provides for the following:

- Applicant has the option to either (a) go through River Review to avoid, minimize and mitigate; or (b) pay a fee in lieu of River Review and City mitigation.
- The fee system is based on the City's natural resource inventory. The fee is calculated as a percentage of the total project cost, with a higher fee assessed for projects in high natural resource areas and a lower fee assessed in medium natural resource areas.[4]
- If applicant chooses to pay the fee in lieu, this fee would not be counted toward mitigation required by the federal Clean Water Act and state removal fill laws. In other words, for projects that include work below ordinary high water, applicant will still be required to obtain federal and state permits and avoid, minimize and mitigate impacts to habitat. If mitigation is required by state and federal agencies, the City payment would not be used to meet the required mitigation. The City fee represents something in addition to the federal and state required mitigation.
- The fees collected would be pooled and used by a third-party (accredited and approved by the City) to implement large enhancement projects identified by the North Reach River Plan.

City staff has rejected the WWC proposal because they believe it would not ensure that impacts are minimized or mitigated. If the City's only goal was to preserve and protect the natural resources along the river with one hundred percent accuracy, rejecting WWC's proposed solution would make sense. Likewise, if the City's only goal was to encourage a prosperous working harbor to the greatest extent possible, there would be no review and no fees for businesses. But City planning is not that simple; there have to be trade-offs and balancing to meet competing goals.

During the last stakeholder meeting, you listened very carefully and recognized that WWC has a valid concern with respect to wanting a certain and timely permit process. We appreciate your ability to evaluate the issues fairly, and urge you to reconsider the WWC proposed solution, based on the following:

- The River Review approach focuses on process and bureaucracy to preserve natural resources. To really enhance the natural resources on the Willamette River and reverse the trends, the City does not need more process and review. What is needed is a system to pool various resources to put toward larger, more meaningful projects.

[4] Note that the proposal also provides for a fee in low natural resource areas, not currently regulated under River Review. This was intended as a unified fee system to address the enhancement issues. This should be discussed in conjunction with the vegetation standard and fee.

- Businesses are willing to write checks to jump start such a program and make meaningful improvements to the river. If the City adopts the River Review approach without a fee in lieu of River Review, those checks will not be written and significant progress toward meaningful river improvements cannot be achieved. Businesses will be discouraged from making investments, and where they do, small on-site projects will be the norm. This will leave very few dollars to put toward the River Plan's enhancement projects.

- If the City proceeds with River Review, the City will discourage, rather than encourage, new and continued investment in the working harbor. SSI's illustrative dock project is just an example of the real world impacts River Review will have, and the City cannot discount the impact this type of uncertainty and expense will have on economic growth and job opportunities for Portland.

- When considering the real world applications, the trade-off seems worth the gain. Staff has stated that the WWC proposal will allow business to impact natural resources without a requirement to avoid or mitigate for those impacts; however, the facts are not that straightforward.

    - First, most projects performed in the river environmental overlay zone (high and medium natural resource areas) will also trigger state and federal requirements to avoid, minimize and mitigate for resource impacts.[5]

    - Second, while the state and federal process focuses on threatened and endangered species, these are often keystone species that provide a reasonable surrogate for assessing overall ecosystem impacts. (See Floyd Snider, 2009; and Windward Environmental, Memorandum, November 12, 2009 (both presented to the City on November 19, 2009).)

    - Third, even to the extent there are "additional" habitat impacts over what the state and federal government have assessed, this is addressed by the WWC proposal on a relative basis by using the City's natural resource inventory to assess a fee. Again, the applicant will get no credit for the mitigation performed and will have to pay the full fee to the City. So, under the WWC proposal, the City will get mitigation plus a fee. This, with the vegetation standard fee, can go a long way toward making meaningful natural resource improvements in the North Reach.

    - Essentially, under the WWC proposal, the City is giving up assurance of one hundred percent accuracy on the habitat mitigation determination in exchange for two gains: (1) generate funds to put toward larger enhancement projects, and (2) provide a streamlined, certain and reasonably priced permit process to encourage investment by businesses.

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[5] As the maps indicate, the majority of developed industrial area regulated through the river environmental overlay zone and River Review appear to be below ordinary high water, i.e. in the river. This is shown for the SSI example on Map ¼ Section 1819 (attached for your convenience). Note, however, that there continues to be ambiguity on this issue. For example, compare Map Section 1819 to the general Overlay Map #2. Map #2 appears to cover some limited upland area but this is not shown on the more specific Map Section 1819. (Note also that Map #2 states that zoning of the river is not shown, and one must go to the Section Maps for complete zoning designations). This ambiguity is another example of the uncertainties presented by the River Plan.

Good policy decisions are balanced; the River Review approach is not.

Mitigation Bank.

WWC supports development of a multi-purpose North Reach mitigation bank that could be used to address Clean Water Act, state removal-fill laws, Endangered Species Act requirements, and local City requirements. WWC has concerns, however, that the River Plan as written will not achieve this goal. We have discussed our concerns with you in the stakeholder meetings, and the City's proposed amendments appear to be going in the right direction. Due to the limited time, the discussions have been ambiguous as to specifically how the new phased approach would work. It is also unclear to us how the amendments are to be included in a package that is presented to City Council for adoption. Until the WWC sees written code language, we cannot express agreement or consent to any specific approach.

To help City staff as they draft the amendments, we thought it would be helpful to summarize the issues we discussed in the meetings:

- The WWC does not support a system based on a City administered and controlled mitigation bank. Any restoration fund or bank should be administered by a third party to ensure transparency, cost-effectiveness, and credible crediting system.
- The City should provide a certification process for third-party administered banks.
- The code should allow the City flexibility in approving the credit system presented by the third-party. The code should not be limited to only approving banks that use HEP and HEA. This area is emerging and developing, and the City should have the ability to approve banks that use other habitat assessment and crediting methods that are otherwise approved by state and federal agencies.
- The WWC supports a phased approach, but we need more clarity on the City's plan. The City should not establish new requirements without a system in place to support it. Otherwise, it creates too much uncertainty. The WWC's in-lieu fee payment could be part of Phase I to help generate funds to create projects, and we would be interested in discussing specifics on how this could work.
- Any mitigation obligations should allow for multiple options including on-site, off-site, and third-party banks. The code should not be prescriptive and inflexible, as it could have unintentional results such as hindering the ability of the City and businesses to invest in large natural resource enhancement projects.

Vegetation Standard

The Vegetation Standard in the code, as written, requires an applicant to vegetate 15 percent of its entire site or pay a fee in lieu of vegetation. As we have discussed, the basis for this fee is unacceptable to WWC because it has as its foundation a requirement to convert significant amounts of industrial land into vegetated land that is no longer useful for economic purposes. WWC believes this is inconsistent with Goals 15 and 9. The City's amendment presented at the last meeting is a better approach, and again, we appreciate your recognition of our concerns. Our members are still evaluating how it will impact their

specific site, and frankly, some members are still having difficulty understanding and accepting the ultimate goal to vegetate (or pay the equivalent to vegetate) fifteen percent (or more) of their industrial site, particularly if no consideration is given for vegetation that may already exist on their site for existing Greenway or other purposes.

With that said, the primary issue of concern for our members is the River Review, as explained in detail above. If we can come to a reasonable resolution on the River Review issue, our members would likely be more willing to accept the amended vegetated standard with a few minor changes.

Process Issues

We greatly appreciate the time and energy you have personally invested to ensure that the River Plan is good policy, today and for years to come. We are unclear, however, as to the issues that will be discussed at City Council on December 16th, and how code language is intended to be amended and ultimately adopted. We request that WWC have adequate time to review any new code versions prior to plans for City Council adoption, as the documents are voluminous and very detailed.

On that note, we have gone through the June 2009 version of the code in great detail and we have suggested edits on the less significant issues. In the event that the above issues can be successfully resolved, we recognize that the final task is to work on specific code edits. We would happy to provide our specific edits at that time.

Conclusion

WWC is truly committed to finding a solution that achieves coordinated habitat enhancement and a prosperous working harbor. If there are any follow-up questions or clarifications that you need, please do not hesitate to contact me. We look forward to continuing discussions at our meeting later today.

Sincerely,

Ann L. Gardner

Enclosures

Cc: Commissioner Nick Fish (w/enc.) (via email)
Commissioner Randy Leonard (w/enc.) (via email)
Commissioner Amanda Fritz (w/enc.) (via email)
Commissioner Dan Saltzman (w/enc.) (via email)
Sallie Edmunds (w/enc.) (via email)
Ann Beier (w/enc.) (via email)
Patti Howard (w/enc.)(via email)
Joe Zehnder (w/enc.) (via email)
Paul Ketcham (w/enc.) (via email)
Mike Rosen (w/enc.) (via email)
Bob Sallinger, Audubon Society of Portland (w/enc.) (via email)
Alan Horton, The Freshwater Trust (w/enc.) (via email)

183694

PORTLAND BUSINESS
ALLIANCE
Leading the way

October 20, 2009

The Honorable Sam Adams
City of Portland
1221 SW Fourth Ave., Room 340
Portland, OR 97204

Dear Mayor Adams,

The Portland Business Alliance represents more than 1,400 small, medium and large employers in the greater Portland area. We are writing today to provide comments regarding the proposed draft River Plan.

As you know, the North Reach of the Willamette River is Portland's working harbor. It is Oregon's largest seaport and the area where marine, rail, petroleum pipeline and highway infrastructure come together. The working harbor is also the region's largest heavy industrial area, characterized by facilities such as marine terminals, rail yards, petroleum tank farms, steel mills and heavy equipment manufacturing. This area supports a significant number of related jobs in the Portland metro area. Industrial jobs are higher paying and offer better benefits than the average job in the region.

The lack of clear progress on planning for this area has hampered economic development efforts in the Portland Harbor, and the Alliance appreciates the efforts the city is undertaking to accelerate the crafting of a comprehensive plan for the river and nearby lands. We support the effort to appropriately balance environmental concerns with the needs of water dependent enterprises in the city and to provide a clear and workable set of rules and guidelines for all river users.

The Alliance believes that the Portland Harbor is one of the most important employment areas in the region and deserves special consideration as the heart of the region's manufacturing sector and location of some of the city's most valuable high-wage, high-benefit employment opportunities. History and city, state and national policy have, for decades, focused industrial and marine development in this area, and the entire region benefits from the world-class marine and manufacturing facilities in the harbor. The policies the city adopts regarding the harbor impact not just the city's economic and employment

Greater Portland's Chamber of Commerce
200 SW Market St., Suite 150 • Portland, OR 97201
Phone 503.224.8684 Fax 503.323.9186
www.portlandalliance.com

opportunities, but those of the entire state of Oregon and a good portion of SW Washington. Therefore, extreme caution is called for in evaluating any policy that would negatively impact the viability of industries in the harbor.

The Alliance appreciates the modifications staff has made to the draft proposal in a number of areas after hearing from firms in and around the harbor. However, after hearing from River Plan staff and companies located in the harbor who have extensive knowledge of the draft proposal, the Alliance believes additional modifications are called for and would like to offer the following comments regarding the draft proposal.

Restoration Requirement

Companies operating in the harbor understand the need to provide appropriate mitigation for future development. However, it is not reasonable to require firms in the harbor to shoulder the cost of restoring areas damaged over more than a century of development in the area. Development in the harbor was done according to the standards of the day. The fact that those standards have changed over time cannot be retroactively applied to the current occupants of these sites. Portland was once an old growth forest with fresh water streams, abundant fish runs and vast wetlands. Requiring residents of the city to mitigate for the damage done to the historical environment that allowed them to have a house in Irvington or Ladd's Addition would be seen as absurd. Requiring the same of harbor companies is no less so.

The 15 percent landscape requirement is motivated by a desire on the part of the city to restore river sites. It will remove some of the most productive employment land in the region from use as employment land. It will ultimately result in the loss of jobs and economic activity in the city.

Land along the river is one of the scarcest commodities in the region and forcing it to be removed from productive use seems counterintuitive.

Fee in lieu of restoration. The option of paying a fee, in lieu of providing 15 percent on site landscaping, is not a reasonable alternative, because the requirement to conduct restoration for historical actions is not itself reasonable. There is no reason that harbor related businesses should be held to the restorative standard when no other property in the city is held to that standard.

Policy conflicts. This policy is in conflict with other established city policy, notably the recently adopted Economic Development Plan that calls for the creation of 10,000 new jobs in the next five years. The proposed rules will reduce employment in the harbor and will make new capital investments and the jobs associated with them less likely, retarding both economic and employment growth in the city. The Economic Development Plan relies on the Harbor ReDI proposal to provide strategic land supply to accommodate new traded sector businesses recruited to the city.[1] The proposal is in conflict with that proposal as well.

Harbor ReDI. The proposed plan conflicts with the City's Harbor ReDI effort to bring brownfields back into productive use. The costs and restrictions associated with the new rule will make lands, which in many cases are already uneconomic to build on, even less attractive. These sites are not now developable, and the tools available to the city and state to incent redevelopment are limited. Adding these costs will even further diminish the odds that these sites will come back into productive use in the foreseeable future.

Carbon Action Plan. The proposed plan is also in conflict with the proposed City of Portland and Multnomah County Carbon Action Plan, which calls for no expansion of the Urban Growth Boundary. The city cannot simultaneously call

---

[1] City of Portland, Economic Development Plan. Action 1.1.1. of the Economic Development Plan notes that to compete effectively for manufacturing operations in various Clean Tech & Sustainable Industries (CTSI) sectors, the city, as part of the Harbor ReDI initiative, will complete an inventory of industrial lands and identify up to three sites for acquisition and remediation. The banking of these sites will provide the city with available land for possible recruitment and test the efficacy of investments in remediation.

Action 1.1.10 of the Economic Development Plan notes that the limited supply of developable industrial land threatens the city's ability to recruit new businesses to Portland and meet the expansion needs of existing companies. If not addressed, the limited supply of industrial land furthers the need to expand the urban growth boundary to accommodate industrial expansion, requiring heavy investment in new infrastructure and jobs and tax revenues outside the city.

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for zero expansion in the UGB and at the same time advocate for reducing key industrial employment lands within the city and expect the region to meet its employment and economic development goals.

Protection of Industrial and Employment Lands. It is long standing city policy to protect existing industrial and employment lands within the city. Businesses in the harbor are largely prohibited from converting any of the lands in the harbor from industrial use to other uses such as retail or commercial space. These restrictions are in place to preserve this scarce resource. The city's proposal to require property owners to convert used and usable industrial space to landscaping is in direct conflict with this policy.

Alliance Recommendation. The Alliance recommends that the 15 percent requirement be entirely dropped from the River Plan.

Restoration Sites

It is our understanding that the plan calls for the city to purchase or otherwise control and improve mitigation sites at a cost of approximately $200 million. We further understand that the city would then require all development within the harbor to use only city owned or controlled sites for mitigation. The Alliance is concerned with this proposal on a number of levels.

First, businesses in the harbor have long undertaken mitigation through open negotiation in the market. Successful mitigation agreements have been reached with the Port of Portland, other public entities and with private landowners. A city owned and controlled monopoly on mitigation is not necessary and, like all monopolies, excludes opportunities for the market to identify lower cost options.

Second, this would be both a vertical and a horizontal monopoly. The city would be both regulator - the entity that determines how much mitigation is necessary – and provider. This is an inherent conflict and will lead inevitably to a failure of confidence on the part of those required to undertake mitigation that they are being fairly treated by the city.

Third, the fact that the city will have leveraged itself to the tune of $200 million or more and has an obligation to pay itself back through the charges imposed on developers is an inherent conflict of interest. The city will not assume the

risk of having overpaid for the mitigation sites. That risk will be entirely shifted to business owners. The city will be forced to increase fees to meet its debt obligations regardless of whether those fees reflect the actual value of the mitigation required of developers.

Fourth, the level of fee being proposed appears to be high enough to act as a significant disincentive to new capital development in the harbor. To remain competitive, and to grow jobs as called for in the city's Economic Development Plan, harbor companies must make substantial new capital investments. These investments are difficult to finance and have long return on investment cycles. Adding mitigation fees of the type suggested in the draft proposal will reduce investment in the harbor and will lead to lower employment and less competitive businesses.

Alliance Recommendation. The property owners and employers in the harbor agree that mitigation for projects is necessary and appropriate. It is our understanding that they have proposed a reasonable alternative to the city monopoly, which would allow mitigation on their own properties or on third party sites. This proposal is both workable and sufficient to address the need for mitigation of future projects. We strongly encourage the city to give this proposal positive consideration.

City Regulatory Review below Ordinary High Water

River dependent firms are very concerned with the city's expressed interest in joining the already crowded field of agencies with regulatory jurisdiction in the river below ordinary high water. It is difficult to see what justification the city could have in seeking to exercise regulatory authority over these areas given the extensive rules and regulations that are already enforced by the Coast Guard, Corps of Engineers, National Marine Fisheries, Department of Environmental Quality, Environmental Protection Agency and Division of State Lands. In most of these regulatory processes, the city is a significant stakeholder, is consulted and has significant sway with the regulatory authority.

It is already tremendously difficult to get approval for in water projects through the existing regulatory framework. Even if all the regulatory bodies are in perfect agreement, it is time consuming, expensive and frustrating. Adding yet another, and we would argue, unnecessary regulatory player to this already

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complex process will not serve good interest for the city and will further reduce the desire of companies to invest in needed capital improvements in the harbor.

Alliance Recommendation. We encourage the city to work with the existing regulators to achieve any desired outcome and not pursue independence in water regulatory authority.

Willamette Greenway Trail

The Alliance appreciates the modifications to the proposal that have been made to reflect the real safety, security and access issues associated with locating a trail in an active heavy industrial zone.

Alliance Recommendations. While most of the conflicts have been addressed, the Alliance would urge the city to examine the two remaining at grade trail rail crossings in Linnton and urge consideration of alternative routes that would avoid the need for these dangerous crossings.

Thank you for considering these comments. We appreciate the efforts of the city staff to listen and respond to input from the employers in the North Reach on this issue. While much progress has been made, we feel these changes are necessary to align the River Plan with the city's Economic Development Strategy and help promote both a healthy environment and a robust economy.

Sincerely,

Sandra McDonough

Sandra McDonough
President & CEO

cc: Commissioner Nick Fish
Commissioner Amanda Fritz
Commissioner Randy Leonard
Commissioner Dan Saltzman

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Working Waterfront
COALITION

June 17, 2009

Mr. Don Hanson, Chair
Planning Commission
City of Portland
1900 SW Fourth Avenue
Portland, Oregon 97201

Re: River Plan – North Reach

Dear Chair Hanson:

Members of the Working Waterfront Coalition (WWC) received the new revised River Plan and accompanying code changes (Proposed Plan) one week before the June 17, 2009 deadline for public comment. We remain committed to working with staff to achieve the original vision of River Renaissance. However, the WWC and its members have concerns that the Proposed Plan will result in negative impacts to the City's economy and uncertain improvement to the environment.

River Renaissance committed the City to "promote Portland as a hub for ship, barge, railroad, highway and air transportation and as a Pacific Northwest gateway to the changing global marketplace." We do not believe the Proposed Plan meets this commitment. Rather, the Proposed Plan will impede significant investment in the working harbor, the City, and the region. The Proposed Plan will add significant costs, complexity, and confusion for projects that the River Renaissance program intended to encourage. Why would a company invest in the harbor if permitting and fees are so much more complex and costly than they would be elsewhere? They would not. The Proposed Plan also reduces our ability to compete globally and react quickly to changing market opportunities. This results in lost jobs for the City and region.

As we have said before, the WWC and its members *are* willing to pay more than the status quo for a coordinated strategy involving natural resource enhancement at specific sites, in conjunction with an improved permit process to facilitate jobs and economic development. We have consistently supported these goals and continue to believe that the goals are compatible and achievable. That is why the WWC and its members have devoted hundreds of hours to the River Plan effort.

During the course of our involvement, we have submitted several proposals to the City as compromise solutions that would have generated substantial fees to support the restoration program, even though they would have cost more than what WWC members incur today to accomplish the same projects. These proposals were rejected.

We fully recognize the challenges of developing a code that will address the interests of multiple stakeholders and a complex regulatory climate. However, many of the issues we presented in earlier testimony remain unresolved. These issues include, but are not limited to:

- Fees – excessive in geographic scope and amount
- Industrial land – 15% lost to landscape requirement
- Project review – adds cost and complexity, and delays Superfund and other cleanup projects, absent further modifications
- City review below ordinary high water – redundant with state and federal regulations
- Greenway Trail – operational and safety concerns at some locations
- Restoration Sites – unclear management and implementation plan and uncertain site boundaries

Until these critical issues are resolved, we believe that the Proposed Plan will not enhance the environment or further the economic prosperity of the working harbor. Therefore, we cannot support the Proposed Plan in its present form.

With that said, we remain committed to River Renaissance and the River Plan. We will continue to work with staff as they refine the code. In order to ensure the long-term prosperity of Portland's working waterfront, the WWC believes that this is precisely the time to debate and resolve the details.

Sincerely,

Working Waterfront Coalition
See attached signatures

Glacier Northwest, Inc.

American Waterways, Inc., and
Northwest Pipe Company

J.R. Simplot Company

Gunderson, LLC

Port of Portland

Miller Nash LLP

NRC, Inc., for CLD Pacific Grain, LLC

Vigor Industrial, LLC

Kinder Morgan Liquids Terminals LLC

Perkins Coie

NuStar Energy L.P.

Evraz Oregon Steel

Schnitzer Steel Industries, Inc.

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Working Waterfront COALITION

August 4, 2008

BY HAND DELIVERY

River Plan Committee
c/o Sallie Edmunds
City of Portland
Bureau of Planning
1900 S.W. Fourth Avenue
Portland, Oregon 97201

Subject: Protecting Industrial Lands Within the Working Harbor

Dear River Plan Committee Members:

I am writing on behalf of the Working Waterfront Coalition in support of the increased protection of the City's industrial sanctuary land within the working harbor. Part of the Working Waterfront Coalition's mission is to educate the public regarding the need to protect and enhance prime industrial land along the working harbor for industrial use.

The May 23, 2008, River Plan/North Reach draft, along with the June 2, 2008, errata sheet, recommends that the City prohibit quasi-judicial comprehensive plan map amendments for industrial land identified as Regionally Significant Industrial Areas ("RSIAs") within the working harbor. The purpose of this text amendment is to reduce the pressure to connect RSIAs to other conflicting uses, such as residential and mixed-use zones.

In addition, the current draft recommends that quasi-judicial comprehensive plan map amendments for industrial land within the working harbor, that is not identified as an RSIA, be subject to the Guild's lake Industrial Sanctuary comprehensive plan map amendment criteria, currently set forth in PCC 33.810.050(A)(3). In those cases, in order to prevent the displacement of industrial uses and preserve industrial land primarily for industrial uses, the following criteria would need to be met:

> "a. The uses allowed by the proposed designation will not have significant adverse effects on industrial uses in the plan district or compromise the district's overall industrial character;
>
> "b. The transportation system is capable of safely supporting the uses allowed by the proposed designation in addition to the existing uses in the plan district. Evaluation factors include street capacity and level of

service, truck circulation, access to arterials, transit availability, on-street parking impacts, site access requirements, neighborhood impacts, and pedestrian and bicycle circulation and safety;

"c. The uses allowed by the proposed designation will not significantly interfere with industrial use of the transportation system in the plan district, including truck, rail, and marine facilities; and

"d. The proposed designation will preserve the physical continuity of the area designated as Industrial Sanctuary within the plan district and not result in a discontinuous zoning pattern."

The WWC believes that these criteria provide a common-sense approach for determining whether comprehensive plan amendments should be approved for prime industrial lands along the working harbor. It is absolutely vital that the City limit conversions of prime industrial land along the working harbor, and that it protect all harbor industrial districts from new land uses that can interfere with industrial operations or disrupt the physical continuity of the industrial business located there.

In short, we strongly support your efforts to protect prime industrial land and believe that the recommended protections are consistent with the City's Industrial Sanctuary Policy, River Renaissance, the City's Working Harbor Reinvestment Strategy, Metro Title 4, and Statewide Planning Goal 9, and that they simply make good sense.

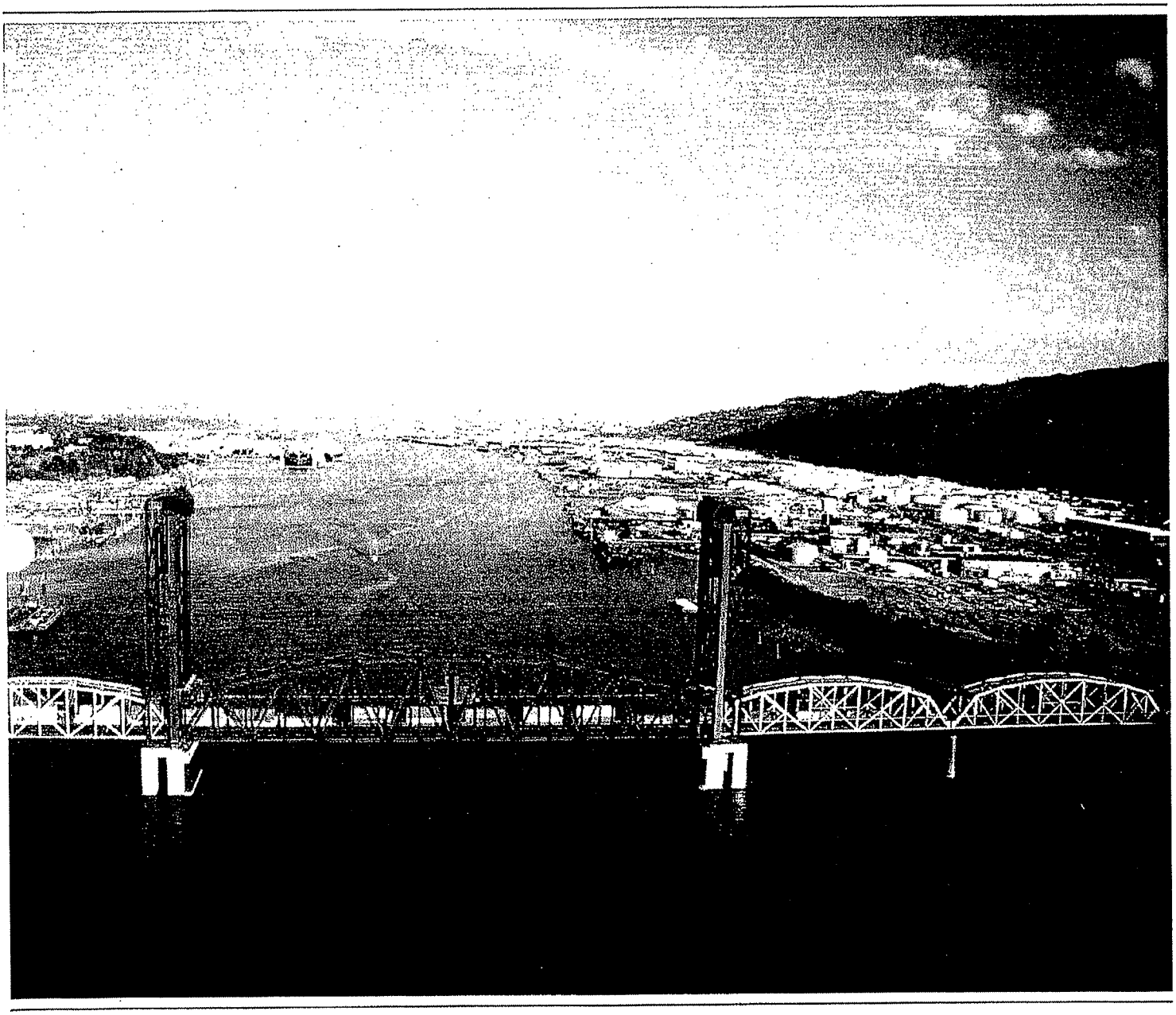
Thank you for your continued efforts in the River Plan effort.

Sincerely,

Phillip E. Grillo
on behalf of the Working Waterfront
Coalition and its members

cc: Mr. Don Hansen

PORTLAND'S WORKING RIVERS:
The Heritage and Future of Portland's Industrial Heartland



Prepared by Carl Abbott

January 2008

PREPARED FOR THE
WORKING WATERFRONT COALITION
C/O SCHNITZER STEEL INDUSTRIES
P.O. BOX 10047
PORTLAND, OR 97296

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EXECUTIVE SUMMARY

Portland is one of a handful of U.S. cities whose riverside location is nearly as important to prosperity and growth today as it was a century ago. The water, rail and energy complex that converges around the lower Willamette River has long supported several industrial sectors, especially primary metals, machinery and equipment manufacturing, distribution and logistics.

Unfortunately, however, the general public isn't familiar with Portland's industrial heart -- its history, its function, its importance. If there is a public image of Portland's working waterfront and heavy industry, it tends to be about problems, such as the Superfund designation or the environmental costs of maintaining the navigation channel.

This report traces the stages of development of Portland's industrial heartland and industrial mix; identifies current issues and places Portland in a comparative context. The report touches on:

- Portland's strategic location at the intersection of the Columbia River Valley and the Puget-Willamette Trough
- The growth of various sectors in Portland: lumber and wood products, agricultural processing, metals and machinery and electronics
- Recognition of how the natural river can live in concert with the commercial and industrial uses on the river
- How Portland's economy is supported by river-dependent and transportation-oriented businesses
- Trends in the region's industrial land preservation and the working waterfront
- Considerations as Portland plans for the future of its harbor and industrial areas

The report concludes by offering specific recommendations for planners, governments, employers, investors and the general Portland populations, including some of the following:

- The public sector should continue to recognize its importance with supportive land use regulations and protections.
- Portland needs to take extreme care and caution before determining that industrial land is no longer viable for industrial uses.
- It is vital to protect and enhance this transportation infrastructure as an economic asset that would require billions of dollars to replace or reproduce, and to promote public awareness of its value.
- Public agencies and private organizations that promote sustainable development have an opportunity to increase their effectiveness by taking advantage of a supportive industrial base.

- As private activity increases in the first decade of the 21st century, it is important to keep the industrial economy on the public agenda.
- Deliberate efforts to maintain this diversification by supporting the continued development of the waterfront transportation/industry complex should be a central element of all regional planning and development efforts.

Historically, Portland has been committed to investing in its working waterfront and industrial complex. Moving forward, the community should remain committed to preserving the resources the city has built over the last hundred years.

PROTECTING PORTLAND'S INDUSTRIAL HEARTLAND

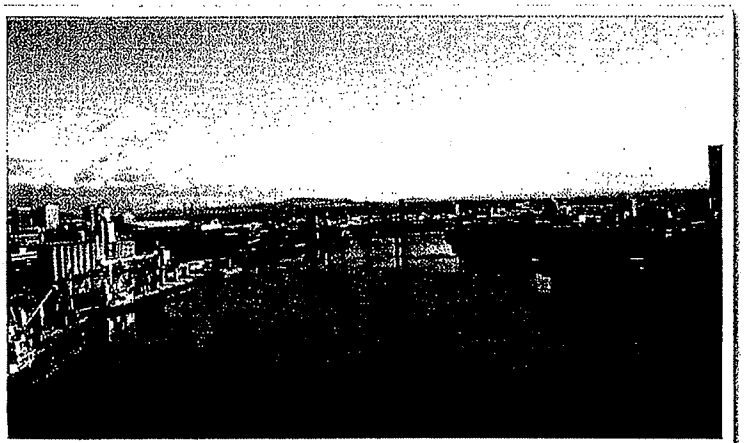
There's a common sentiment with regard to real estate: "They're not making any more land." It is even truer that "They're not making any more rivers."

It's a thought that everyone in Portland should keep in mind. Most cities grew originally because of access to water transportation, whether ocean harbors or navigable rivers. Portland is one of a handful where the riverside location is nearly as important to prosperity and growth as it was a century ago. Rivers are many things: ecological systems, recreational opportunities and real estate amenities. The Willamette and Columbia rivers are all of these, but they are also essential parts of the working economy of the Portland-Vancouver metropolitan area.

Closely tied to the rivers are the city's workhorse railroads, which sought vital connections to river commerce from their beginnings in the 1870s. Because the Columbia River cuts a relatively easy route eastward, Portland has been a natural rail center that pulls freight for eastern markets from Puget Sound as well as the Willamette Valley. The president of the Portland and Western Railroads, which serves much of the Portland harbor, has commented that "industrial land with rail access is also a finite resource." With a few exceptions (like the enormously expensive Alameda Corridor in Los Angeles), the railroad-building era in the United States ended two generations ago, so it's also true to say that they're not really making any more rail-industrial land.

The water/rail/energy complex that converges around the lower Willamette has long supported several industrial sectors, especially primary metals, machinery and equipment manufacturing, and distribution and logistics. These industries have one foot planted solidly on the waterfront, but have also thrived in other industrial areas such as northern Clackamas County and the Columbia Corridor, where companies have also depended to varying degrees on river and rail transportation. To talk about an industrial heartland is to look simultaneously at place and an intertwined set of industries.

This report takes Portland's working waterfront, with its tens of thousands of jobs and its thick infrastructure of transportation facilities, as a starting point. It traces stages in the development of Portland's industrial heartland and industrial mix, identifies current issues and places Portland in comparative context with similar cities.



Portland, like most cities, grew due to access to water transportation.

I. Invisible Industry

The twenty-first century has brought renewed public attention to the Willamette River as a defining feature of Portland. Popular interest in the last decade, however, has focused on the river's environmental and recreational aspects. Waterfront locations have been developed with new upscale housing. City officials have improved general public access with the East Bank Esplanade and other trails. Public and private actors have worked to preserve parts of the natural riverscape, such as Oaks Bottom and Ross Island, within the urban fabric. To different groups of Portlanders today, the Willamette River encapsulates fishing, dragon boat races, scenic cruises, the Rose Festival fleet and an annual armada of decorated Christmas ships. The Columbia means more fishing, pleasure boating, sailing races and summertime camping on Government Island.

At a "Central City Summit" in 1998, 200 civic leaders placed "a healthy river that centers our community" as one of the two highest priorities for the city, along with strong schools. Movers, shakers and idea people agreed that the Willamette "should be more fully embraced as the center and essence of downtown" and that it function as "a transportation way, a playground, a theater, and a scenic resource." Economic uses were noted, but the emphasis was clearly on the river as a personal amenity.

Survey interviews done for the Port of Portland indicate that the general public has little knowledge or information about the Port and its marine terminal operations.

When delivered in September 2007, the final report of a multi-year visioning process organized and overseen by Mayor Tom Potter summarized the ideas of 12,000 Portlanders in forty-five statements about the desired city of 2030. The report lays out six points about the economic future, but none that talk about preserving the working waterfront. It envisions brownfields regenerated into greenspaces and wildlife habitat, not employment sites. Its eleven points about the physical environment include "healthy rivers, streams, wetlands, and ponds" and a Willamette that is "clean enough to swim in and provides abundant wildlife habitat and safe fishing," but mentions nothing about industrial uses, marine terminals, ship repair yards, or ocean-going commerce.

Additionally, survey interviews done for the Port of Portland indicate that the general public has little knowledge or information about the Port and its marine terminal operations.

If there is a public image of Portland's working waterfront and heavy industry, it tends to be compounded of a set of problems including the possibility of breaching Snake River dams, the environmental costs of dredging a 43-foot channel, and the Superfund designation for the lower Willamette. The issue was brought home in the recent debate over rezoning the site of an inactive plywood mill in the Linnton neighborhood for housing. Although the site lies in the heart of the industrial waterfront, sandwiched between tank farms that have been functioning since the early twentieth century, it took a concerted effort by the newly organized Working Waterfront Coalition to convince three Portland City Council members to go against public opinion and block the permanent loss of waterfront industrial land.

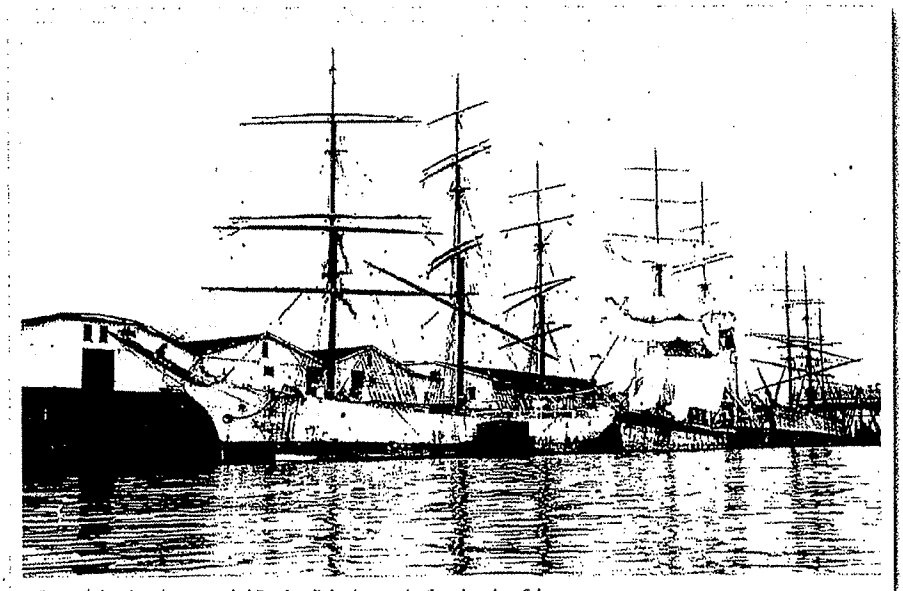
II. Portland: The River City for More Than 160 Years

The Willamette and Columbia rivers have always been central to Portland's economy. They have been arteries for trade among Native American peoples, avenues of European exploration, pathways for Anglo-American settlement, and channels of commerce that made – and still make – Portland the commercial gateway to the American Northwest. To put the history another way, since Asa Lovejoy and Francis Pettygrove first claimed a wide clearing on the west bank of the Willamette River in 1844 and ambitiously staked out streets and lots a year later, Portland has grown alongside and because of its working rivers.

Geographers make a distinction between a city's site and its situation, terms that roughly translate as land and location. The first deals with the microlevel influence of the particular landscape, the second with the macroscale interactions of the city with the nation and world beyond. For Portland, both aspects are deeply – and inextricably connected to its rivers.

1. Portland's selection as preferred port

Portland grew originally because it was the head of navigation for the ocean-going ships of the mid-nineteenth century. The river shallowed above Ross Island, effectively blocking the hopes of Milwaukie and Oregon City. Captain John Couch, who moved his operations from Oregon City to Portland in 1846, announced that the river at Ross Island was surrounded by water only four feet deep and claimed to have ridden across the river on horseback. The fact that Oregon's first steamship was based on the Willamette in Milwaukie was not enough to overcome that town's limitations for ocean-going commerce.



Grain & lumber ships crowded Portland's harbor in the first decades of the century.

The battle between Portland and St. Helens was tougher. Thirty miles closer to the ocean and on the main stem of the Columbia River, St. Helens built a road over Cornelius Pass to the rich Tualatin Valley wheat farms. Portland countered with a road of wooden planks through a lower and more direct pass, the route of Canyon Road. It was the first "paved" road in the Sunset Corridor. Another sandbar, this time at Swan Island, nearly swung the balance to St. Helens, but Portland had better access to the Tualatin Plains and Willamette Valley and therefore more reliable cargoes. When the Pacific Mail Steamship Company decided to terminate its San Francisco-to-Oregon runs at Portland, the contest was over.

One additional point about the Portland waterfront being a prime commerce destination is worth noting: Portland was incontestably on U.S. territory. From 1818 to 1848, the United States and Great Britain controlled the vast Oregon Country as diplomats tried to find an acceptable dividing line. It was clear by the time the Oregon Trail migration started that land on the south side of the Columbia River would end up American. The fate of what is now western Washington was less certain, meaning that Fort Vancouver and its very buildable surroundings were not attractive to settlers from the United States until Portland already had a head start.

2. Portland's Strategic Location

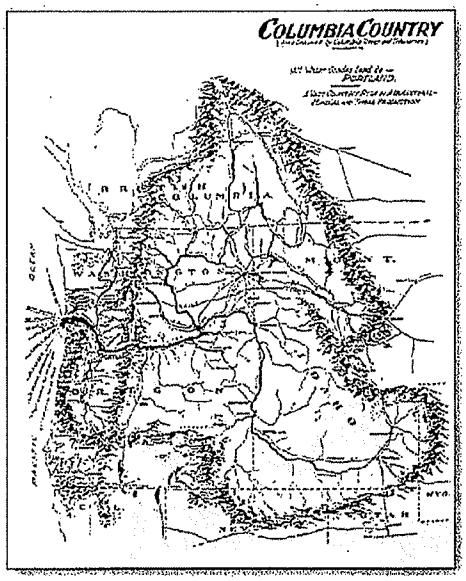
The Portland metropolitan region lies at a natural intersection. Running east to west is the valley of the Columbia River. Extending north to south is the Puget-Willamette Trough, where fault lines have dropped great blocks of land below the parallel coastal mountains and Cascades. To the north, the trough dips below sea level to form Puget Sound and the Strait of Georgia. Further south, it has captured rivers that drain the west side of the Cascade Mountains, diverting the Cowlitz River southward in Washington and the Willamette River northward in Oregon. Even the powerful Columbia bends north between its confluence with the Willamette, where it enters the trough, and the Cowlitz, where it turns again toward the sea. This natural lowland was the obvious route for the first telegraph line in the 1860s, for railroads in the 1870s and 1880s, and for 20th century highways.

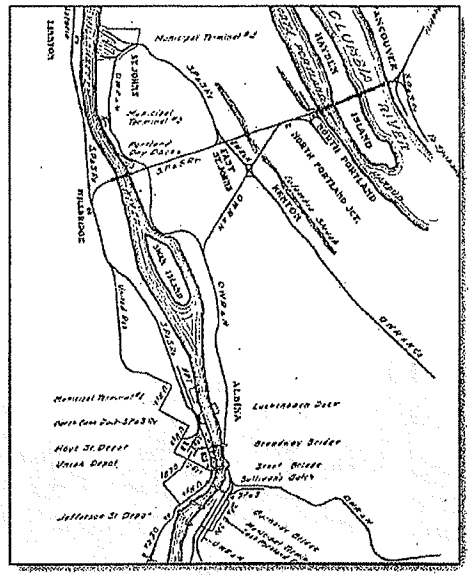
The Columbia, of course, is the Great River of the West that connects the Pacific Ocean to the interior of the Northwest. The river's discharge at its mouth is three quarters of the flow of the Great Lakes/St. Lawrence system and two-fifths of the flow of the Mississippi River. The closest analogy for the Columbia is the Danube, which draws the same volume of water from a comparably sized region (imagine Spokane as Vienna, the Tri Cities as Budapest and The Dalles as Belgrade). The natural geography of the Columbia, which was interrupted by rapids 40 miles upstream from the Willamette, also made Portland the easiest and most logical place for ocean-going shipping exchange cargoes with upstream shipping and then railroads and trucks.

183694

The result of this dual geography is a "city that gravity built." Portland is one of the last generations of American cities that was founded and developed as an ocean-to-river port first and rail center second (the others are Houston and Sacramento).

Since the 1840s, transportation policy has centered on maintaining the functionality of these transportation corridors.

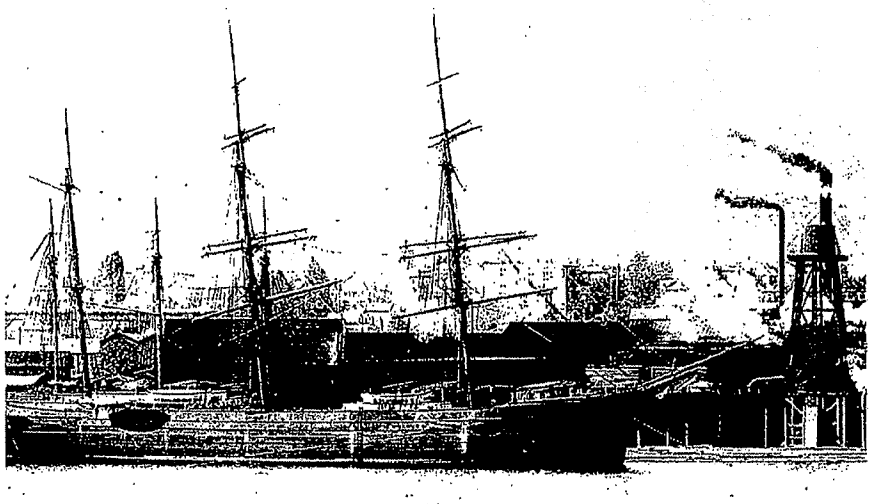




Upstream on the Willamette, commercial navigation was feasible for only a few decades. In 1870, six of the seven largest towns in Oregon were on the Willamette, and steamers regularly served Albany and Corvallis, picking up produce that farmers laboriously hauled to the riverbank. Riverboats even reached up the Yamhill River to Lafayette and McMinnville. With intensive farming and logging, however, the upper Willamette silted up and filled with snags by the end of the century. Railroads had already taken up the slack, with lines on both sides of the valley that connected strings of towns collecting farm and forest products. The 20th century brought highways – 99E, 99W and Interstate 5.

The Columbia River gained an integrated transportation system in the 1860s when Portland entrepreneurs created the Oregon Steam Navigation Company by consolidating transportation interests into an integrated system of steamers, wagon and stage lines and short railroads. It was a "millionaire making machine" for its investors and the transportation key that helped unlock the mineral and agricultural wealth of eastern Oregon, eastern Washington and Idaho. Navigation improvements included a canal and locks around the Cascades and another canal and lock system around The Dalles and Celilo Falls in 1915. In the middle decades of the 20th century, a series of dams across the Columbia and Snake rivers opened barge navigation to Idaho.

Downstream, the Columbia required maintenance and repeated deepening of the channel from Portland-Vancouver to the sea. The Oregon legislature in 1891 created the Port of Portland to construct and permanently maintain a 25-foot ship channel in the Willamette and Columbia rivers "at the cities of Portland, East Portland, Albina, St. Johns and Linnton and from these cities to the sea." Subsequent federal legislation specified and mandated cooperation between the Port of Portland and the U. S. Army Corps of Engineers in maintenance and deepening the Columbia and Willamette channels.



At the turn of the 20th century, factories and warehouses lined the Willamette waterfront. River steamers ran goods and people up and down the Columbia and multi-masted steamers hauled Oregon lumber to California.

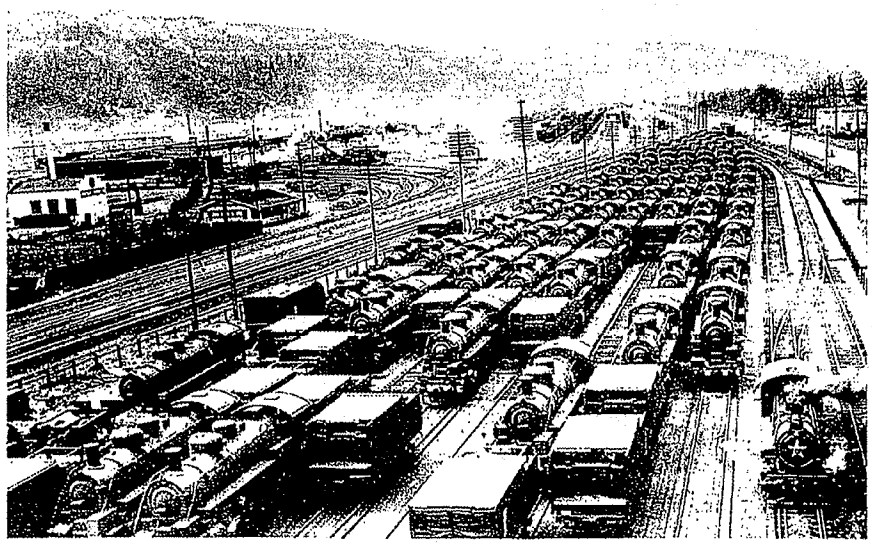
Dredging and fill repeatedly created new industrial land and reshaped the harbor. Couch Lake northwest of the Portland city center turned into Northern Pacific rail yards. Guild's Lake was filled for what is now Portland's Northwest Industrial District. On the east bank, fill made possible the warehouse district between Southeast Grand Avenue and the river. And in the 1920s, the Port of Portland shifted the channel of the Willamette from the east side to the west side of Swan Island, attaching the "island" to the east bank. Rivergate is the most recent example, filled with dredge spoils in the 1960s after it passed from private ownership (as a duck shooting area) to Willamette University and then to the Port of Portland.

In 1910, Portland voters established a Commission of Public Docks over the objections of the mayor. The purpose was to build public docks and marine terminals as alternatives to those owned by railroads or individual businesses. The new Commission opened Terminal 1 on the west side of the Willamette at Northwest Front and Upshur, just north of today's Fremont

Bridge in 1913, following with an east side terminal at the foot of Oak Street across from downtown and then by a terminal at St. Johns.

Railroads, of course, were a second part of the transportation story. In the 1870s, west side businessmen hurried to build rail line south toward California while upstart Ben Holladay, a California transplant with money from freighting and stage coach lines, pushed a rival line southward along the east bank of the Willamette. The city got its first transcontinental rail connection in 1883 with a connection to the Northern Pacific. Board of Trade president Donald MacLeay summed up the excitement in one sentence: "We are now connected to the rest of the world." When a Union Pacific branch linked up with the Northern Pacific in eastern Oregon the next year, MacLeay was doubly right. A towering – and still standing – symbol of the maturing economy was the Union Pacific smokestack in the rail yards below the Albina bluff, built in 1887 on "a foundation that would last for all time."

Nearly a century later, Portland is the meeting point of a 110-mile deep-draft channel to the ocean that carries 30 million tons of foreign cargo each year and a 355-mile barge route to Idaho that carries 8.5 million tons of cargo per year. The Port of Portland owns four marine terminals, Portland International Airport, general aviation airport and several industrial parks. Private docks handle construction materials, fuels, grain and other bulk commodities. Two Class 1 railroads handle heavy freight while trucks rumble in and out of the city on two interstate highways.



These locomotives were built for the Soviet Union under Lend-Lease program during World War II. They awaited shipment to Russia at Guild's Lake (ca. 1945).

III. Baseline Industries

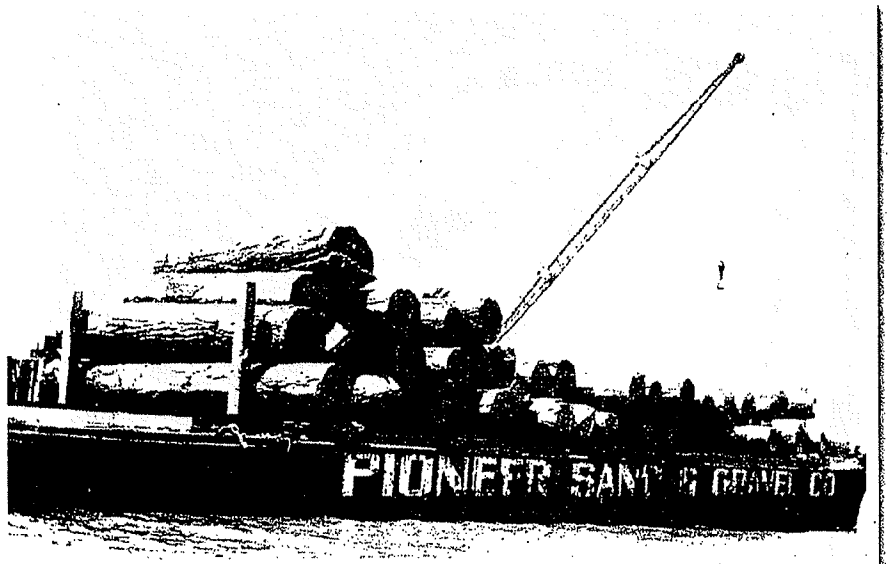
The baseline for Portland's development has remained its ability to link the Northwest and the North American interior with national and world markets. Comprehensive comparisons of the economic roles and functions of American cities have consistently described it as a "commercial hub" or a "regional metropolis." Like Minneapolis-St. Paul, Kansas City or Denver, Portland has had a disproportionate number of workers in transportation, warehousing, wholesaling, and finance compared to national averages, making it "a commercial center for the Pacific Northwest."

Principal employers in the early 21st century are still wholesaling, transportation, finance, professional and health. The interrelated complex of finance, insurance, transportation and wholesaling accounted for 14 percent of Portland-area jobs in 1994, a proportion that is one-third greater than for the United States as a whole. A closely related growth sector is high-end competitive business and professional services. Portland continues to thrive as the regional transportation hub and trading post for Oregon and much of Idaho and Washington. Major exports that move through its marine terminals include wood products, farm products, minerals and electrical machinery. Leading imports are Korean and Japanese automobiles, petroleum and miscellaneous manufactures. On the whole, its bulk export cargos such as minerals and agricultural products account for high tonnage but relatively low value compared to other West Coast ports. In contrast to the high tonnage of exports, Portland has struggled in recent years to attract container lines that bring in high-value containerized manufactured goods.

Portland's manufacturing sector has been characterized by the emergence in sequence of four industrial clusters: first lumber and wood products, then agricultural processing, then metals and machinery, and most recently, electronics. The first two passed their peak as industrial clusters more than two generations ago, although individual companies still thrive. The second two are still large, viable and capable of further innovation and growth.

1. Wood Products

The dominant industrial cluster from the mid-nineteenth century into the 1930s was lumber and wood products. This dominance coincided with the rise and maturity of the Pacific Northwest as the nation's most productive timber region from the early 1900s into the 1960s. Portland sawmills and shingle mills first processed logs from the Willamette Valley foothills, then from the Coast Range and lower Columbia. Logs arrived by water and then by rail for huge mills on both sides of the Willamette, including the Weidler mill in northwest Portland and the Inman-Poulson mill on 37.5 acres in southeast Portland. Using the products and byproducts were factories that turned out crates and boxes, window sashes, doors, architectural features and furniture (memories of some of these companies survive in the names of Doernbecher Hospital, Nicolai Street and John's Landing). Lumber schooners bound for California loaded in the Portland harbor. Portland was the No. 1 lumber shipping and manufacturing center in the world, according to Harper's Weekly of May 24, 1913, and it remained the premier shipper of lumber and wood products into the mid-1920s.



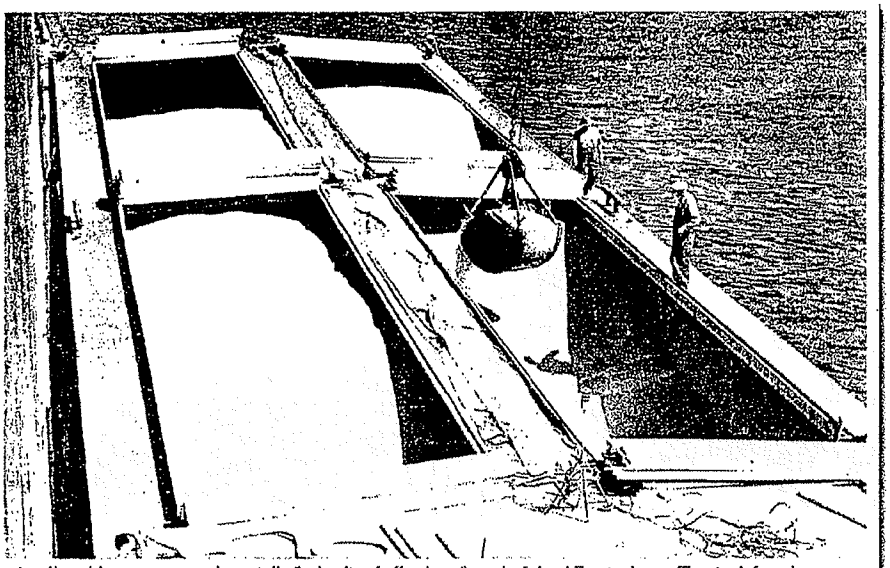
Steel barges hauled logs from the foothills of the Willamette Valley to sawmills along both sides of Willamette river. (ca. 1973)

Activity spanned both sides of the river, combining with railroads and rail yards to create an industrial waterfront that stretched from Fulton (now the Terwilliger neighborhood) to Slabtown and Linnton on the west side and from Brooklyn to St. Johns on the east side. Mills, factories, and transportation facilities were interspersed with working class housing, immigrant neighborhoods and skid road institutions for single male workers.

2. Agricultural Processing

Agricultural processing is a relatively loose cluster that emerged in the later 19th century, developed over the next 50 years and faded in the later 20th century. Its growth was tied to the spread of railroads and agriculture east of the Cascades. The Upper Columbia region grew by 79 percent in the 1900-1910 decade alone as the Northern Pacific and Union Pacific rail systems extended lines and competed for business. Grain and livestock poured into Portland. The Portland waterfront already boasted the Pacific Coast elevator, which could unload grain from eight rail cars and load two ships at the same time and whose million-bushel capacity was unrivaled west of the Twin Cities. Now the city emerged at the nation's No. 1 wheat port in 1910s as Palouse and Pendleton farms came into production. Meanwhile, the expanding livestock industry east of the Cascades in the early 20th century supported two additional industries.

One was woolen textiles and woolen goods, with Jantzen and Pendleton the most prominent



An all-steel barge constructed especially for hauling bulk wheat from the Inland Empire lays at Terminal 4 on the Willamette, waiting to discharge it's 18,000-bushel load. (ca. 1939)

names. Eastern Oregon produced great quantities of wool in the early decades of the 20th century, and small woolen mills sprung up around the state. Jantzen began as Portland Knitting Mills in 1910 and enjoyed explosive success in the 1920s when it developed and marketed lightweight woolen swimwear. Pendleton grew from small mills in Salem and Pendleton but expanded from a Portland headquarters that coordinated production sites from Washougal, Washington, to northern California. Other firms also were part of the industry, such as Portland Woolen Mills in St. Johns, with 500 workers at its peak.

The other agriculture-based industry was meat packing. When the North Bank railroad (now part of the BNSF system) completed its Columbia River line and railroad bridge to Portland in 1907, Swift and Company opened a huge meat packing plant near the Columbia where 1,500 workers processed cattle from eastern Oregon and Washington. Another dozen factories soon followed, and the industry peaked in the years before World War II.

3. Metals, Machinery and Transportation Equipment

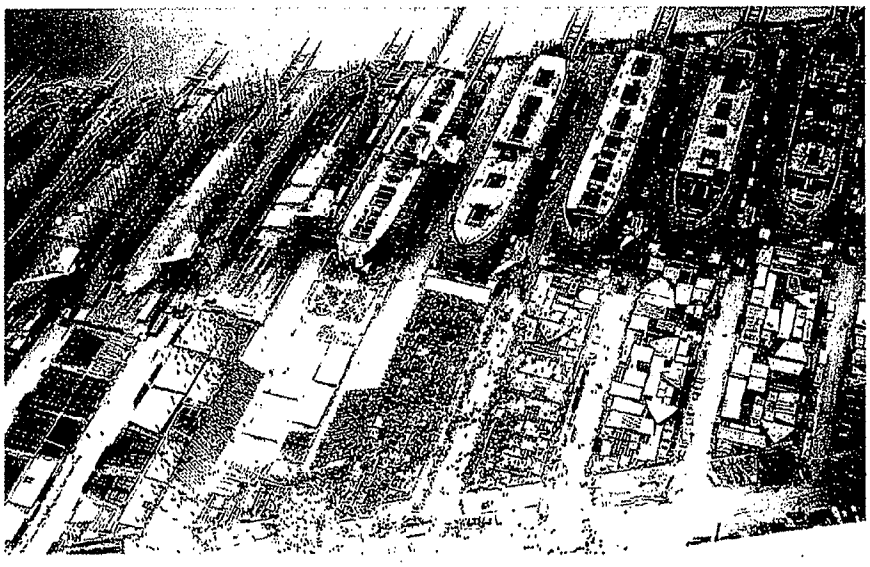
Metals, machinery and transportation equipment is a long-lived cluster that grew up with the 20th century. The industrial complex originated with small manufacturers of building materials (such as a iron for office building construction), farm machinery, logging tools and supplies, and ship repair. In effect, it was a smaller regional version of the manufacturing

powerhouse that the San Francisco Bay Area developed to serve California mining and farming.

World War I brought a dramatic change. The German U-boat campaign destroyed cargo ships faster than European nations and East Coast shipyards could replace them. In 1916, the Northwest Steel Company at the foot of Sheridan Street in south Portland began to fill orders from European shipping lines. The Albina Engine and Machine works soon followed on the strength of orders from Norway. When the U.S. entered the war in April 1917, the U.S. Emergency Fleet Corporation commandeered the ships under construction and declared itself the sole customer for all the merchant shipping Portlanders could build. From 1917 through 1919, Portland shipyards launched 96 steel ships. Total employment in steel shipbuilding peaked at 12,000, with thousands of support jobs in foundries and machine shops.

In the same years, up to 16,000 other Portlanders built 80 wood-hulled cargo ships, particularly at the Grant-Smith-Porter yard at the foot of Baltimore Street in St. Johns. They bought their material from booming Portland sawmills, drew their workers from the large pool of men with woodworking skills and fitted the ships with hardware from many of the same plants that supplied the steel-hull shipyards.

Kaiser shipyard workers.



Portland shipyards built more than 1,000 ocean-going ships during World War II.

Shipbuilding returned like an economic tornado during World War II. The first federal contract went to the Commercial Iron Company in 1940. New orders for minesweepers and patrol craft came to the Albina Shipyard and the Willamette Iron and Steel Company in 1941. In the same year, Henry Kaiser, fresh from helping to build Boulder and Grand Coulee dams, partnered with Todd Shipbuilding to create Oregon Shipbuilding with 11 construction ways in St. Johns. It produced the first of 330 Liberty ships and 120 Victory ships in September 1941. Kaiser bought out Todd early in 1942 and opened Kaiser Company-Portland on Swan Island to build T-2 tankers and Kaiser Company-Vancouver to build LSTs, cargo ships and escort carriers. At the peak in 1943-1944, metropolitan Portland counted 140,000 defense workers – 92,000 with Kaiser, 23,000 at other shipyards and 25,000 in other defense industries. Portland and Vancouver together produced more than 1,000 ocean-going combat and cargo ships.

Portland emerged as one of the nation's largest shipbuilding centers for multiple reasons. It had no large military bases to compete for workers, but its climate allowed year-round work, its inland location protected it from direct attack and the rivers had good depth for medium-draft vessels. It also had a pool of metal workers and a set of small shipyards that provided a foundation for the Kaiser effort.

Partially concealed by the meteoric rise and fall of shipbuilding was a steadily evolving set of specialized producers of construction materials, transportation equipment, machinery and tools, many of them oriented originally to serving the needs of western resource industries.

The following is a small sampling of these firms.

- Schnitzer Steel originated as a scrap recycling company and has grown into one of the nation's leading metal recyclers and is an important manufacturer of steel products.
- The Electric Steel Company (ESCO) poured its first steel casting in 1914 and has prospered by making steel castings for a wide range of customers, first logging and mining operations and now spanning a gamut of industries from logging and mining to aerospace and petrochemicals.
- The Iron Fireman Company, which developed from the Portland Iron and Wire Works, prospered in the 1920s and 1930s by building automated stokers for coal furnaces. It benefited from the pool of skilled workers and from the fact that Portland's transportation connections made it easy to collect and reuse scrap iron from the hinterland – broken log chain, worn-out farm machinery and the like – and ship its output to eastern markets via the Panama Canal.
- Beall Corporation, which located in Portland in the 1930s as Beall Pipe and Tank, now produces specialized trailers and truck beds in north Portland and in other locations inside and outside the Portland area.
- Hyster grew out of the Willamette Iron and Steel Company in the 1930s, with forklifts replacing steam engines in the product line.
- Precision Castparts is a 1953 offshoot of Oregon Chain Saw (later Omark and then Oregon Cutting Systems), itself founded in 1947 to manufacture an innovative product for the forest industry.

4. Electronics

The fourth and most recent addition to Portland's baseline industries has been the "high-tech" complex of measuring and sensing, devices, electronics and related software. The industry is the combined result of entrepreneurial accident and location. Tektronix is the most significant homegrown electronics company. Howard Vollum and Jack Murdock started their firm in an old factory building on Southeast Hawthorne Street in 1946 and moved to Washington County in 1951. Demand for Tektronix's oscilloscopes and scientific instruments boomed as the United States invested more and more resources in Cold War science and medical research. Reaching its peak employment in the 1970s, Tektronix was a fertile source of innovation and a seed bed for new start-ups. Floating Point Systems, Planar Systems, Triquint, Mentor Graphics, InFocus and Merix all came spinning out of the Tektronix orbit.

A new surge in electronics created Oregon's Silicon Forest, developed courtesy of California. In 1976, Intel chose Portland for a major branch plant. One attraction was the pool of workers trained by Tektronix, the other was a location only two hours from San Jose. Hewlett-Packard came to Oregon in 1979. Foreign companies followed: Wacker Siltronics in 1980, and then Japanese firms such as SEH, Fujitsu, Epson, Sharp and NEC, attracted in

part by the city's closeness to Tokyo by the great circle air route. Intel, too, has been an important source of spin-off companies that have kept the Silicon Forest alive despite the recent technology shakeout.

Statewide, high-tech employment passed timber-related employment in the mid-1990s, explaining why the Portland-Salem Consolidated Metropolitan Statistical Area in 1996 ranked 10th in the nation in the value of its exports at $9.2 billion. High-tech and software companies, broadly defined, employed roughly 70,000 people in the Portland area in 1997, double the number a decade earlier. In 2006, in the aftermath of the industry's readjustment, statewide employment in electronics manufacturing and software was 42,500.

The more sophisticated technology firms are concentrated in Washington County. This first industrial cluster that is independent of water and rail transport (but not air service) was dubbed the "Silicon Forest" in the 1980s. Silicon wafer and semiconductor plants were more widely scattered in Portland and Gresham in Oregon and Clark County, Washington. In contrast, software and multimedia firms clustered in central Portland in proximity to advertising, publishing, art galleries and financial services. Telecommunications scholar Mitchell Moss (1998) used the registered location of commercial Internet domains (.com addresses) at the end of the 1990s to assess the relative standing of 85 cities as Internet information centers. Portland's location quotient of 3.11 placed it a satisfying 16th, several steps up from earlier in the decade. Another comparison by the Progressive Policy Institute in 2001 placed Portland 13th among 50 large metropolitan areas in its engagement with the "digital economy."

IV. Planning for Portland's Rivers

1. The First Plans: Nature or Commerce

Self-conscious city planning as a practice and profession emerged around the beginning of the 20th century out of the intersection of landscape design, architecture, civil engineering and social reform. Portland followed the national model by engaging in two of the most renowned planning consultants of the time to advise the city and its citizens on its future growth and land use. The resulting documents emphasized two different ways to understand and use the Willamette and Columbia rivers as central features.

The Olmsted Park Plan and the natural river

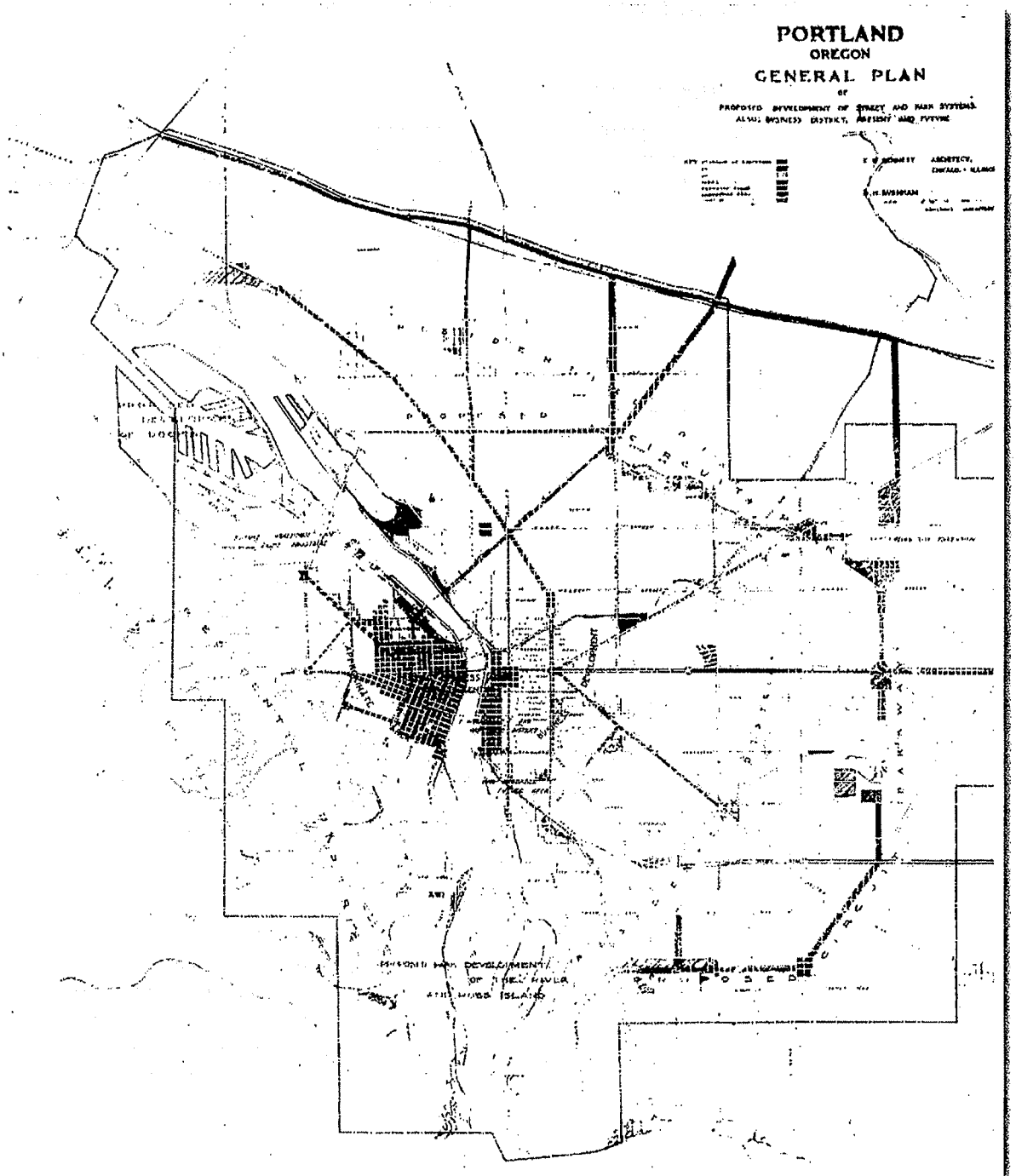
Most American cities began to develop public parks in the 1860s and 1870s, following the great example of Central Park in New York City. By the last decades of the century, cities were increasingly interested in comprehensive planning for park and parkway systems. Examples included Chicago, Kansas City, Minneapolis and Boston.

With the opening of a new century, Portland joined the trend by creating a Parks Commission. The Commission invited John C .Olmsted, son of the pioneering landscape architect Frederick Law Olmsted, to prepare a parks plan for Portland. The resulting plan, presented in 1903, proposed a series of parkways and boulevards to connect steep slopes (the crest of west hills, volcanic cones like Rocky Butte and Mount Tabor) and low-lying lands (the northwest waterfront, the south shore of the Columbia River, Ross Island, Swan Island), which would be reserved for large parks. Olmsted thus emphasized preserving open and natural space along what was a busy commercial river.

Edward Bennett, the Greater Portland Plan and the commercial river

The early 20th century also brought a set of comprehensive city-regional plans that focused on creating strong – even magnificent – city centers and linking those centers to the surrounding region with rationalized transportation systems. The key figure was Chicago architect Daniel Burnham, who was involved in the replanning of Washington, D.C., and identified with grand, comprehensive plans for Chicago and San Francisco.

As Portland boomed in the early 1900s, a group of business leaders formed the Civic Improvement League, raised $20,000 in donations and invited the Burnham to do a Portland plan. Burnham was too busy, and they instead got his right-hand man Edward Bennett, British-born, Paris-educated and experienced in comprehensive planning. The "Greater Portland Plan" that he submitted in 1911 was described as "architectural engineering in its application to city building." Working outward from the heart of Portland, Bennett proposed three civic centers – a government complex, a cultural complex of museums below Washington Park and a transportation center around Union Station. There were diagonal boulevards in the style of Paris to serve a future population of 2,000,000. There was to be an improved downtown riverfront in the style of Paris or Budapest. And there were to be vastly



The plan for Greater Portland proposed a series of diagonal boulevards and highways, eastside business development and the movement of waterfront industry down the Willamette to the Guild's Lake area.

expanded marine terminals from the Steel Bridge downstream. In short, this was a plan that devoted a small segment of the riverfront to aesthetics but largely retained and enhanced the working harbor.

In the ensuing decades, one of the key decisions concerned the Guild's Lake area, the site of the Lewis and Clark Centennial Exposition in 1905. The Exposition, whose grounds were designed by John C. Olmsted, called attention to the possibility of a large riverfront park. A variety of reasons, including the unwillingness of city and citizens to invest heavily in park land acquisition, led to the dismantling of the Exposition buildings (they were not built to last), filling of the site with dredged material and adapting it first for war worker housing in World War II and then for industry after 1945. It is now Portland's Northwest Industrial District.

2. 21st Century Plans: Environment and Industry

The competing approaches to the river and riverfront land that marked the first generation of Portland planning remained evident a century later. Compared to other cities, however, Portland has been more aware of the tensions and tradeoffs and more willing to explicitly recognize the commercial and industrial functions of its rivers.

Industrial land supply

OREGON

The Oregon land-use planning system includes "Goal 9: Economic Development." Local jurisdictions are required to plan land uses "to provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare and prosperity of Oregon's citizens." The goal further states that comprehensive plans for urban areas shall "limit uses on or near sites zoned for specific industrial and commercial uses to those which are compatible with the proposed uses." Implementing rules require that local governments identify sites needed for industrial and commercial development in both the short term and the long term. In specific, local governments are required to make sure that conversions of more than two acres do not create supply deficits.

In 2003, the Department of Land Conservation and Development undertook a broad study of the state's industrial land supply at the mandate of House Bill 2001 (2003) and Governor's Executive Order 03-02 on industrial lands. DLCD convened an Industrial Conversion Study Committee and presented a report titled Promoting Prosperity: Protecting Prime Industrial Land for Job Growth in November 2004. The report found that conversion of industrial land to non-industrial uses occurs because of zoning changes, because the pattern of uses in multiple-use zones changes, and because adjacent lands develop in such a way as to make industrial use incompatible or unsustainable (e.g., because of increased highway congestion). The report found that "the state has an interest

in discouraging conversions of prime industrial lands" and "in reinvesting in viable industrial districts including those with brownfield sites."

In response, LCDC adopted amendments (effective January 2007) to the Oregon Administrative Rule relating to Goal 9. In particular, changes added the concept of Prime Industrial Land, meaning lands that are well suited for traded-sector industries and are difficult or impossible to replicate in the planning area or region. These lands have "necessary access to transportation and freight infrastructure, including, but not limited to, rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes." The changes also encourage attention to short-term supply and to consideration of market factors such as availability and ownership patterns in identifying an adequate industrial land inventory.

METRO

Metro has a mandate to identify and conserve regionally significant industrial land. Title 4 of the Metro Code requires cities and counties to adopt zoning that limits commercial uses in industrial areas. Its Title 4 map matches the industrial sanctuary and general employment areas of the City of Portland. In 2002 Metro expanded the Urban Growth Boundary for the Portland region but also determined that land inside could/should be used more efficiently. It amended Title 4 to make a distinction between regionally significant industrial areas and other industrial areas, to limit retail in industrial areas and to limit non-industrial office development in regionally significant areas. Most of the industrial zones of the Portland harbor are regionally significant industrial areas.

PORTLAND

In most cities, industrial zoning is intended to protect residential and commercial areas, so it allows other uses in industrial zones (creating a hierarchy in which industrial uses are at the bottom). The City of Portland has the reverse, using affirmative zoning to protect industry, with an industrial sanctuary policy stated explicitly in its Comprehensive Plan. The language is straightforward: "Provide industrial sanctuaries. Encourage the growth of industrial activities in the city by preserving industrial land primarily for manufacturing purposes."

The policy is implemented through zoning that allows six categories of use outright in industrial sanctuaries: industrial service, manufacturing and production, railroad yards, warehouse and freight movement, waste-related and wholesale sales. It also allows retail, community service and office uses when they "are supportive of the industrial area or not detrimental to the character of the industrial area." In practice, this means uses that will not adversely impact industrial transportation needs and directly serve industrial workers. The most prominent test of the policy was the city's decision to reject a proposal for a Costco big box retail outlet in the Northwest Industrial District.

Waterfront-Oriented Initiatives

PORTLAND'S RIVER RENAISSANCE STRATEGY

The River Renaissance Strategy (Dec. 2004) recognizes "a prosperous working harbor" as the second of five comprehensive goals for Portland rivers, and states that "Portland's working harbor and Columbia Corridor are among the most important contributors to the region's economy." The strategy goes on to identify important issues of freight transportation including highway bottlenecks, railroad capacity and river channel maintenance. Its seven policies are:

- Stimulate Portland's competitiveness and growth as a major West Coast marine port and distribution and industrial center. Affirm and advance the critical role that the harbor and its industries and businesses play in the economy and quality of life of Portland and the Columbia and Willamette basins.
- Invest in maritime, rail, air and truck infrastructure...and develop seamless connections among these modes.
- Protect and enhance the industrial land supply, economic health and distribution-hub functions of the working harbor and Columbia Corridor industrial districts and ensure river access to river-related and river-dependent industry.
- Maintain and enhance the buffers (riverine bluffs, major roadways and mixed employment areas) that frame these districts and separate them from other land uses, in order to prevent the loss of industrial land...
- Facilitate industrial redevelopment, particularly in brownfield site...
- Improve the transparency, predictability and timeliness of regulatory systems, while encouraging innovation.
- Promote environmentally beneficial industrial operations and facility planning through a combination of incentives, technical assistance and regulations.

RIVER CONCEPT AND RIVER PLAN

The Planning Bureau is currently (September 2007) engaged in a River Plan, which will be integrated into a substantial revision of the city's Comprehensive Plan. The planning process is guided by a River Concept adopted in 2006 and is first dealing with the North Reach (the Willamette River and adjacent lands from the Columbia River south to the Fremont Bridge on the west side and to the Broadway Bridge on the east side). The basic policy statement reads as follows:

The North Reach: Portland's Working Waterfront – The North Reach will continue to provide Oregon with access to global markets and support the region's economy as a West Coast distribution hub and a heavy industrial area.

Working Harbor Reinvestment Strategy

The Working Harbor Reinvestment Strategy is the economic development element of this River Plan. It brings together the Planning Bureau, Portland Development Commission and Port of Portland to develop a 10-year plan for capital investment to enhance the working waterfront and promote private investment and development in harbor industrial districts Drawing from stakeholder interviews and focus groups, the Investment Strategy emphasizes work to improve rail and highway bottlenecks and to increase the supply of useable industrial land through assistance with brownfield cleanup.

Portland Development Commission

The Willamette Industrial Urban Renewal Area, created in 2005, gives the Portland Development Commission a tool for assisting with the investment needs that may be identified in the Working Harbor Reinvestment Strategy. The 751-acre district includes Swan Island/Mocks Landing and sections of the west shore on both sides of the BNSF railroad bridge. Because state law allows downward assessment of environmentally damaged lands, the tax increment available for appropriate projects will be small in the short run, although it is expected to increase in a 5 to 20-year time frame.

V. Maritime and Industrial Portland in 2007

The economy of the Portland region in 2007 is supported by a thick ecology of river-dependent and transportation-oriented businesses and industries. The rivers and waterfronts are not only the historic focus for Portland's economy but remain central to a complex of activities. From 2004 through mid-2007, capital investment of $440 million was completed or funded for 36 harbor sites.

1. Transportation nexus

Portland's rivers are the focal point for multifaceted transportation system of marine terminals, ocean shipping lines, barge lines, bulk handling facilities, Class 1 railroads, short-line railroads, Interstate highways, commercial and general aviation airports and pipelines. The federal government recognized the importance of this nexus by funding replacement of the BNSF railroad bridge across the Willamette to reduce an impediment to navigation. Roughly 90 percent of harbor sites also have rail access.

- Portland and Western Railroad has seen business originating along its Astoria-Willbridge line triple in the past 10 years, from 7,000 carloads in 1997 to more than 20,000 carloads per year at present. The railroad is a link in a multimodal system. It interfaces with tank farms (which receive materials by water and pipeline) and exchanges freight with trucks, barges and other transportation modes.
- Fuel and construction materials firms have expanded and upgraded terminals and storage facilities in recent years.
- The Port of Portland in 2006 ordered a new crane for Terminal 6 to serve post-Panamax vessels.
- Portland is the largest wheat export port in United States, just as it was a century ago, drawing from as far as Minnesota and Kansas. Including Vancouver and Kalama, lower Columbia ports account for 40 percent of wheat shipments. The Columbia system also draws cargo across the Mississippi as the second largest corn export point. Portland is also the most important bulk mineral port on West Coast.
- Port of Portland cargo forecasts anticipate that the volume of trade through Portland will double by 2035.

2. Wholesaling and distribution

The North Reach of the Willamette River and the Columbia Corridor taken as a single crescent of industrial land have an intense concentration of wholesaling and distribution businesses that serve both the metropolitan area and the larger multi-state hinterland.

- With a good climate for aviation, a relatively uncrowded airport and relatively non-congested regional highways, Portland has potential as a secondary air freight center. The announced expansion of FedEx at Troutdale is one indicator of possibilities.

- Automobile import volumes have climbed in recent years. In 2006, a record number of 464,000 Hondas, Hyundais and Toyotas came across Portland auto import terminals. In addition, the Port of Vancouver has been receiving Subarus since the early 1990s. Toyota, which is being squeezed out of Los Angeles, it expanding its Terminal 4 import facility for a second time. Hyundai has also expanded its auto terminal.

3. Metals, machinery, transportation equipment

Third, the Willamette River is the focal point for the metals, machinery, and transportation equipment complex of interdependent firms. Portland has countered the trend in decline of metal industries jobs.

Riverfront Expansion

- Advanced American Construction relocated from Oregon City to the North Reach in 2006, after searching the entire metro area for a suitable site.

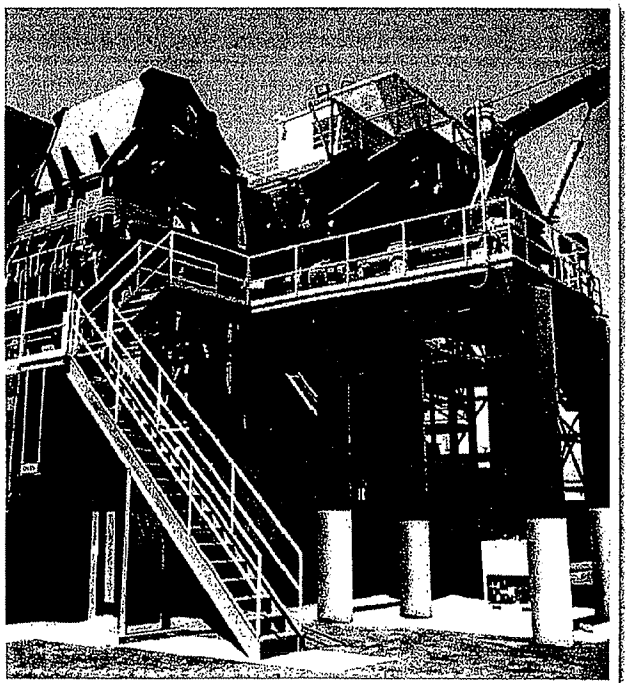
- Evraz Oregon Steel Mills relocated to Rivergate in 1969 and has expanded several times on site, including adding a new pipe mill. It depends heavily on bringing in steel slab by water from Russia and Mexico and shipping product to western U.S. markets by water and rail. Its expansion has led to expansion of subcontractors.

- Gunderson has utilized its flexible location between rail and water to overcome shortterm business downturns and upgraded facilities in 2005-2006.

- Schnitzer Steel, which consolidated its Portland operations in 1973, has recently invested $30 million in a new shredder and other capital improvements.

- Cascade General ship repair is at capacity and planning another drydock.

- U.S. Barge has recently relocated from New Orleans to Swan Island, not only because of problems with previous location but also the rise of Pacific trade demand for barges.



Schnitzer Steel's many investments at its Portland yard include a new mega-shredder. These improvements significantly enhance the operation's processing capabilities and global competitiveness.

Metro-wide Industry

This industrial complex extends to locations beyond the working waterfront. Related companies include Precision Castparts, Oregon Cutting Systems, Oregon Iron Works, Warn Industries, Gerber Blades, Leatherman Tools and Boeing. Most of these firms are located either in the Columbia Corridor-Gresham area or the Milwaukie-Clackamas industrial corridor. Both of these areas need to be considered as parts of Portland's industrial heart.

Flexibility and Innovation

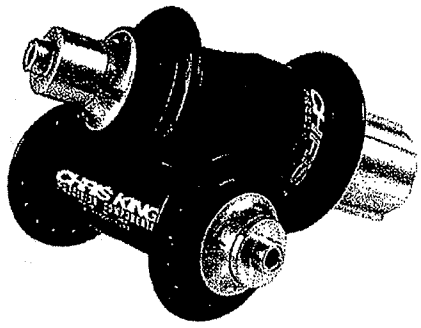
Many manufactured items follow a product cycle. As a product moves from an initial stage of innovation and small-scale production to large-scale, routine production, manufacturing tends to move from the original site to other, lower-cost sites. Headquarters, and research and development may remain in the original location, but branch plants and subcontractors in other locations can be used for more efficient production. The challenge in any specific community is to nurture the next innovations and next products to fill the gap left by closed factories. The same challenge occurs when the market for a particular product is saturated or when that product becomes outmoded.

The metals and machinery complex has shown substantial flexibility over the last century. New firms and products have appeared as replacements for companies with outdated products, and Portland has suffered less from the product cycle than rustbelt cities like Youngstown or Dayton, Ohio for several reasons. First, Portland's metals and equipment industry has been a set of small and middle-sized firms rather than consisting of one or two vulnerable giants. Second, many of these firms have produced a wide range of products for multiple markets rather than depending on a single customer or single markets. They have the flexibility to shift production from one item to another. Third, many of them produce intermediate items for construction or manufacturing, again providing the buffer of multiple markets. Fourth, the pool of skilled workers adds to the ability to shift directions or to develop new firms and products.

Over time, these factors have meant that this industrial sector has remained strong even as individual companies have disappeared (no one buys home coal stoking machines any more) or shifted production to other locations (Hyster, Freightliner). This is the same sort of process that has kept Oregon's computer and electronics sector viable despite the decline of Tektronix from its peak around 1980.

For example, Oregon Iron Works was founded in 1944 and has specializing in complex, large-scale metal fabrication (bridges, hydroelectric systems, patrol craft). Now this mid-sized company with 300 plus employees at Clackamas and Vancouver facilities recently received federal funding to build the first U.S.-made streetcar in many decades in partnership with a Czech company.

Portland is also developing bicycle manufacturing for niche markets, a spin-off both from its "green industry" sector and its metal-working sector. It may seem a stretch from Gunderson barges or Evraz Oregon Steel Mills to the bicycles industry, but manufacturing of high-end bicycles and components is an important and growing business. The business currently ranges from two-person artisan shops that build a handful of bikes at a time to firms like Kinesis in north Portland, a U.S. branch of a Taiwanese bicycle manufacturer with 40 workers, Huntco Supply, which makes bike racks and lockers, and Chris King Precision Components, a manufacturer of high-end bicycle parts that relocated from California to northwest Portland.



Bicycle headsets manufactured by King Cycle Group, a leading producer of bicycle components, which relocated to Portland in 2005.

4. Oregon Export Industries

Oregon stands well above the national average for value of exports relative to population. Its export history reaches back to 19th century agricultural and timber exports. This category remains important, but it has been eclipsed by other manufactured goods. Federal government data for 2001-2006 shows that the value of all Oregon exports increased by 72 percent in the first half decade of the 21st century. In comparison, export growth in fabricated metal products, primary metals and transportation equipment all matched or surpassed the growth of computer and electronics exports.

INCREASE IN VALUE OF OREGON EXPORTS: 2001-2006

Agricultural and livestock products	31%
Fabricated metal manufactures	69%
Computer and electronic products	71%
All Oregon exports	72%
Primary metals manufacturing	177%
Transportation equipment	205%

Computers and electronic products made up 43 percent of the total value of Oregon exports in 2006. Metals, machinery and transportation made up 28 percent, while agricultural and lumber products accounted for only 17 percent.

5. Industrial Employment Concentration

The Portland harbor area, as defined by planning agencies and the Working Waterfront Coalition, counts 35,000 industrial jobs and 4,000 to 5,000 other jobs.

State employment data for 2004, aggregated by Metro staff for all of the major industrial districts, show the importance of the several districts that utilize and/or abut the Willamette and Columbia rivers. The following table shows industrial employment in these districts.

EMPLOYMENT IN RIVER-RELATED INDUSTRIAL DISTRICTS, 2004

	Manufacturing	Transportation, Warehousing Utilities	Wholesale Trade	All Workers
Northwest Industrial District	8,800	2,800	2,900	22,000
Swan Island & Central Eastside	3,700	3,700	5,500	37,000
Rivergate	10,400	1,400	. . .	20,000
Columbia Corridor	7,200	8,800	4,800	40,000
Totals for river-related districts	**30,100**	**18,200**	**13,200**	**119,000**

Employment in these districts can also be compared to that in the metropolitan area's three other industrial districts: the Sunset Corridor and 217 Corridor where the electronics and computer industry is concentrated, and the Milwaukie/Clackamas Corridor, with its mix of manufacturing and distribution.

EMPLOYMENT IN ALL MAJOR INDUSTRIAL DISTRICTS, 2004

	Manufacturing	Transportation, Warehousing Utilities	Wholesale Trade	All Workers
River-related Districts	30,100	18,200	13,200	119,000
Milwaukie & Clackamas	6,200	2,500	4,500	28,000
Sunset corridor	10,500	6,600	800	42,000
217 corridor	5,000	1,400	5,000	46,000

In total, the Multnomah County and Clackamas County districts have 36,200 manufacturing jobs compared to 15,500 in the Washington County districts, and 38,400 jobs in transportation and distribution compared to 13,800.

VI. Challenges in Comparative Perspective

1. Waterfront and Industrial Lands under Pressure

The most powerful trend relating to older industrial districts in the last quarter century has been conversion from traditional manufacturing and transportation functions to other, more intensive uses. This pattern has been doubly true of waterfront lands with their potential aesthetic appeal.

Industrial obsolescence is certainly involved in the process. Some industries have finite life cycles because their product becomes obsolete, inputs become unavailable or their national/international competitive position changes. Few people are going to complain when offices and condos are constructed within the granite shells of old water-powered mills, whether in Edinburgh (Scotland) or Georgetown (Washington, D.C.). In the Portland region, for example, the aluminum industry had roughly a 50-year life span from the early 1940s to the 1990s. Created by abundance of cheap electricity and a war defense market, the aluminum industry was later squeezed by combination of growing competition for electricity within the Northwest and competition from cheaper overseas producers.

There is also a tendency for industrial waterfront uses and port facilities to move downstream toward deeper channels and wider expanses of land for manufacturing and transportation. In the long view, this trend can be traced to London and Philadelphia, Bremen/Bremerhaven and Antwerp. At the same time, river ports remain key players in the patterns of global commerce. The three highest volume ports in Europe – Rotterdam, Antwerp, and Hamburg – are all located on rivers. Shanghai is a river port. Houston, New Orleans-Baton Rouge and Savannah are among the strong river ports in the United States.

At the same time, real estate developers and public officials have seen central city waterfronts as sites to be reclaimed for new, intense development. An entire nonprofit, the Waterfront Center in Washington, D.C., was founded in 1981 "in the belief that waterfronts . . . are unique, finite resources. Like the cities they help define, urban waterfronts are dynamic places, undergoing profound change. Waterfronts often represent the best opportunity for community enhancement and enrichment." Older central industrial districts, with loft buildings and warehouses, are often viewed in the same terms. Where more traditional uses remain, there are strong pressures to push them downstream or further away from the center of the city. As a result, old industrial waterfronts have often become bright, post-industrial redevelopment zones.

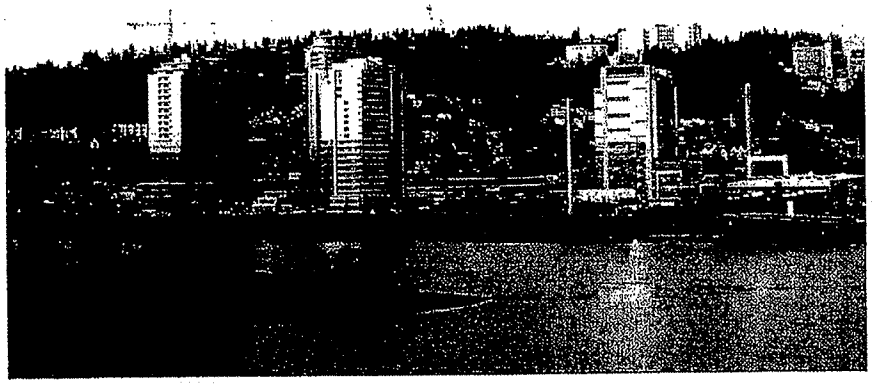
Upscale housing: Multi-story granite wharves have been converted to residences in Boston and brick converted in Baltimore. Printers Row in Chicago now has hotels, trendy restaurants and new upmarket housing but no printing businesses. The northern branch of the Chicago River looks far different than it did even 10 years ago. San Francisco's industrially zoned land saw the construction of 5,000 residential units between 2001 and 2005. At the same time, a combination of rising rents and complaints about industrial activities by new residents drove out many production, distribution and repair businesses. In Los Angeles, high housing prices and demand have pushed residential uses into industrial districts south of downtown.

Recreational attractors: The examples are numerous. They include aquariums for Boston and Baltimore, festival markets in Baltimore, New York, Norfolk and Vancouver, ballparks for San Francisco, Seattle, Cleveland and Denver, parks for Seattle and Portland. Philadelphia residents and officials have been engaged in bitter debate for the past two years whether to build casinos on the waterfront that Benjamin Franklin once knew.

Mixed-use developments: Waterfronts are especially attractive sites for mixed-use projects that combine retail, office, hotel and residential space – for example, the Georgetown and now the Anacostia waterfront in Washington, D.C.

A similar story has been playing in Portland since the early 1980s: Waterfront Park was the first public investment. Private investors followed in the 1980s with McCormick Pier apartments and Riverplace on the south waterfront. Then came the emergence of the Pearl District on the bones of a railroad warehouse district and a River District on abandoned rail yards. Terminal 1, Albers Mill and a PGE power plant were redeveloped for housing, offices, and a museum, respectively. South Waterfront condo towers are currently filling in what was once a waterfront industrial district. The Burnside Bridgehead project, if it comes to fruition, will mark the encroachment of mixed-use development into the Central Eastside.

At the same time, however, many Portland firms have deliberately relocated from these older industrial areas to the remaining parts of the working waterfront. The tension between the two uses remains.



Mixed-use development in Portland's South Waterfront district.

2. Public Policies to Facilitate Change

In the common framework of city politics, the default position is to accommodate the transition of industrial land by piecemeal rezoning in response to development proposals. Rezoning, of course, generates new pressure for additional change. It has been an issue of concern at the state level in Oregon (hence the land conversion study discussed earlier). This sort of question surfaced recently in Portland over the possible future of the Linnton Plywood site.

Cities can facilitate transition by proactive rezoning and adopting plans than anticipate change. Oakland has rezoned waterfront industrial land for housing in the hope of attracting overspill for the hot San Francisco market. San Francisco envisions its southern waterfront, from China Basin southward, as the home of bioscience companies, an idea with a familiar ring in Portland. Seattle came close to adopting the Seattle Commons idea that would have totally transformed the area between downtown and Lake Union – change that is now happening piecemeal. Seattle's first light rail line runs through the large warehousing and light industrial area south of downtown. Because the city allows housing and commercial uses of up to 70,000 square feet in the area, pressures for land conversion are intense for projects ranging for housing to the expansion of Starbucks headquarters.

Cities can promote land conversion by actively priming redevelopment with public assistance through urban renewal and tax increment financing tools, property tax abatements and similar tools to subsidize the costs of private development. All of these are options that Portland has utilized for the middle reach of the Willamette.

3. Public Policies to Resist Change

Relatively few cities have implemented systematic policies to retard or resist the conversion of industrial lands. A review of other cities clearly indicates that Portland has been a leader.

BOSTON

Boston has identified the retention of "back streets" jobs as a city priority. It defines "back streets" as manufacturing, wholesale, construction, commercial services, logistics and food processing businesses (in contrast to "main streets" retailing). It sees "back streets" businesses as important places for entrepreneurship and sources of family-wage jobs. The city inventoried eight industrial districts in 2001, with a total of 47,000 jobs, and found that the trend in all but one was toward increased residential and commercial uses.

The city has adopted a policy goal of no net loss of industrial space, to be implemented with infrastructure improvements for industrial districts, low-interest loans to qualifying businesses, assistance in finding tenants for industrial space and strengthened zoning review guidelines "regarding development proposals that convert industrial land and buildings to office, commercial, residential or institutional uses." Evaluations of the impacts of these policies are not available.

VANCOUVER, BRITISH COLUMBIA

In the last two decades, much of Vancouver's historically industrial land on both sides of False Creek has been converted to upscale housing (this includes the site of the 1986 World's Fair). In 1995, the City Council adopted Industrial Lands Policies for seven remaining industrial districts. These included two districts along the Fraser River, four districts located east of the city center with historic rail and water transportation services (Burrard Waterfront, Powell Street/Clark Drive, False Creek Flats, Mount Pleasant) and one with rail and truck transportation (Grandview/Boundary).

The overall policy was to "retain most of the city's existing industrial land base for industry and service businesses . . . to meet the needs of port/river related industry and city-serving and city-oriented industries." The city updated definitions of industry to better accommodate service businesses and revised provisions for conditional uses permitted in industrial areas. For each district, the city also determined how much land should be retained for industrial and established criteria for approving or disapproving applications to rezone industrial land. As a former Vancouver City Council member phrased it: "The main initiative we took was actually to let industrial lands go for housing. We inventoried what we had, what was in demand and what parcels made sense to 'let go.'"

Vancouver followed in 2005 with a Metropolitan Core Jobs and Economy Land Use Plan. It found that manufacturing jobs in the core sub-area of the city have declined by 40 percent since 1981 and consisted largely of clothing and food manufacturing. At the same time, it reiterated the importance of manufacturing by noting that demand for industrial space is likely to increase in the False Creek Flats, Powell, Burrard Waterfront and Mount Pleasant areas (see earlier paragraph). At the same time, the city's department of community services anticipated increases in offices, services and commercial businesses in these spaces.

Taken together, Vancouver policies offer a mixed message about the future of industrial and water-dependent land uses. They identify retention of industrial land as important, but deal with the issue on a district-by-district basis. I2 and I3 zones have protected large parcels from being subdivided and prevented residential conversion, but they also allow a wider range of uses and clearly suggest that traditional heavy industry and logistics businesses will gradually give way to commercial services, big box retailing, offices, service activities, and – they hope – high-tech industries. The city currently faces a challenge in supporting hoped-for expansion of the port because supporting rail facilities are located precisely in an area (False Creek Flats) that has seen changing land uses.

CHICAGO

Chicago has 20,000 acres of industrial land, but it is scattered in more than two dozen small districts that cluster around the Chicago River and the city's thick network of railroads. In the late 1980s, the real estate market in Chicago was placing very heavy pressure on industrial land adjacent to the Loop and North Loop, which were increasingly attractive for residential and mixed-use projects. In response, the neighborhood-oriented administration of Mayor Harold Washington created the category of Planned Manufacturing District, which it applied to three areas near the North Chicago River in 1988-1990. Two additional PMDs were created in the 1990s and eight more in 2004-2005.

In PMDs, the city foregoes higher taxes revenues possible from rezoning to residential or retail use in favor of preserving and creating industrial jobs. As defined in the Chicago Zoning Ordinance, PMDs have several purposes: (1) foster the city's industrial base; (2) maintain a diversified economy; (3) strengthen suitable manufacturing areas; and (4) encourage industrial reinvestment, modernization and expansion by providing stable and predictable industrial environments. PMDs can be initiated by the mayor, the relevant alderman, or the owners of all land within proposed boundaries. Proposed areas are reviewed for suitability and established by vote of the City Council. PMD regulations are zoning overlays. Each PMD has an industrial council and an urban renewal district to generate funds for brownfield and transportation work, and a staff person to advocate for infrastructure improvements.

An evaluation of the older Planned Manufacturing Districts by the Center for Economic Development at the University of Wisconsin-Milwaukee found that two of the three districts from the 1980s had succeeded in increasing the number of businesses and jobs. However, there was a continuing shift from manufacturing to warehouse and distribution employment, marking the program partly but not completely successful in meeting its goals.

Chicago's Planned Manufacturing Districts are a relatively close match to Portland's industrial sanctuaries, although they are much newer and applied to individually smaller districts. It has been popular with local industrial businesses and with different city administrations.

VII. Current Trends and Issues

The Port of Portland likes to say that Portland is engaged in "industrial smart growth." This is a slogan designed to appeal to Portland's "green" constituency, but it also a good description of the facts on the ground and on the waterfront. Clustering freight-oriented industrial and distributing uses along the harbor and railroad freight corridors limits the total miles of transportation that are needed. Maintaining intensive use of industrial waterfronts and other close-in industrial land reduces sprawl and makes efficient use of a century and a half of cumulative investment.

1. Land Needs and Availability

There has been steady demand for waterfront industrial land and land within the transportation core. Land uptake was 21 acres per year in 1990s, slowed with economic downtown, but now is closer to 30 acres per year.

One response to the need for more close-in industrial land has been for firms to make more intensive use of their existing acreage. For example, the Columbia Sportswear warehouse at Rivergate is built high enough to stack materials in multiple layers. Tank farms are expanding to handle ultralowsulfur fuel, and Chevron is replacing low storage tanks with taller, higher-capacity tanks. Toyota is trying to move cars more rapidly through its import facility in order to maximize use of its land.

2. Environmental Concerns

The Superfund listing of the Portland harbor raises serious problems for maintaining and reusing industrial land. Environmental remediation will be necessary before a number of parcels can be reused, especially highly desirable 50- to100-acre sites. However, it is worth noting that Superfund listing has also been applied to much of the comparable land in Tacoma and Seattle (Harbor Island, Lower Duwamish).

3. Energy and Construction Materials

Continued growth in Oregon and southwest Washington supports the viability and expansion of energy and construction materials businesses on efficient sites on or near the waterfront.

4. Metals, Machinery, Transportation Equipment

Since 1980, Portland has defied the national trend of declining industrial employment, even without counting high-tech employment. Several factors support the viability of the large cluster of metals, machinery and transportation equipment manufacturers. The presence of many small and moderate sized firms, rather than one giant company, provides flexibility and resilience. So does the orientation to markets in the rapid growth region of western North America) markets. In addition, many firms make a variety of products for multiple markets.

5. Green Industries

There are opportunities for synergy between traditional industrial firms and "green industries."

The Portland Development Commission's target clusters include metals and transportation equipment but also cycling and energy technologies, both of which have "hard" product dimensions as well as expertise dimensions.

6. Distribution and Logistics

Several factors support continuing growth in the distribution and logistics field. As overall United States manufacturing declines and production shifts overseas, more products will be arriving through U.S. ports (especially on West Coast) and moving long distances into and across the continent. Portland has substantial advantages in a port with room to expand and with good highways and rail connections that are less congested than in California.

At the same time, the region has transportation bottlenecks and continued investment needs. Half of region's rail users are in harbor area. The huge and growing commitment of Class 1 railroads to coal hauling puts limits on the future of Portland as a transshipment point for containers headed to central and eastern United States.

7. Labor Supply and Production Synergies

Portland is known as an attractive location for small and medium-sized businesses in the metals and machinery industries because it has skilled workers and a network of subcontractors. For one example, Schnitzer Steel has 150 accounts in the Portland region. For a comparison and model, we might think about the Los Angeles area, where the aircraft industry developed and thrived with more than 1000 subcontractors and suppliers.

8. Industrial Sanctuaries

Industrial land that is affordable and protected from competing uses remains vitally important for supporting new businesses, for new manufacturing entrepreneurs need affordable, accessible, and hassle-free space in which to grow their businesses. This was true in the 1910s when Portland Knitting Mills got its start in a 50 by 50 foot building on Southeast Stark Street. It was true in the 1940s when Tektronix started in an old loft building at Southeast Seventh and Division and the 1950s when ESI used the same building on Stark. It was true recently when Rejuvenation Houseparts grew from a storefront operation in the mid-1980s to manufacturing operation with 300 plus employees located in the Northwest Industrial District, or when Chris King Precision Components moved from California to the Northwest Industrial District.

9. Competition from Non-industrial Uses

Industrial districts and the working waterfront will continue to face pressures for conversion to residential areas and/or mixed-use developments. For example, not far from home, Salem is proposing to rezone industrial land with good rail service, effectively removing it from the industrial land inventory. Another example is that of Advanced American Construction. The company has a marine and industrial repair business in Vancouver, whose future has been made uncertain by the nearby construction of a new middle school and rezoning for mixed use.

Similarly to Seattle and Vancouver, B.C., the coming years may well see consolidation of railroad yards and maintenance facilities on Portland's east side, opening previously industrial lands for debate about future land uses.

Along the river, there will be resistance to the continued operation of Terminal 2 because of its proximity to new housing. There continues to be pressure against industrial uses of industrial land in Linnton. The Port of Portland will have a balancing act with environmental concerns when it needs to expand to West Hayden Island.

VIII. Conclusion

Portland's complex of metals, machinery and transportation equipment manufacturing is an innovative industrial sector with a strong future and growing connections to Portland's position as a leader in sustainable economic development. The public sector should continue to recognize its importance with supportive land-use regulations and protections.

Portland is known for a strong and systematic commitment to maintaining industrial land, a commitment that is more deeply rooted and more comprehensive than in any other U.S. city. It has strong record of favoring industrial land retention over proposals for the intrusion of big box retailing and housing into industrial districts. As the metro-area economy adds more and more jobs in high-tech industries and "idea industries," is important to keep people educated about this policy and its benefits. Policy makers and the public need to remember that the traditional industrial economy employs tens of thousands of workers at family-wage jobs and still pay more bills than fashionable software or multimedia firms.

Like many cities throughout the United States, Portland is experiencing strong and increasing demand for new housing in the center city and core neighborhoods. Some of this demand is being satisfied on land that previously housed industrial or transportation uses. Although such land conversion is sometimes appropriate, the city needs to take extreme care and caution before determining that industrial land is no longer viable for industrial uses.

Portland has a superior freight movement infrastructure that represents 150 years of investment. This infrastructure includes railroad lines developed more than a century ago, as well as much more recent investments like an enlarged lock at Bonneville Dam, a new BNSF bridge across the Willamette, brownfield remediation and ongoing rail and highway improvements for Rivergate. It is vital to protect and enhance this transportation infrastructure as an economic asset that would require billions of dollars to replace or reproduce and to promote public awareness of its value.

Freight transportation in the 21st century is the quiet partner in Portland's transportation system. Freight movement is less glamorous than new passenger rail systems and receives less public attention than highway congestion. However, the water-rail-pipeline network that concentrates in Portland is the anchor for a trade-based economy. Regional transportation planning and investment will be most effective when addressing truck mobility and highway connections to major industrial areas, marine transportation facilities and railroad bottlenecks as coordinated elements of a single freight movement system.

There are important points of compatibility and synergy between Portland's industrial heartland and the growing desire to make the city a leader in sustainable urban growth. These include the capacity of metals and machinery businesses to engineer and build specialized, environmentally friendly products (from bicycles to streetcars to fish ladders); the important role of recycling in the metals industry; and the substantial energy advantage

of moving freight by water. Public agencies and private organizations that promote sustainable development have an opportunity to increase their effectiveness by taking advantage of a supportive industrial base.

Conserving Portland's industrial districts and its working waterfront is directly compatible with Oregon land-use planning goals. The Oregon system was established to protect the economic foundations of the state from being eroded by urbanization and sprawl. Most attention, then and now, has focused on Urban Growth Boundaries and the preservation of farm and forestland, but the protection of one-of-a-kind industrial land and transportation infrastructure is fully in synch with the system's goals. Retaining a compact industrial waterfront limits conflicts between industrial and residential uses and reduces the need for "industrial sprawl."

Portland has a history of intentional action to promote and protect its waterfront economy and industrial base. The private sector has invested and reinvested in transportation and industrial facilities, and the public sector has actively supported this investment through land-use policy, energy development and transportation improvements. As private activity increases in the first decade of the 21st century, it is important to keep the industrial economy on the public agenda.

Over the decades, Portland has benefited from a diversified economy with multiple industries and areas of activity, rather than depending on a single industry or employer. This diversification has helped smooth the peaks and valleys of the business cycle and prevented the kind of economic problems of cities like Detroit or Youngstown. Deliberate efforts to maintain this diversification by supporting the continued development of the waterfront transportation/industry complex should be a central element of all regional planning and development efforts.

About the Author

Carl Abbott is Professor of Urban Studies and Planning at Portland State University, where he teaches courses on the urban history and city planning. He has also held faculty positions at the University of Denver, Old Dominion University, and George Washington University. He has written extensively about the development of Portland and other American cities. His professional work includes six years as co-editor of the *Journal of the American Planning Association* and current co-editorship the *Pacific Historical Review.* He has been active in civic groups such as the Oregon Downtown Development Association, Livable Oregon and the City Club of Portland. He is also part of a six-year project to enhance the teaching of American history in Portland area school and works frequently with organizations such as the Oregon Historical Society and the Architectural Heritage Center. He has written about urban issues for *Landscape Architecture, Historic Preservation, The Next American City* and other national magazines.

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Working Waterfront
COALITION

March 16, 2007

Ms. Cary Pinard, Principal Planner
City of Portland
Bureau of Planning
1900 SW 4th Avenue, Suite 4100
Portland, Oregon 97201-5380

Re: Developing the River Plan/North Reach
Public Review Draft – February 12, 2007

Dear River Plan Staff:

The Working Waterfront Coalition (WWC) is a representative group of transportation dependent companies whose purpose is to advocate policies to enhance and protect the economic opportunities and job expansion created by the business activities in Portland's working harbor.

The importance of this effort cannot be overstated. No other location in Oregon connects a seaport with transcontinental railroads, regional barge routes, an interstate fuel pipeline, an international airport and interstate highways, making Portland's harbor the region's gateway to world and domestic markets.

The WWC agrees that the 1987 Willamette Greenway Plan must be updated. In the last twenty years, Portland has reaffirmed the importance of the historic working harbor, and, in response, the business sector has invested hundreds of millions of dollars, modernizing its facilities and reinforcing an important employment center. Over 100,000 Portland jobs are industrial in nature, many of which are tied to businesses in the working harbor. In fact, the recent Economic Impact Study of the Portland Harbor indicates that more than 19,000 jobs are tied directly to maritime harbor activities which generates more than $1.4 billion in wages and salaries, nearly a billion in business revenue and more than 145 million in state and local taxes

It is critically important that we take great care in developing the plan for the North Reach and designing a permit process that will support existing and future investments and job creation. It must also be acknowledged that the economic and environmental viability of the harbor is dependent upon the outcome of the Superfund cleanup. Millions will be invested by public agencies and private companies. If, at the end of the day, businesses are unable to succeed under the financial obligations of the cleanup, our community will suffer an incomprehensible loss. To that end, amendments to the Greenway Comprehensive Plan and Code should assist with business development, rather than facilitate a piling on of requirements to achieve vague, undefined or marginal benefits.

Several WWC members have been actively engaged in River Renaissance/River Plan conversations for years. We understand this February 12, 2007 document is not the River Plan, and that you are requesting comments only on a summary of issues and potential solutions. We also expect that the next step, as set forth in the city's plan amendment process and statewide land use planning goals, is to develop a Greenway Plan/North Reach, followed by Greenway Code and Design Guidelines/North Reach. Attached is a list of WWC observations, questions and recommendations. A summary is provided below.

1. Responsiveness to working waterfront concerns: The North Reach is primarily a working harbor, and we appreciate that the needs of the working harbor are articulated in parts of this document. This is particularly true in the "Contamination" section. As stated in that section, the overall objective should be to expedite clean up and reinforce harbor viability. Many of the solutions offered for exploration will help in this regard. Nonetheless, the issues and potential solutions identified throughout the remainder of the document seem heavily weighted towards recreational, habitat and natural resource considerations.

2. Watershed Health Section: We are particularly troubled by the "Watershed Health" section, and it is our sense that the planning approach to watershed health is both too narrowly focused and at the same time not based on clear, measurable goals. The Willamette River is some 200 miles long. About 15 miles are within Portland city limits, and about half of this 15 mile stretch, known as the working harbor, supports about 50% of Oregon's economy. As Paul Fishman, of SWCA Environmental Consultants points out in his letter dated March 16, 2007, the North Reach is part of an ecosystem that is dominated by human social and economic actions. The fact that the North Reach is part of a highly altered system with very limited natural resource functions should be acknowledged throughout this section of the document. This realization should then set the tone for the rest of the document.

   That said, members of the WWC support a clean and healthy river. All of us already contribute to water quality through our stormwater fees, and these fees have increased substantially in order to pay for the "big pipe" and other stormwater capital projects.

   Our members are also investing in improvements that reduce environmental impacts. Examples of these investments include the reuse and treatment of process water, installation of dust collection equipment, removal and replacement of aging rail lines, and enhanced on-site stormwater systems. A clean river is in our best interest.

   Finally, many members are involved in ongoing activities that are addressing concerns raised by the Harbor Superfund listing. There include "early action" clean up activities, which remove contamination and mitigate natural resources damages. Most will participate in Superfund settlements. These settlements will involve costs of investigation, cleanup, and natural resources mitigation. It is important to permit maximum flexibility to address these concerns in the future.

Given this level of investment over time, it is critical that we maximize environmental benefits with limited resources that are not hindered by an inefficient and outdated Greenway Code. In short, do not waste "early action" efforts. It is crucial City planners understand these issues prior to attempting to make policy which would affect the scarce dollars spent here.

3. Metro Goal 5 Map: As we have discussed with you previously, we request that the River Plan honor the Goal 5 decision made by Metro Council on May 20, 2004. This decision designated 250 fully developed acres, flooded in 1996, as "allow". As David Bragdon said in his June 2, 2004 letter to Schnitzer Steel, "the Council recognizes that the site's special economic importance outweighs its resource values, and we have directed staff to determine if there are other similarly situated sites."

   Metro staff subsequently identified similarly situated sites. These additional sites were designated as "allow" when Metro reaffirmed the May 2004 decision on September 29, 2005 with the adoption of Ordinance No. 05-1077B. The Metro decision was based upon the Goal 5 – Economic, Social, Environment and Energy (ESEE) Analysis completed by Fishman Environmental Services. The City's actions must be consistent with not only the facts but also the intent of Metro's Goal 5 decision.

4. Laying Back the Bank: Since 1998 a number of studies have documented the importance of industrial land to the economy and the inadequate supply within the urban area. These same studies also reaffirm the exceptional capabilities offered by the transportation infrastructure available only in the working harbor. While there may be some aesthetic benefit for laying back the bank, there are economic consequences. For example, after the Port of Portland laid back the bank at Terminal 4, it acquired the Marcom site to offset the loss of usable waterfront land. Not only is the environmental benefit of laying back the bank questionable, the net result is a loss in perpetuity of uniquely served industrial land. For these reasons, we don't support bank layback in the North Reach as a standard approach.

5. Balanced Cut and Fill: Usable land in this area is limited, and there is little that can be done to expand it. Every square foot has to be used wisely for the benefit of the City's economic health. Balancing cut and fill (BC&F) within the same flood hazard area, as the City is requiring for insurance purposes, imposes strict limitations on industrial investment and expansion in the Portland harbor. Please revisit the Metro Title 3 regulation and the applicability of BC&F to this stretch of the river. Staff has heard from various stakeholders and agencies supporting revisions to BC&F policies and removing BC&F from this stretch of the Willamette will have no affect on insurance rates. City planners must understand these issues before making policy recommendations.

6. Nexus of trail and business investment: The WWC supports the goal of a continuous trail along both sides of the river with the understanding that the trail will not interfere with existing or planned or potential riverfront uses. It is unsafe to locate a greenway trail in close proximity to industrial and water related/dependent commercial activities, particularly where transportation and heavy equipment is in use. Adopted public policy supports a viable working harbor. Similarly, national and global market indicators

suggest a continued demand for industrial and commercial waterfront investment. Finally, the Federal Maritime Transportation Security Act of 2002 significantly restricts public access to the working waterfront. With our paramount concern being the safety of waterfront facility operations, it is prudent to design and locate a permanent, safe, continuous trail outside the industrial and water-related/dependent commercial zones.

7. Rail requirements of a healthy working waterfront are not adequately recognized: Any heavy industrial waterfront relies on both efficient rail as well as navigation access to retain and grow its base of river-related business. The North Reach is well served by rail today, but the conflicts between rail and residential/recreational use is growing and its significance is understated in the issues document.

   From a rail perspective, residential/recreational uses and river-access pose severe current and long-term constraints on efficiency of service and public safety. Not only is housing encroaching on industrial areas served by rail, but the housing is also being promoted in town centers without requisite sound buffering, safety equipment and grade separations. Similarly, trail and river access appears to be planned without addressing the noise, capacity, and public safety issues they bring to rail service, ensuring on-going conflict and an erosion of the industrial sanctuary

8. Develop specific goals or desired outcomes: We support specific criteria and numeric solutions for the River Plan goals as, for example, are proposed in the "River Industrial Zoning and Land Conversion" chapter (page 20). We do not support goal statements policies that simply encourage actions for unspecified outcomes. We look forward to continuing to work toward measurable River Plan objectives that support a vibrant working waterfront.

9. First things first and congruency: As this process moves forward, it is important that policy choices be made first, as a basis for future regulatory efforts. This is important for both a planning and legal perspective. For example, OAR 660-020-0065 (Amending the Willamette Greenway Plan), OAR 660-016-0005-0020 and OAR 660-023-0020 (Requirements for Complying with Goal 5) and OAR 660-009-0020 et seq (Industrial and Other Economic Development Policies), all require policy choices to be made first, followed by a regulatory program that is congruent with those choices. In other words, the River Plan should contain clear policy choices, particularly in the North Reach where the working waterfront exists. The River Plan's policy choices should then drive the regulatory process that follows, not the other way around. In the end, there should be a clear congruence between the River Plan and any implementing regulations enacted later.

   In the past, there has been a disconnect between the City's Willamette River Greenway Plan and the regulations that implemented it. That disconnect has led to problems when the ambiguities in the code needed to be interpreted, and clear policy guidance did not exist in an adopted comprehensive plan document. The River Plan itself, or a similar document that triggers appropriate statewide approvals and is formally adopted as an amendment to the City's Comprehensive Plan, should make the important policy choices first, before we find ourselves deeply involved in a process drafting regulations to fit a yet-undefined set of policy choices. Again, we believe that a policy of first things first

and congruency should be an essential part of our mission as we move forward in this important process.

10. Purpose/timing of "issues" document: In as much as several River Plan task groups are still meeting, it is unlikely that this February 12, 2007 document identifies all the known implementation issues or potential solutions. We recommend convergence of committee work prior to completion of amended "issues" document.

Thank you for the opportunity to comment on this report. We appreciate the efforts to date, and, most particularly, the background analysis, including the inventory of industrial lands and the survey of businesses. As we learned in these and other recent studies, Portland is competing in the global marketplace, and the working harbor is one of our most important assets.

Yet, a successful future is not assured. If Portland is to compete successfully, it must preserve essential transportation infrastructure and the land it serves. Environmental cleanup costs must be contained, and waterfront businesses must be supported by a nimble public permitting process.

While there continues to be a notion that multiple public objectives can be met in the working harbor, it is time to recognize that policy choices must be made. There is no other stretch of the Willamette River that serves the economy as do these few short miles. Our focus for the North Reach must be on its continued economic vitality.

Sincerely,

Howard O. Werth

Howard Werth, Gunderson, Inc.
Working Waterfront Coalition

Attached: WWC Additional Comments
WWC Roster

Cc: Mr. Gil Kelley
Ms. Sally Edmunds

Working Waterfront Coalition's Additional Information or Clarifications, April 1, 2010.

Working Waterfront Coalition's Additional Information or Clarifications to the *City staff responses to River Plan/North Reach Hearing follow-up questions* (March 24, 2010).		
Question	**City Response**	**WWC Additional Information or Clarification**
2. How does the River Plan sync with Portland Harbor Superfund process?	It syncs well.	• Staff did not discuss the fact that the majority of restoration sites identified in the River Plan are contaminated. The Portland Harbor Feasibility Study and EPA's Record of Decision will determine the cleanup plan for the site. While it may be possible to coordinate River Plan restoration with the cleanup plan, there are significant practicability issues including legal liability, allocation, costs and time. Any cleanup is many, many years away based on the current schedule and therefore these sites are not realistic restoration sites in the near term. • Likewise, the 18 Harbor ReDI brownfield sites identified in the River Plan face significant legal and cost hurdles. These hurdles have not been accounted for or dealt with in the plan.
5. Clarify the claims of uncertainty and duplication in the plan. To what extent can people use the appellant rights to undermine certainty? What are the duplication arguments?	• Standards are clearer, and the coordinated permit process will help the applicant. • Concerns about appeals should be no different than e-zone in other parts of City.	• The standards and approval criteria are not clearer from the applicant's perspective. • The coordinated review process is not part of the code adoption and there has been no formal acknowledgement from federal or state agencies that this will occur. Likewise, there has been no commitment made by Bureau of Development Services and other Bureaus that they currently have the staff and resources to commit to such a process. To the contrary, BDS has indicated they currently do not have the staff for such a process.
7. What is the incremental improvement that the City provides over what would occur as a result of state and federal review? Why not just pay the multi-tiered fee as industry suggests?	• City review adds value to protect species like lamprey that are disregarded in state and federal process. • City asserts that paying a fee-in-lieu may raise Nolan/Dolan nexus and proportionality issues because the impact may not be proportionate to the impact on resources.	• This assertion oversimplifies the issue. See memorandum dated from Windward.
8. Will there be more reviews with the new river plan or fewer	• There should be fewer reviews because the area of review is smaller and 4.5 miles of the river bank will	• While there may be fewer reviews overall, the scope of review is increasing for Working Waterfront Coalition businesses.

reviews?	not be regulated.	• This is because the new River Review focuses primarily on regulating activities along the river bank—50 feet from the water line and below. Thus, regulation of river-dependent and river-related uses—the primary use of the Working Harbor in the North Reach—is increasing. • Saying that 4.5 miles of river bank has been deregulated is misleading. In fact, the entire river bank from ordinary high water riverward is regulated, including hardened rip rap banks with no vegetation, bulkheads, piers, and docks unless subject to an exemption. As currently written, the exemptions do not go far enough and many developed areas being used by businesses as a committed river-dependent and river-related use will have to go through an extensive environmental review. • Any positive stimulus gained by eliminating the greenway setback are offset by River Review for all river-related and river-dependent uses, and for all sites in the newly designated Environmental Conservation and Protection Overlay Zones.
Working Waterfront Coalition's Additional Information or Clarifications to *River Plan/North Reach: Responses to questions from North Reach Businesses* by Mayor Adams (March 22, 2010).		
Question	**City Response**	**WWC Additional Information or Clarification**
1. Will the River Plan result in less certainty for applicants when they apply for a permit?	• No, the River Plan/North Reach should result in more certainty. Review has been narrowed to only those instances when development will impact a natural resource area. • 4.5 miles of riverbank will not be subject to review. In addition, certain development will be allowed through specific standards without review.	• This response disregards the fact that for those areas regulated, the scope of review has significantly expanded. From an applicant's perspective, the River Review requirements and approval criteria have the potential to leave significant discretion to City, which increases uncertainty for businesses. • As stated above, the 4.5 mile claim is misleading because all river bank areas below ordinary high water are subject to review—including hardened rip rap banks with no vegetation, bulkheads, piers, docks, walkways, ramps—unless there is an exemption that applies. The exemptions are limited in scope. As staff has stated, the standards under River Review are more limited than anywhere else in the City. Further, it is uncertain whether the costs under the standards will make it a real viable option for applicants because those costs have not yet been determined.
2. Why should the City regulate in the river below the Ordinary High Water Mark? Isn't that	• City review compliments state and federal review which only addresses discreet resources and in limited circumstances.	• See memoranda from Windward. • The coordinated review process used by the City has never been done on a new capital improvement project like those anticipated by Working Harbor businesses. Based on staff

duplicative of state and federal reviews?	• There will be a coordinated review process similar to the one the City has successfully used on its own infrastructure projects.	descriptions during the work sessions in January, the projects have been either restoration projects or emergency situations (e.g. dredging in Fireboat Cove to keep City fireboats operational, addressing issues with the Big Pipe in coordination with the McCormick & Baxter).
3. Will it take more time for a business to get a permit under the new River Plan than it does today under the Greenway Plan?	• Flowchart shows that City review will not add time to state and federal process.	• Flowchart is inaccurate and does not reflect the discussions held at the January meeting. o City process would add time, even under best circumstances because, based on James Holmes comments at Work Session, the Corps permit is typically issued within 30 days of receiving BiOp (not 60 days) and DSL permit is typically received on time prior to BiOp and Corps permit. This means that City permit will be last permit received based on process in flowchart. o Based on experience with City reviews by applicants, review time is extended due to requests by staff to provide more information and redesign the project. Applicants experience the "bring me another rock" scenario, constantly trying to appease staff. This takes significant time and costs a lot in engineering and consultant time. o WWC anticipates this "review" and design process will take even more time with the expanded scope of River Review as compared to Greenway Review.
5. Why can't businesses just pay a fee and not go through a lengthy review?	• Fee does not directly address impacts from development on natural resources. Fee paid may not fully compensate for the impacts of the proposal and may not meet the goal of no net loss. • The fee paid will likely not be considered adequate mitigation by DSL, the Army Corps, and NMFS, thereby doubling the mitigation paid by applicant.	• The fee is was never intended to meet the goal of no net loss <u>on its own</u>. The fee is <u>in addition to</u> mitigation required to ensure no net loss under federal and state law. The concept is that, in a worst case scenario, 95% of the impact is mitigated under federal and state law. The fee should certainly be adequate to address any remaining City-specific concerns. Example projects could demonstrate this to ensure the fee is correctly calibrated. • It appears there is a misunderstanding. WWC always intended that the fee in lieu not count toward federal and state mitigation—that is the reason it is only 1.5%. • In fact, the City's in lieu mitigation fee after going through River Review will not count toward state and federal mitigation. There is also a risk of overpaying under the City's approach.

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SCHNITZER STEEL INDUSTRIES INC.

3200 NW Yeon Avenue (97210)
PO Box 10047
Portland, Oregon 97296-0047
Phone 503.286.5771
Fax 503.286.6948

March 31, 2010

Mayor Sam Adams
City of Portland
1221 SW 4th Ave., Suite 340
Portland, Oregon 97204

Dear Mayor Adams,

As follow up to my letter dated February 17, 2010 with respect to prior submitted comments on the City's Natural Resource Inventory Update (NRIU), I submit the following updated comments and attached memo from Windward Environmental:

1. Some erroneous assumptions in the NRIU previously identified by Windward and Schnitzer have not yet been corrected. These assumptions are used to establish the ranking and classifications. It is assumed that some *features are de facto natural resources providing a* function. For example, the Willamette River is a *feature* that is assumed to provide a sediment/pollution/nutrient control *function.* Yet, clearly, a hardened bank does not provide pollution control. Conclusion: some of the report assumptions are incorrect and require further attention and correction prior to adoption by Council.

2. The rankings are not transparent and site attributes that resulted in a medium or high ranking are not easily knowable. By way of example, some sites have both wildlife habitat and riparian functions. If the rankings are not equal (one is low, another medium or high), the higher ranking trumps the lower ranking. Without significant research, it is not known which function triggered the higher designation. Recommendation: added symbology to indicate combined functions determining the rank of medium or high.

3. With respect to beaches, the assignment of Willamette Beach areas as SHAs based on the 2005 ODFW fish study is not appropriate. The study did not find statistically significant correlations for salmonids and beach habitat. Please delete any reference to this effect. (See Friesen, T.A. (ed). 2005. Biology, Behavior, and Resources of Resident and Anadromous Fish in the Lower Willamette River: Final Report of Research, 2000 – 2004. ODFW)

4. Map Corrections on Schnitzer property and property north of IT Slip: certain bank treatments are in error as noted in the attached memo. These bank types should be corrected prior to adoption of the finalized NRIU.

5. Flood Plain "function": the *de facto* baseline condition of "low" for developed flood areas should be reconsidered. Assignment of an ecological function for flood plain solely because it lies within the 100-year flood plain does not necessarily correspond to the capacity of the area to perform flood plain function.

We appreciate your thoughtful attention and consideration of our concerns over the River Plan.

Sincerely,

James H. Wilson
Regional Director

enclosure

WindWard environmental LLC

200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206.217.0089 • www.windwardenv.com

MEMORANDUM

To: Jeff Swanson, Schnitzer Steel Industries
Subject: Updated review of Natural Resource Inventory Discussion Draft
Date: March 11 , 2010

Schnitzer Steel Industries, Inc. requested an updated review of the "Natural Resource Inventory: Riparian Corridors and Wildlife Habitat, Willamette River, Portland, Oregon Recommended Draft Report November 2009" (NRIU) produced by the City of Portland Bureau of Planning. This most recent version of the NRIU updates Metro's inventory of regionally significant fish and wildlife habitat adopted in September 2005. The purpose of the document is to provide updated information on the location, extent, and relative condition of natural resources along the Willamette River in the North Reach. The NRIU has several purposes and potential uses including, but not limited to, inform the design of land use and zoning tools for the City's and Willamette Greenway zoning programs and to fulfill programs developed to meet statewide land use planning goals to protect significant natural resources and meet multiple objectives for the Willamette River Greenway. Since the publication of the draft NRIU in 2007, the City of Portland has further developed the River Plan for the North Reach related to habitat restoration, mitigation, and establishment of a habitat mitigation bank. In many instances, the NRIU will be used to determine baseline condition of a property parcel to evaluate a development's potential benefit or impact on natural resources.

August 2007 comment: *The intent of the NRIU is to document the current location, extent, and relative condition of natural resources along the Willamette River. The report divides the resource mapping of the river into three reaches, the North, Central, and South. At this time, only the results of habitat mapping for the North Reach, which includes the Portland Harbor Superfund site, are presented. While the intent of the report is to provide a "snapshot" of current natural resources, it is unclear throughout the report how the inventory will be used in development of regulation and potentially affect river-dependent industry within the highly developed North Reach of the Willamette River.*

Updated comment: The City website states that the NRIU does not propose any new regulations or programs, but that it will be used to update City regulations such as environmental zones and the Willamette Greenway program. Areas ranked in the NRIU as medium and high are the basis for a new River Environmental overlay zone, which will replace the existing Greenway overlay zone. Projects conducted in the River Environmental overlay zone will need to conform to specific standards, will require additional development fees, and will often require mitigation as specified in the River Plan/North Reach code amendment. The City could use the NRIU classifications as a basis from which to scale the potential benefit or impact of a development project within the North Reach. Additionally, the City developed plans for a habitat bank to provide on-site mitigation for development impacts. However, the selection of the restoration sites, according to Section 33.475.050 of Code Amendment and Zoning Maps volume of the River Plan (Vo. IB), "were identified based on input from River Plan stakeholders and refined by City staff with the help of staff from state and federal agencies."

August 2007 comment: *The updated NRIU maps wildlife habitat, riparian function, Special Habitat Areas (SHA), and combinations of the above components. The individual riparian function and wildlife habitat maps represent the results of a model that relatively ranked and summed criteria for each inventory site within the North Reach. The rationale for the development of the riparian rank based on primary and secondary features is not clear. How are secondary relative ranking incorporated into the ranking scheme? Furthermore, what are the "relative ranks" relative to? Summaries of the specific model input of riparian corridor model criteria and wildlife habitat ranking for each individual inventory site are not presented in the report. We recommend including summary tables of the model input for inventory sites to provide greater transparency and evaluation of site ecological function.*

Updated comment: The City has clarified how the secondary relative rankings are incorporated into the ranking scheme. However, concerns still remain regarding the assumptions behind the rankings and the resulting classifications. A table listing the riparian corridor GIS model criteria used in ranking riparian function has been added (Table 1 of the NRIU main report). The table lists primary features and secondary features of riparian areas organized by the watershed functions they are considered to provide. The features listed in Table 1 are considered to be natural resources and are also considered to provide significant functions and are subsequently referred to in the NRIU as primary and secondary functions. Riparian areas that have none of the primary features and between one and six secondary features are ranked "low"; areas that have between one and three primary features and zero and six secondary features are ranked "medium"; and areas that have four to six primary features and zero to six secondary features are ranked "high" (see Table 2 of the NRIU main report).

It is unclear how all of the riparian features listed in Table 1 perform riparian functions. For example, one of the secondary features in Table 1 is listed as "Willamette River North and Central Reach." This listing implies that all riparian areas within the North and Central Reach are performing a secondary riparian function in the category of bank

function and sediment/pollution/nutrient control. Based on the way the rankings are calculated, all riparian areas in the North and Central Reach automatically receive at least a "low" riparian habitat rank and are considered to provide significant riparian corridor functions. This makes "low" ranking the baseline and gives only two indicators ("medium" and "high") with which to distinguish relative riparian quality. It is unclear how hardened bank areas devoid of vegetation provide significant riparian functions such as pollution control.

Information on inputs used in the wildlife habitat model has also been provided. Habitat patches were defined as areas of forest vegetation or wetlands at least two acres in size, plus the woodland vegetation adjacent to these areas. Table 3 of the NRIU main report lists the categories considered when evaluating habitat patches: patch size, interior habitat area, connectivity/proximity to other habitat patches, and connectivity/proximity to water. For each category, wildlife habitat areas received a "high" score (worth three points), a "medium" score (worth 2 points), or a "low" score (worth one point). Habitat patches that received a total of one to three points were ranked "low"; those that received four to eight points were ranked "medium"; and patches that received nine or more points were ranked "high."

When a wildlife habitat and a riparian function overlap or if either of these overlaps with a special habitat area (SHA), the higher ranking habitat value or the SHA "trumps" a lesser rank, thus masking the individual habitat rankings used to compile the summary figures. In our 2007 memo, we recommended the incorporation of map symbology on the combined riparian/wildlife relative ranking figures to clearly indicate the combination of functions overlain to create the summary figures (e.g. low wildlife ranking, high riparian, etc.). No symbology or indications of combined ranking have been added. We still feel that it would be more accurate and informative to include a scale that portrayed combined rankings. For example, an area that was ranked medium for riparian function and low for wildlife habitat would receive a unique ranking (with corresponding shading or other indication on the map) of med-low. This would allow managers and planners using the NRIU to understand, at least in a basic sense, the separate site features resulting in the ranking. In the example provided, the manager or planner would understand that a specific area provides moderate riparian function but only low wildlife habitat function, rather than just seeing that an area has a "medium" rank, without understanding the site conditions behind that ranking. Such a system would also allow for a more transparent evaluation of the habitat rankings. This level of detail in the figures will provide a more informative management tool.

August 2007 comment: *Special Habitat Areas (SHAs) were identified based on several attributes and designations. In general, the criteria for SHAs seem reasonable. However, the assignment of Willamette Beach areas as SHAs based on the 2005 ODFW fish study is generally not appropriate. The study did not find statistically significant correlations for salmonids and beach habitat. The report concludes that it "found little evidence to suggest that nearshore habitat as it currently exists is a critical factor affecting yearling salmonids" while suggesting*

nearshore habitats "appear to be important to smaller fish (Friesen 2005) [1]." As the study did not conclusively find (i.e. statistically significant results) it does not provide a substantive basis from which to designate SHAs for beach areas within the North Reach.

Updated comment: Beaches are considered a scarce resource within the North Reach. Within Site WR5, the beach area within and adjacent to ITS is not identified correctly and the map should be updated. The NRIU still states that the beaches and near-shore shallow water areas in WR5 provide important ESA habitat (for salmonids and macroinvertebrates) citing the ODFW 2005 report. The City's statement regarding the beaches at Site WR5 is the following: "Although the vegetated banks reflect disturbance associated with development, they provide a connectivity corridor between Site WR4: South Rivergate Corridor to the north and Cathedral Park to the south." The City has since revised its rationale for identifying beaches as part of SHA in the North Reach based on the 2005 ODFW study to emphasizing their role in providing habitat connectivity.

The City responded to our previous comments regarding habitat function on specific hardened banks. The revised draft has downgraded bank habitat values in the North Reach, and in International Terminal Slip, on the riparian values map where there are hardened banks without vegetation, seawalls, pilings, manicured landscapes or cultivated vegetation (versus natural vegetation), and sediment contamination; the revised draft states that these downgrades will likely also apply to areas in the Central reach. The revised draft also recognizes that microclimate and shade functions should only be considered when the forest vegetation is contiguous to the river and that shrubland and cultivated woodland areas do not significantly contribute to the microclimate and shade functions. However, it is not clear if a site is bordered by shrubland and cultivated woodland areas, whether the score is zero or "low" for those functions. Additionally, more clarification is needed on river bank classification when the SHA areas interface a low-ranked upland. In response to this comment, most of the SSI property is now ranked "low" except for in-water area and some of the shoreline area.

In 2007, we suggested including information on current bank conditions, such as presented in the Willamette River Atlas, to provide a context for the riparian rankings. Information on current bank conditions is now provided on Site WR5- Maps 2 and 3 (water-related features map and vegetation features map, respectively,) but are not accurate for SSI and adjacent properties. Inaccuracies on the type of bank within ITS should be corrected. The shoreline in front of Burgard Yard, to the south of ITS, is currently classified as "unclassified fill bank" when this bank is primarily unvegetated rip rap. The north side of ITS at the mouth of the slip is currently classified as beach, when this portion is actually unvegetated riprap. The bank type layer should be verified for inconsistencies prior to finalizing the NRIU. Additionally, the details on

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[1] Friesen, T.A. (ed). 2005. Biology, Behavior, and Resources of Resident and Anadromous Fish in the Lower Willamette River: Final Report of Research, 2000 - 2004. ODFW.

bank type are lost on WR5- Maps 4 – 6 where habitat rankings are presented. It would be more informative to carry the bank type layer through on all figures.

Separate comment: On the Site WR5- Map 4 figure, there are a couple medium ranked slivers within ITS located in the middle near the northern shoreline. Please clarify the basis of this ranking in the slip.

August 2007 comment: *The upland area of the Schnitzer property is assigned a low riparian function as a result of being located within the 100-year flood plain. Developed floodplain areas, such as the 680 acres of non-vegetated flood plain within the Willamette River watershed, do not provide equivalent ecological functions, such as flood control, groundwater recharge or stormwater attenuation as undeveloped flood plains. As a developed site covered by impervious surfaces, the site lacks the vegetation and soils necessary for a functioning flood plain. Assignment of an ecological function for flood plain solely because it lies within the 100-year flood plain does not necessarily correspond to the capacity of the area to perform flood plain function. The City needs to consider current site conditions within each inventory area and their potential to fulfill the ecological function assigned.*

The *de facto* baseline condition of "low" for developed flood areas should be reconsidered. The upland area of the Schnitzer property is still assigned a "low" riparian function ranking. The NRIU states in the definition of the low riparian rank that it includes developed flood areas and hard, non-vegetated banks (see pg. 16 of the NRIU main report). The low ranking is considered to perform zero primary functions and one to six secondary functions (these are referred to as primary and secondary features in Table 1). See previous discussion in this document.

In order to effectively accomplish the goals of the Natural Resource Inventory update, we respectfully request the City consider these comments to better represent current resources in the highly developed industrial North Reach of the river.

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WWC Submittal

Appendix 2 – Miller Nash Letters and Submittals

183694

MILLER NASH LLP
ATTORNEYS AT LAW

PORTLAND, OREGON
SEATTLE, WASHINGTON
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WWW.MILLERNASH.COM

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

February 17, 2010

Mayor Sam Adams and
Portland City Council
City of Portland
1221 S.W. Fourth Avenue
Portland, Oregon 97204

Subject: River Plan

Dear Mayor Adams and Commissioners:

At the December 16th forum, I submitted a letter explaining why the success of River Plan is dependent upon the success of the working waterfront. In that testimony, I urged the City to consider the solutions proposed by the WWC, in its November 30th letter.

Since then, several things have occurred. First, the WWC has focused its River Plan concerns on eight critical amendments, as listed in Table 1 of the WWC's February 5th letter. Second, the WWC reviewed the proposed code and submitted detailed amendments with regard to that document. Third, the City's recent response to these specific amendments indicates that only one of our proposed amendments have been accepted by staff.

My concern at this point is that unless the legitimate concerns of the WWC are addressed before River Plan is adopted, the adoption of River Plan will create negative momentum that will deter investment in the working harbor. This is especially a concern within the next few years, when we can least afford that kind of negative economic momentum.

Throughout the River Plan process, we have diligently proposed specific solutions that respond to the legitimate concerns of the environmental community and at the same time tried to create a more positive economic climate for development within the harbor. We need to continue to work together to resolve these differences. In the end, River Plan is a major undertaking that will either create positive momentum for development within the harbor, or it will create a more complex and uncertain set of

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regulations than what we have now, and in doing so create negative momentum for development within the harbor.

I would ask that you continue to work through the specific changes proposed by the WWC, especially with regard to the proposed code and fee issues. We need to create positive economic momentum with the adoption of River Plan, or we will not achieve its desired environmental benefits.

Thank you for your continued consideration of this matter.

Very truly yours,

Phillip E. Grillo

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SEATTLE, WASHINGTON
VANCOUVER, WASHINGTON
CENTRAL OREGON
WWW.MILLERNASH.COM

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

December 16, 2009

Mayor Sam Adams and
Portland City Council
City of Portland
1221 S.W. Fourth Avenue
Portland, Oregon 97204

Subject: River Plan

Dear Mayor Adams and Commissioners:

I am writing as a member of the Working Waterfront Coalition ("WWC") to provide you with my perspective on the potential benefits of River Plan, and how the Plan should be amended to get River Plan back on track.

During the course of the conversation on River Plan, the WWC has continually tried to make River Plan better. As you know, the WWC and other businesses in the harbor have provided ongoing feedback to the City and other stakeholders on River Plan. The WWC has also provided specific suggestions, alternative code language, and an alternative fee proposal for the City to consider.

Despite some of the changes that have been incorporated into the plan, the current version of River Plan still discourages new investment in the Working Waterfront. In the North Reach, River Plan discourages investment in the harbor primarily because it replaces Greenway Review with a highly complex and extremely confusing set of new local land use regulations and fees. These regulations and fees create significant uncertainty, delay, and costs for businesses as they consider whether or not to invest in the property along the Willamette River in Portland. During the course of our conversation, the City has taken the position that River Plan is good for businesses in the North Reach. We respectfully disagree with that conclusion. To help clarify our perspective, I am providing a copy of the WWC's rebuttal to the perceived business advantages of River Plan. In our view, the perceived business advantages of River Plan are overstated and offset by significant disadvantages created elsewhere in the plan. Simply put, the perceived business advantages of River Plan are false-positives.

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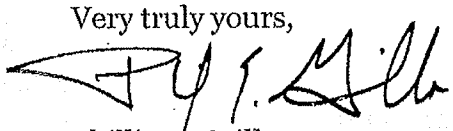
Stepping back for a moment, it is important to understand what the chief potential benefit of River Plan really is, and how it can be achieved.

What is unique about River Plan is its potential to create a series of restoration sites ("pearls") along the working harbor, where environmental mitigation and restoration efforts can be concentrated. The potential benefits of these restoration sites are both ecological and economic. If implemented effectively, these sites can help protect other prime industrial lands, facilitate development and redevelopment in the working harbor, and can eventually become the focus of our restoration efforts in the North Reach. What is critical to remember, however, is that the success of these restoration sites and ultimately the success of River Plan itself, depends upon a thriving working waterfront. Without a thriving working waterfront, River Plan will not create real ecological and economic benefits along the river. Without a thriving working waterfront, River Plan will simply replace our current set of greenway regulations with a much more cumbersome and complex set of land use regulations that will deter investment along the river. In short, economic prosperity along the river is what will drive the success of River Plan and future investment in its restoration sites. We must find a way to implement River Plan that encourages reinvestment along the river. Discouraging investment in the harbor is not something we should be willing to risk.

In order to get River Plan back on track, I urge you to consider the solutions proposed by the WWC in its November 30, 2009 letter.

Very truly yours,



Phillip E. Grillo

WWC Rebuttal to the Perceived Business Advantages of River Plan
(December 16, 2009)

At various times and in various materials, the City has articulated what it believes to be the business advantages of River Plan. The WWC disagrees with the City's assertions that the current version of River Plan creates significant business advantages. In an attempt to summarize our response to the City's perceived business advantages of River Plan, the WWC is responding to the October 28, 2009, memo from the Bureau of Environmental Services ("BES") to Commissioner Saltzman. As explained below, the perceived business advantages of River Plan are, in reality, false positives.

In the above-mentioned memo, BES asserts that the Portland Business Alliance letter of October 20, 2009, "neglects to mention the following important aspects of the North Reach Plan. The WWC disagrees for the following reasons:

1. **"Providing certainty to industry by bolstering (sic) sanctuary policy and prohibiting conversion of industrial land to non-industrial uses."**

Response: Metro's regulations already require the City to prohibit quasi-judicial conversion of industrial land to non-industrial uses. With regard to industrial land conversions, the City was simply implementing what it was already required to do under Metro's regulations. In other words, this is a false positive, because the prohibition on industrial land conversions already existed under applicable law.

2. **"Strengthening the River Industrial Overlay Zone as a tool to reserve riverfront industrial land for river-dependent and river-related uses (such as beefing up nonconforming sues and land division provisions)."**

Response: The minor adjustments to nonconforming use and land division provisions in the River Industrial Overlay Zone, are more than offset by the additional local regulations and fees imposed on development within this overlay zone, particularly on river-related and river-dependent uses and development along the shoreline and in the water, that will now be subject to the new River Environmental Overlay Zone. The River Environmental Overlay Zone makes it much more difficult for most river-dependent and river-related businesses to use the shoreline and the river, and in doing so, frustrates economic prosperity along the working waterfront. In other words, this is a false positive , because the economic and regulatory burdens created by the River Environmental Overlay Zone far exceed the minor economic and regulatory relief provided by the revisions to the River Industrial Zone.

3. **"Improving regulations to increase predictability and flexibility for industrial development and expansion (such as standards for bulkheads, cargo conveyors, rail ROW)."**

Response: The special standards for bulkheads, cargo conveyors, and rail ROW in River Plan were purposely crafted by the City to have limited applicability. As such, these standards

provide a very limited benefit. Most river-related and river-dependent development along the shore and in the river will be subject to much more rigorous review under the River Environmental Overlay Zone and related regulations. As noted above, these regulations frustrate economic prosperity along the working waterfront, and the limited standards mentioned above do not offset the economic and regulatory burdens created by River Plan for most development in the working harbor. In other words, these standards are a false positive, because the minor increases in predictability and flexibility for development such as certain bulkheads, cargo conveyors, and rail ROW do not offset the much more significant economic and regulatory impacts created by the River Environmental Overlay Zone and River Review.

4. **"Eliminating greenway setback in the River Industrial zone."**

Response: It is true that greenway setbacks are eliminated in the River Industrial Zone. This is an advantage for businesses who may intend to develop within the setback, so long as the area within the existing greenway setback is not located within either the new River Environmental Overlay Zone or within newly designated Environmental Conservation or Environmental Protection Overlay Zone areas in the North Reach. It is important to understand, however, that all medium- and high-value natural resource areas along the river will be regulated by the new River Environmental Zone. In other words, eliminating the greenway setback is a false positive for the vast areas along the working waterfront that will be regulated by the new River Environmental Zone, because the economic and regulatory burdens associated with these new regulations significantly outweigh the burdens currently imposed by the existing greenway review. With that said, we acknowledge that in upland areas that are currently within the greenway setback, where no medium- or high-value natural resource areas exist, some local regulatory relief will occur. However, it seems to us that since we now know that these areas do not contain any significant natural resources, we also now know that these areas have been over-regulated for many years by local greenway review. In these areas, regulatory relief is long overdue.

5. **"Fueling Harbor Reinvestment Strategy through coordinated public and private investments in infrastructure and land development."**

Response: The potential investments listed in the Harbor Reinvestment Strategy do not represent a commitment by the City to fund all the projects on that list. Many of the projects will be funded with Port, private, and grant funds, not just resources the City controls. In fact, many of these projects will be or have already been funded by gas taxes, which are paid by harbor businesses and others who buy gas in the state. In short, the Harbor Reinvestment Strategy does not commit the City to fund projects along the river. Since many of the projects listed in the Harbor Reinvestment Strategy will be or are already funded by the Port, the private sector, grants, or gas taxes, River Plan by itself does little to actually commit the City to reinvest in the working harbor.

6. **"Integrating (sic) of local, state and federal permit reviews."**

Response: We continue to disagree with the City's assertion that River Review will be "integrated" with state and federal permit reviews. The fact is, River Review will occur through

a separate local review process. River Review is a local land use review process, and is subject to all of the normal land use procedural requirements, including notice and an opportunity for a hearing and the opportunity for any party to appeal the City's decision to LUBA and the courts. In the event that River Review triggers a hearing, there will be nothing "integrated" about that hearing. The City's hearings officer is not bound by the opinions of state and federal officials regarding to the criteria in River Review. River Review is a separate and independent land use permit decision-making process. Even in cases where a hearing doesn't occur (which will not be known until after City staff completes its review and issues its decision), local review will not occur in an integrated way, because the City's regulations are different and regulate different functions and values than state and federal regulations do. In cases where regulatory overlap occurs, the potential for conflict exists between the city, state, and federal regulatory agencies. In other words, "integration" is a false positive, because the River Review is inherently a separate local review process. River Review is subject to all of the usual land use procedural requirements. Those requirements and the potential for appeal add significant cost, uncertainty, and delay to a project, well above and beyond the cost, uncertainty, and delay associated with state and federal permit processes. There is simply no way to know what the costs, uncertainties, and delays will be in any particular case until the results of River Review are known and a final decision is reached.

7. **"Providing options for off-site mitigation."**

Response: Off-site mitigation options are important. River Plan, however, does not provide assurances that an applicant can mitigate off-site. Under River Plan, off-site mitigation is a possibility, not an option available by right. In that regard, it is a false positive, because off-site mitigation is merely a possibility, not an option available by right. Under River Review, any party, including members of the public, can appeal the City's decision to allow off-site mitigation to the hearings officer, then to LUBA and the courts. In other words, the possibility of off-site mitigation, by itself, is a false positive, because as long as off-site mitigation is a discretionary decision made by the City as part of a local land use permit decision, the possibility of off-site mitigation provides no certainty. Rather, it adds additional uncertainty, cost, and delay. Instead, off-site mitigation should be allowed by right, and should be coupled with the option of a fee-in-lieu for any mitigation required by River Plan.

8. **"Allowing in-lieu fee options to meet vegetation requirements."**

Response: We have made some progress in this area through ongoing discussions with the Mayor and BPS, but this issue is still not fully resolved. Nonetheless, under the existing greenway code, vegetation requirements are much less than what would be required under River Plan. Under River Plan, the vegetation requirement would be triggered by development anywhere in the site, rather than by development within the greenway or greenway setback, as is currently the case under greenway review. In other words, the fee-in-lieu option to meet the new vegetation requirement under River Plan is a false positive, because the new vegetation requirement is triggered by any development anywhere on the site, and the 15 percent standard is more extensive than it would be under existing greenway review.

183694

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

April 14, 2009

BY HAND DELIVERY

Mr. Don Hanson, Chair, and
Portland Planning Commission
City of Portland
1900 S.W. Fourth Avenue, 4th Floor
Portland, Oregon 97201

Subject: River Plan North Reach- Riverbank Restoration Requirements
Comments on Behalf of Morgan, BP, and NuStar Energy

Dear Chairman Hanson and Commissioners:

I am writing on behalf of my clients Kinder Morgan, BP, and NuStar Energy regarding the proposed riverbank restoration requirements contained in the city's March 24, 2009, draft of River Plan. In that regard, please consider the following three points:

1. **Requiring River-Dependent Industrial Businesses to Lay-Back the Riverbank to a 5:1 Slope and Restore it to a Natural Condition is Incompatible with the Working Harbor.**

The March 24, 2009, River Plan draft requires property owners in the North Reach to lay-back the riverbank and restore it to a natural condition. As you know, most of the land in North Reach is zoned for industrial use. Most of this land is part of the working harbor and has been committed to urban uses for decades. Under the city's Greenway regulations, industrial uses located along the river must be either river-dependent or river-related uses or must undergo Greenway Review to locate in this area. By definition, river-dependent and river-related uses require access to the river in order to conduct their operations.

State and local land use regulations, including River Plan itself, all recognize the need to protect urban industrial uses that have established operations along the river. For example, Statewide Planning Goal 15 specifically mandates that "lands committed to urban uses within the Greenway shall be permitted to continue." This mandate reflects reality for most industrial businesses located along the river.

Industrial businesses like ours are located along the river because we need to use the river and the riverbank to conduct our operations.

Staff's proposed riverbank restoration requirement is incompatible with the realities of the working harbor, because it will severely limit business operations along the waterfront where the restoration requirement applies. These areas are committed to urban use and must be protected for river-oriented industrial use. As a result, staff's restoration requirements will lead to significant disinvestment in the working harbor and will conflict with one of the key purposes of River Plan, which is to increase investment and growth in the working waterfront. For all of these reasons, the proposed on-site restoration requirements should not be adopted.

2. **The City's Proposed 1%-In-Lieu Fee is Only a Down Payment on the Remaining Restoration Liability. Businesses Must Still Account for and Pay the Remaining Restoration Obligation.**

Staff seems to recognize the problems associated with its proposed on-site restoration requirement. To avoid those problems, staff has proposed a fee option. In order to fully understand the problems related to the fee option, the total restoration obligation needs to be considered. For example, for a site with approximately 1,000 lineal feet of river frontage, (assuming a 50 percent restoration requirement and a 100 percent management fee), the total restoration obligation would be approximately $1.5 million. Even if the applicant's current installment of that restoration obligation is capped at some percentage of the project cost, the remaining restoration obligation does not go away. Businesses must still account for the remaining obligation and are presumably liable for it. Unfortunately, we don't know what this long-term financial obligation will look like, or how it will be regulated by the city. These unknowns further complicate the restoration fee and make it even more problematic.

Overall, we believe that the restoration fee proposed by staff is incompatible with the working harbor, and that this restoration obligation will complicate and deter future investment choices in the harbor. The proposed fee is incompatible with the working harbor because it has no relationship to the impacts caused by the project. Under staff's fee proposal, a project located in the upland area of a waterfront site, that has no impact on identified natural resources, would trigger the same fee that a project located on the shoreline would. There is simply no connection between the proposed fee and the purpose of the restoration requirement. The fact that the fee for a particular project might be limited to some percentage of the total project cost does not create a linkage between the project and the need to restore the riverbank,

nor does it make the fee roughly proportional to the impact caused by the proposed development. For all of these reasons, staff's fee proposal should be rejected.

3. **The Working Waterfront Coalition Has Proposed A Better Fee Proposal for Restoring the Riverbank and the River along the North Reach.**

The Working Waterfront Coalition ("WWC") has proposed a better fee proposal for restoring the riverbank and the river along the North Reach. The WWC's proposal (see attached draft dated February 5, 2009) was submitted to the city in February. Our fee proposal replaces both the proposed restoration fee and the proposed mitigation fee proposed by staff with a one-fee system containing three payment tiers. Under the WWC's fee proposal, the amount of the fee varies depending on the location of the proposed development, relative to the location of natural resource areas mapped by the city. For example, Tier 1 fees would be the highest, and would apply to projects located in River Environmental Zone areas classified as High Value habitat areas. Tier 2 fees would be the next highest, and would apply to projects located in River Environmental Zone areas classified as Medium or Low Value habitat areas. Tier 3 fees would be the lowest, and would apply to projects located within 100 feet of any River Environmental Zone boundary.

This type of tiered fee system creates a clear relationship between fees and project impacts on inventoried natural resource areas. This system can be calibrated to generate a reasonable level of revenue to help fund the enhancement of restoration sites within the North Reach. In the end, environmental enhancement in the working harbor depends on the ability of businesses along the river to invest or reinvest in the working harbor. A fee system that deters investment is counterproductive and will ultimately harm both the economy and the environment.

For all of these reasons, we ask that you not adopt the riverbank restoration requirement and fee proposal recommended by staff, and instead, that recommend adoption of the fee system proposed by the WWC.

Respectfully submitted,

Phillip E. Grillo

WWC Fee Proposal – Draft 2/5/09

Multi-Tier Fee System:

1. Replaces the following fees in the October 2008 Draft: Restoration Fee (Deconstruction Fee) is eliminated; River Environmental Zone Fee is eliminated; no fees are required for Cleanup of Contaminated Sites.[1]

2. Applies to all development within the Areas designated below unless the activity is listed as Exempt.

3. Requires Applicant to either do (a) ***or*** (b):
   a. Go through River Review, including evaluation of impacts of development on natural resource functions and values; evaluation of alternatives that meet project purpose to avoid or minimize those impacts; and mitigation if impacts cannot be avoided or minimized.
   b. Pay a Fee in lieu of River Review according to the following:

Tier 1	• Area: Applies to the River Environmental Overlay Zone that is classified as High Value according to the City's NRI • Fee: X% of Project Cost[2]
Tier 2	• Area: Applies to the River Environmental Overlay Zone that is classified as Medium Value according to the City's NRI • Fee: X-1% of Project Cost
Tier 3	• Area: Applies to a Buffer Zone defined as the area within 100 feet of the River Environmental Overlay zone. • Fee: X-1.5%

4. Choosing Option (a) or (b) is applicant's right.

5. Exempt activities would be those listed in the October 2008 draft proposal, 33.475.430.A, with the following modifications: (a) add exemption for Cleanup of Contaminated Sites; (b) clarify the dredging/maintenance exemption per the Port's comment letter dated 1/13/09 to Planning Commission. *Further discussion of exemptions may be necessary if parties are interested in this approach.*

6. River Review would be similar to City's October 2008 draft except: (a) language regarding right to ground truth NRI data is inserted per Steve Pfeiffer's recommendation, and (b) fee calculator is removed.

[1] Need to determine what happens with IG2 landscape fee, which has limited applicability.
[2] Need to discuss an appropriate cap depending on the final fee schedule selected.

Pros/Cons for City and Applicants

Pros	Cons
Certainty	For applicant - If opt out and pay fee, potentially pay more than if applicant did mitigation
Regulatory basis has nexus/relationship to natural resource impacts; reduces risk of challenge	For applicant - If opt out and pay fee, do not get credit for state and federal mitigation actions
Simplicity; eliminates confusing nature of multiple fees in current draft	For applicant – Likely pay more than current greenway requirements in current code; not revenue neutral.
For City – WWC can agree to it.	For City – some may perceive this approach as generating less in fees.
Avoids need to significantly modify the River Review section because applicants will have right to opt out and simply pay a fee	
For City - Would not require significant modification of existing draft; retains fundamental concepts, zone designations, NRI database, and restoration pearl sites. Fee relies upon existing NRI data and is not subject to challenge by applicant.	
For applicant - Limits exposure for failed mitigation sites b/c applicant can opt out and pay fee	
Eliminates potential for conflicting uses on same site (water dependent marine and natural resources) because allows applicant to opt for fee in lieu instead of doing on-site mitigation; maintains flexible and sustainable marine uses.	
Allows applicant to avoid expensive and timely process of River Review alternatives analysis	
Fees are fair so it would encourage applicants to pay fees into restoration fund; this increases likelihood of success for the City program.	
Potentially generates more fees because if applicant pays fee in lieu, credit is not given for state and federal mitigation. Also generates more fees than if based on current greenway requirements.	
This approach encourages development to stay away from the River. The closer you get, the higher the fee.	
Appropriately balances a healthy working harbor with natural resource goals. Burden on business is not so great as to deter investment to retain and grow job and tax base.	

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PORTLAND, OREGON
SEATTLE, WASHINGTON
VANCOUVER, WASHINGTON
CENTRAL OREGON
WWW.MILLERNASH.COM

183694

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

December 9, 2008

BY HAND DELIVERY

Mr. Don Hanson, Chair, and
Portland Planning Commission
City of Portland
1900 S.W. Fourth Avenue, 4th Floor
Portland, Oregon 97201

Subject: River Plan North Reach
Comments from Kinder Morgan, BP, and NuStar Energy

Dear Mr. Hanson and Commissioners:

I am writing on behalf of Kinder Morgan, BP and NuStar regarding the October 28, 2008, draft of the North Reach River Plan (River Plan). As you know, these companies own and operate important energy distribution and storage facilities in Linnton and Willbridge. Together with six other energy companies in this area, the energy cluster provides the City, the region, and the state with most of its gasoline, diesel, oil, and jet fuel.

Over time, these energy companies have clustered along the North Reach for a specific reason. The industrial lands in Linnton and Willbridge are uniquely suited to the needs of the energy cluster, because they provide direct access to multi-modal transportation infrastructure, including the river and an international port, local and interstate rail facilities, the state and federal highway system, and the Olympic Pipeline. Likewise, these companies have made and continue to make major investments in the North Reach, to create a private infrastructure system that interconnects their individual storage and distribution facilities and allows them to safely and efficiently transport and store a variety of energy products, 24 hours a day, 365 days a year. This interconnected infrastructure system allows fuel to be shipped into Linnton and Willbridge by pipeline, barge, rail, and truck, so it can quickly and safely be distributed throughout the region, and ultimately to businesses and consumers like you and me.

While the River Plan acknowledges the energy cluster in a general way, several policy and regulatory choices proposed in the October draft threaten the continued viability of the energy cluster, and will significantly compromise the safety

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and security of these facilities and the public generally. We hope that our comments highlight the critical role the energy cluster plays in the day-to-day operation of businesses and households in the region, and provides you with a better understanding of how to protect this critical infrastructure both now and in the future. With this background in mind, we offer the following specific comments:

1. Critical Infrastructure Protection (CIP)

Critical Infrastructure Protection, or CIP, is a national program to assure the security of vulnerable and interconnected infrastructure in the United States. In May 1998, President Clinton issued Presidential Directive PDD-63 on the subject of Critical Infrastructure Protection. This directive recognized certain parts of the national infrastructure, including energy facilities like ours, as being critical to the national and economic security of the United States and the well-being of the country. President Clinton's directive required that steps to be taken to protect these critical infrastructure facilities. President Clinton's directive has been updated by subsequent directives, such as Directive HSPD-7, known as the Critical Infrastructure Identification, Prioritization and Protection Directive. Together, these directives and other federal and state laws enacted to implement them, create a legal framework that requires federal, state, and local governments to take into consideration the complexities involved in protecting critical infrastructure, and to work together to secure this infrastructure—not just from potential terrorist attacks—but also from the risks associated with conflicting uses nearby.

Unfortunately, the network of facilities that make up our critical infrastructure are often taken for granted. As the owner and operator of a complex system of water and sewer systems, the City of Portland is already aware of how the City's infrastructure is sometimes taken for granted by the public, especially where maintenance and facility protection issues are involved. It may, however, be surprising to know that approximately 85 percent of the critical infrastructure in the United States is owned and operated by private companies, rather than the public sector. Private critical infrastructure, like ours, often suffers from the same lack of understanding as to what is required to protect these facilities from conflicting uses and other significant risks.

As you will see in the discussion below, the location of public trails and "restoration sites" directly adjacent to critical infrastructure significantly threatens these critical facilities. These draft policy choices do not take into account the need for Critical Infrastructure Protection, and should therefore be rejected.

2. Identification and Protection of Prime Industrial Land

We are pleased that the River Plan has begun to articulate and address the Statewide Planning Goal 9 (Economic Development) requirement for the identification and protection of Prime Industrial Land. Under the new administrative rules that implement Goal 9, "Prime Industrial Land" must be inventoried and protected. OAR 660-009-0005 defines Prime Industrial Land as follows:

> ""Prime Industrial Land" means land suited for traded-sector industries as well as other industrial uses providing support to traded-sector industries. Prime industrial lands possess site characteristics that are difficult or impossible to replicate in the planning area or region. Prime industrial lands have necessary access to transportation and freight infrastructure, including, but not limited to, rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes. Traded-sector has the meaning provided in ORS 285B.280."

Most of the land along the North Reach is correctly identified as prime industrial land in the River Plan, as shown on Map 4 in Volume 1A. However, in Linnton, approximately 35 acres of industrial land, zoned IH, has been excluded from the "Prime Industrial Land Retention Area" boundary shown on Map 4, without any relevant explanation. This is the area in Linnton that the Portland City Council recently voted not to rezone from industrial to residential use. This 35-acre industrially-zoned area in Linnton meets the definition of "Prime Industrial Land" in OAR 660-009-0005 and as a matter of law must be identified and protected as such. We therefore ask that you amend the Plan to show this land as Prime Industrial Land.

3. Objection to the Location of a Public Trail through Prime Industrial Land and Critical Infrastructure in Linnton

Maps 8 and 9 in Volume 1A propose that a public trail cross the Portland and Western Railroad line at two locations in Linnton, looping through IH-zoned industrial land, then along the riverfront, adjacent to the Kinder Morgan energy facility in Linnton. We have repeatedly objected to this trail location based on significant safety and security reasons. This trail would require the creation of two at-grade pedestrian and bike crossings of the busy Portland and Western Railroad, through Linnton. These crossings would be extremely dangerous and would be difficult to control from the

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standpoint of pedestrian and bicyclists who may be determined to cross. Furthermore, several large petroleum tanks and other storage and distribution facilities are located within a few feet of these proposed public trails. This trail location violates several comprehensive plan policies that are designed to reduce land use conflicts. These trails are also inconsistent with the federal and state protections required for critical infrastructure and prime industrial land.

4. Objection to Restoration Site 16 (RS16) Located at the Kinder Morgan Terminal in Willbridge

Map 11 in Volume 1A recommends approximately 20 "restoration sites" along the North Reach. As you know, we have worked cooperatively with the City and the environmental community to explore the feasibility of creating a system of restoration sites along the North Reach. If a consensus can be reached, such a system could be used as an innovative way to concentrate environmental restoration in areas where it could do the most good. One of the underlying premises of that effort is and always has been that designation of these restoration sites must be agreed to by the landowner. We have never supported a restoration program that mandates the designation of restoration sites over the objection of the landowner. Proposed Restoration Site 16 is a significant portion of Kinder Morgan's Willbridge Terminal site. This site currently contains Kinder Morgan's largest Oregon terminal, its largest and most active Oregon dock, and its largest and most active Oregon storage and distribution facility. Furthermore, the area identified by the City as "Restoration Site 16" has previously been planned as the location of a future dock and distribution facility. Kinder Morgan is therefore not willing to have this site identified on any map as a "Restoration Site." It is critical that no restoration site be identified on this property.

5. Support Focus of Redevelopment in Linnton Within Existing Commercially-Zoned Areas

As many of you know, Kinder Morgan, BP, and NuStar, along with the Working Waterfront Coalition, have diligently worked with Linnton residents over the last several years, in two separate mediated efforts (one financed by the Working Waterfront Coalition in 2006 and another financed by the City in 2007) to help find common ground between the industrial and residential community in Linnton, that would allow both aspects of the community to prosper. We have always supported the desire of Linnton residents to improve their commercial center, and have continually expressed our desire to see those efforts focused on the existing commercially-zoned areas in Linnton, rather than on the industrially-zoned areas along the waterfront.

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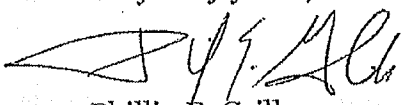
CENTRAL OREGON
WWW.MILLERNASH.COM

We understand the desire of some Linnton residents to access the river in the industrial area, and have tried to work with them to find ways to create a connection to the river that does not create significant safety and security issues for the railroad, our industrial facilities, or the public in general. So far, that effort has been unsuccessful, but not from a lack of effort. We will continue to work with the City and with Linnton residents in an effort to find those solutions. But the location of trails shown in the current draft of the River Plan is not the product of a collaborative effort and is unacceptable to us. We believe that any discussion of Linnton's redevelopment should start with a critical examination of its existing commercial area, and that efforts should initially be focused there, not on trying to create a trail system through the industrial area where critical infrastructure and prime industrial land needs to be protected.

In conclusion, we hope that you will take our comments into consideration as you review the draft River Plan. We join in the comments submitted by the Working Waterfront Coalition and trust that you will carefully consider all of the public comments before making your recommendation to City Council.

Very truly yours,



Phillip E. Grillo

183694

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

June 5, 2008

BY HAND DELIVERY

River Plan Committee
City of Portland
Bureau of Planning
1900 S.W. Fourth Avenue
Portland, Oregon 97201

Subject: Working Waterfront Coalition Comments on River Plan/North Reach Discussion Draft dated May 23, 2008

Dear Chairman Hanson and River Plan Committee Members:

I am writing on behalf of the Working Waterfront Coalition ("WWC") to provide the River Plan Committee with our initial comments on the discussion draft of the River Plan/North Reach, dated May 23, 2008 ("River Plan"). I expect that a number of WWC members will provide additional testimony during the written comment period.

Observations

1. No small undertaking. We agree with the statement on page one of the report, that:

> "Much is demanded of the river and adjacent lands. River frontage is a scarce and increasingly valuable resource and multiple interests compete for its use. * * * This is no small undertaking—the implications of the decision made in this plan will affect the river, the adjacent land and the City as a whole, for generations to come." (River Plan at 1.)

We want to compliment Bureau of Planning staff, members of this Committee, and many others in the City for their diligent work and dedication to this important project. The WWC shares your desire to see River Plan succeed.

2. Work in progress. Now that the work of many committees, staff, and groups has come together in an initial draft, this draft needs to be recognized for what it is—a work in progress. Many issues and specifics still need to be flushed out and discussed further. More property-owner outreach is needed, particularly as it becomes

more clear what regulations and fees will apply. At this point, the report mostly describes policy and concepts. As we have said before, the devil is in the details. Because we do not know what the regulatory details are yet, it is difficult for the WWC, as well as other landowners and businesses to provide meaningful feedback at this conceptual level. Accordingly, we are reserving our judgment on most of this report until we have more details.

3. Set limited and achievable priorities. One of the important lessons we have learned through this process is the amazing complexity of issues we face along the riverfront. While the River Plan is intended to be a "comprehensive effort to meet these manifold challenges"(River Plan at 1), the reality is that we must decide what we can and cannot do, and not attempt to do everything everywhere.

While some progress has been made to focus on desired objectives, the WWC would prefer to see a more focused set of achievable and financially sound priorities established in the River Plan. At this point in the process, there is simply too much on the table. For example, virtually all of the land along the North Reach has a base zone designation of Heavy Industrial and therefore caries an industrial sanctuary designation, regardless of the greenway zone that exist currently or the E Zone overlay proposed. As a result, it is important to recognize that virtually all of the new regulations and fees proposed will limit industrial development and will impose new fees on that development in the industrial sanctuary. We would like to see these regulatory and financial effects become more limited and tailored to specific objectives, as we have suggested in the past through prior proposals. (See, for example, the Port of Portland "hybrid" proposal and the Schnitzer Steel E Zone proposal.)

Key Concerns

1. Economic Prosperity and the Protection of Prime Industrial Land. The River Plan does an excellent job of identifying several key considerations to keep in mind as you consider the regulatory and fee concepts being proposed in the draft River Plan report. For example, the River Plan report underscores the following key points concerning the distinctive traits of industrial land in the region, and within the working harbor:

- "Manufacturing was the highest growth sector in the Portland metro economy from 2003-2005, generating two year GDP growth of 39% and fueling recovery from the 2001 recession." (See River Plan at 37.)

- "Employment in the Working Harbor is projected to grow by 5,800 jobs between 2005-2015, and an estimated 800 acres will be affected by development or redevelopment." (See River Plan at 37.)

- "Industry has invested about $440 million in 36 harbor sites since 2004, such as Evraz Oregon Steel Mills, UPS, U.S. Barge, Schnitzer Steel, Canpotex, Union Pacific and Columbia Sportswear." (Working Harbor Reinvestment Strategy, May 23, 2008, at 1.)

- "Most of the land in the diverse harbor industrial districts is used by industries that need marine, rail, or pipeline access (46 marine loading sites, 92 rail shippers, 10 petroleum terminals)". (See River Plan at 37.)

- "Industry leaders acknowledge that multimodal transportation access is the area's unique ongoing location advantage." (See River Plan at 37.)

- "Low industrial vacancy rates confirm what real estate brokers have explained, that close-in industrial locations are widely preferred in this region, unlike many other cities." (See River Plan at 37.)

On the other hand, although the report includes a broad discussion about the need for economic prosperity, the report does comparatively little to identify, inventory, and protect "Prime Industrial Land" and industrial assets along the working waterfront. (See WWC letters to the Portland Planning Commission of February 28, 2006, and to the River Plan Committee of September 5, 2007, attached.) It is absolutely critical that River Plan protect and enhance industrial assets and prime industrial land along the working waterfront. Without the economic prosperity these assets produce, environmental prosperity will not be achieved along the waterfront in the North Reach.

2. Superfund. The River Plan correctly notes that:

"As Portland nears buildout on vacant lands annexed in recent decades, brownfields are becoming an increasingly important share of our land supply for employment growth. Additionally, productive reuse of the hundreds of Portland brownfields is integral to the regions compact development goals. The Brownfield/Greenfield Cost Comparison Study (2003) evaluated industrial development feasibility on sites in the region and found a competitive disadvantage with greenfield sites and a significant financial gap in brownfield redevelopment feasibility without public intervention."

In order to achieve the City's goals of compact urban development, centralized job creation, and overall economic and environmental prosperity, it is absolutely critical that the 5,800 new jobs projected for the working harbor between 2005 and 2015, not be lost to greenfield sites in suburban markets. The ability to develop and redevelop these waterfront sites in a cost-effective way is critical to the City's economic prosperity, to our ability to retain and grow jobs in this centralized location, and to the overall success of Superfund and the environmental prosperity it aims to achieve.

3. Resource Sites. The WWC has generally been supportive of the concept of creating "Resource Sites" along the North Reach, to the extent that they provide locations where concentrated environmental enhancement and mitigation efforts can take place, both for Superfund and local regulatory purposes. The Port of Portland, with the support of the WWC, has proposed a fee-in-lieu system that would allow mitigation and restoration fees to be assessed when development is proposed on certain industrial land along the river. These fees would be used to support Resource Sites. In return, industrial development on these sites would not be subject to E Zone regulations, and would instead pay to support the "Resource Sites." This as-of-right trade-off is critical to our support of the concept of creating resource sites on industrial sanctuary and/or prime industrial lands within the North Reach.

Unfortunately, the current E Zone concept does not allow the fee-in-lieu decision to be made by the applicant. Under the concept proposed by staff, it is the City, rather than the applicant, who decides whether the fee-in-lieu option can be used. We do not support that approach and suggest that the Port's "hybrid" proposal be used instead.

Key Recommendations

1. Recognize, protect, and promote the use of prime industrial land and industrial assets along the working waterfront. Private capital not only drives economic prosperity, it drives environmental prosperity. The Along the working waterfront, industrial assets must continue to thrive in order for environmental prosperity to realistically occur. The City should ensure that economic prosperity is enhanced by any regulations and fees that may be imposed as a result of River Plan. Resource enhancement efforts should be concentrated on identified resource sites and incentives should be provided to enhance specific resources on-site, where feasible.

2. Focus the enhancement of natural resources in the North Reach, on specifically identified resource sites, if and when those sites are made available by the owner for such purposes. Concentrate first on resource sites that are currently available

and will provide significant environmental lift. Work in a collaborative way with owners to acquire other specifically identified sites. In no case should the City attempt to acquire the site without the voluntary consent of the property owner. Recognize the impact the loss of these resource sites may have on the supply of prime industrial land along the working waterfront, and its impact on both the regional land supply and the City's supply of prime industrial land, and limit sites accordingly. In short, understand and adequately balance these competing needs.

3. Create a reasonable fee-in-lieu system option for industrial property-owners along the working waterfront, that allows this fee-in-lieu system to be used at the option of the applicant, rather than at the option of the City. Work collaboratively with owners, the environmental community, and other stakeholders to effectively calibrate the fee-in-lieu pricing mechanism, to meet reasonable objectives and priorities. Provide incentives for on-site mitigation or E Zone compliance on site.

4. Recognize that public access to the river must be carefully considered where it traverses or abuts prime industrial land. Public access creates significant conflicts for industrial uses in industrial sanctuaries, such as prime industrial land in the North Reach. Public access also presents conflicts with resource sites. Work collaboratively with stakeholders in those situations and resolve conflicts consistent with industrial sanctuary policies and other relevant safety, security, and natural resource concerns.

5. Consider the impact of proposed local regulations, fees, and resource sites, in the context of Superfund and other state and federal regulations. The area along the river, and the river and submerged lands along the river, are already a highly regulated environment. The costs and impacts of Superfund are only now beginning to be understood. Recognize that the proposed regulations and fees associated with River Plan in the North Reach must be reasonable and fair, in light of the combined impact of Superfund and all of the other state and federal regulatory and financial burdens that are already being imposed. Ultimately, cleanup and watershed health go hand-in-hand with economic prosperity along the working waterfront.

Very truly yours,

Phillip E. Grillo
on behalf of the Working Waterfront
Coalition

183694

Miller Nash LLP
www.millernash.com
3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, OR 97204-3699
(503) 224-5858
(503) 224-0155 fax

4400 Two Union Square
601 Union Street
Seattle, WA 98101-2352
(206) 622-8484
(206) 622-7485 fax

500 E. Broadway, Suite 400
Post Office Box 694
Vancouver, WA 98666-0694
(360) 699-4771
(360) 694-6413 fax

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

February 28, 2006

HAND-DELIVERED

Portland Planning Commission
1900 S.W. Fourth Avenue, Suite 4100
Portland, Oregon 97201-5350

Subject: Protecting Prime Industrial Land

Dear Planning Commissioners:

I am writing on my own behalf and as a member of the Working Waterfront Coalition. Members of the Coalition have worked closely with the City during the development of the River Concept. We appreciate the need for a planning and policy document that takes a comprehensive look at uses along the entire river. Overall, I would like to offer my support for much of what is in the North Reach River Concept.

With this overall support in mind, I would like to call your attention to an important policy issue that you will soon be hearing more about, not only in the context of the River Plan, but also in the broader context of the various zone changes and comprehensive plan amendments that you will soon be acting on within the North Reach. I very much appreciate the materials Gil Kelley and Steve Kountz have prepared for you, discussing their approach to considering industrial land conversions. What I would like to talk to you about in the context of proposed industrial land conversions along the North Reach of the Willamette River is the protection of "Prime Industrial Land."

The term "Prime Industrial Land" is a term that has both legal and factual significance. The term has legal significance because it was recently adopted by the Land Conservation and Development Commission as part of its new amendments to Statewide Planning Goal 9, concerning industrial land protection and economic development. The term has factual significance because it provides a relatively clear, statewide definition of the type of industrial land we are trying hardest to protect. According to LCDC's new Goal 9 administrative rule:

> "Prime Industrial Land" means land suited for traded-sector industries as well as other industrial uses providing support to traded-sector industries. Prime industrial lands possess site characteristics that are difficult or impossible to

replicate in the planning area or region. Prime industrial lands have necessary access to transportation and freight infrastructure, including, but not limited to, rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes. Traded-sector has the meaning provided in ORS 285B.280."

Portland's Working Waterfront contains land that was historically and is currently used by heavy industry. This heavy industrial land possesses site characteristics and infrastructure that would be difficult if not impossible to replicate elsewhere in the region. As a result, most of the land along the North Reach of the Willamette River qualifies under state law as "Prime Industrial Land."

The state recently enacted policies and rules to help local governments identify and protect "Prime Industrial Land." In doing so, the state clearly indicated that protecting "Prime Industrial Land" is a matter of statewide concern. In my view, it is critically important that state policies and rules protecting "Prime Industrial Lands" be taken into consideration, as you create Portland's vision for the Working Waterfront. Specifically, I hope that you will integrate the concept of protecting "Prime Industrial Land" into the River Concept Plan, *before* you formally consider any legislative actions to convert "Prime Industrial Land" to other uses along the North Reach of the river.

In order to give you a bit more background, it might be useful to spend a minute describing why the state became so interested in identifying and protecting "Prime Industrial Land." During the 2003 legislative session, both the Oregon Legislature and the Governor's Office (see HB 2011, 2003 and Executive Order 03-02) sought to address the widely held belief that many of the fastest growing areas in the state were not maintaining an adequate supply of prime industrial land. The Portland region itself suffered a series of setbacks when its proposed UGB amendments were remanded due to a lack of an adequate industrial land supply. In late 2003, DLCD and the Governor's Economic Revitalization Team (ERT) established the Industrial Conversion Study Committee (ICSC). The ICSC committee was chaired by Margaret Kirkpatrick, and included other knowledgeable members including Al Burns from the Portland Planning Bureau, Ann Gardner from Schnitzer Steel, Mary Kyle McCurdy (with 1,000 Friends of Oregon), Bev Bookin (with the Bookin Group), Dennis Yee (an economist with Metro), and many others. This group eventually produced a report titled: "Promoting Prosperity: Protecting Prime Industrial Land for Job Growth" (November 2004). (This document can be accessed through the City's River Plan Web site.) This report introduced the concept of "Prime Industrial Land" and discussed how important it was to protect prime industrial land from conversion to other uses, even from conversions that occur as a result of rezoning industrial lands to "multiple use zones." Eventually the ICSC's efforts led LCDC to adopt amendments to Goal 9's administrate rules. Those amendments were enacted in December 2005, based in part on the concept of inventorying and protecting "Prime Industrial Land."

In other words, as of December 2005, state land use law tells us that all industrial lands are not created equal. "Prime Industrial Lands" are special, because that cannot be easily replicated. Because "Prime Industrial Lands" are a special component of our state's economic development strategy, they need to be protected from conversion—even from conversions that would occur from changing exclusive industrial zones to mixed-use zones. The "Prime Industrial Land" framework that is now a part of state land use law is critically important for you to integrate into the River Concept Plan, especially for the North Reach of the Willamette River, where most of the land is "Prime Industrial Land." Thank you for your continued courtesies and hard work on this important matter.

Very truly yours,

Phillip E. Grillo

Working Waterfront
COALITION

183694

September 5, 2007

VIA MESSENGER

Mr. Don Hanson
River Plan Committee and Integration Task Group Chair
City of Portland
1900 S.W. Fourth Avenue, 4th Floor
Portland, Oregon 97201

Subject: Integration of Economic and Environmental Resources in the North Reach

Dear Don:

As you know, the City of Portland has long been a national leader in comprehensive planning. If successfully implemented, River Plan could become one of the City's most important and widely recognized comprehensive planning efforts to date. For many of us in the region, River Plan's success will depend on how effectively it integrates economic and environmental protections along the working waterfront.

As you know, over the past several years, the City has worked very hard to inventory, analyze, and rank natural resources and their functional values along the Willamette River. This inventory was presented to the public for the first time in June 2007. In July, a small stakeholders' group known as the Integration Task Group, which you also chair, was convened to review the proposed inventory. Comments from stakeholder-members were expected by the end of August. Several stakeholders objected to this short timeline, and the deadline was extended an additional month, to September. As a stakeholder and representative of many businesses along the harbor, the Working Waterfront Coalition ("WWC") continues to believe that this short comment period is unrealistic for the reasons set out below. Nonetheless, in order to keep the review process moving forward, we are and will continue to respond as best as we can under the existing timelines.

With the above understanding in mind, the WWC would like to take this opportunity to better articulate our main concern with the planning process to date. Our main concern is that key components of this comprehensive planning process are missing. Without these components, the City lacks the information necessary to support this comprehensive plan and zoning ordinance amendment. Specifically, the River Plan has not inventoried and analyzed economic resources within the working harbor, as required under Statewide Planning Goals 5, 9, and 15. As explained below, until economic resources and their functional values are inventoried and analyzed, under the processes described in these Goals, the City will not have adequate data to successfully "integrate" environmental and economic values within the working waterfront.

Based upon the existing record, the City in general, and the River Plan Committee in particular, lack critically important land use and economic data that is necessary to complete the "integration" task now before you. Despite the critical importance of the economic resources present within the working harbor, other than the City's Industrial Districts Atlas (2004) and River Atlas (2001), there is very little information in the record before you on economic resources within the North Reach. In short, the information currently in the record simply does not meet the inventory and analysis requirements of Goals 5, 9, and 15.

For example, Goal 9's administrative rules require the City, as part of this comprehensive planning map and text amendment process, to prepare an "Economic Opportunities Analysis" ("EOA"). The EOA requires the City to inventory industrial and other employment lands in the area. The inventory must include site characteristics of vacant and redevelopable land, it must describe any development constraints that affect the identified buildable area on individual sites, and it must identify the shortage of supply of buildable industrial and other employment lands in the study area. This EOA inventory and analysis has not been performed. After the EOA is completed, Goal 9 rules require the City to perform an Assessment of Community Economic Development Potential ("ACEDP") to estimate the types and amounts of industrial and other employment uses likely to occur in the planning area based on the EOA. (See OAR 660-009-0015 (4). The ACEDP must consider the area's advantages and disadvantages in location, site, buying power of markets, availability of transportation facilities for access and freight mobility, public facilities, labor market factors, access to supplies and facilities, necessary support services, and limits on development due to federal and state environmental protection laws. This ACEDP inventory and analysis has not been performed.

In conclusion, the City has a significant amount of homework to do, before it can reasonably (or legally) "integrate" the highly detailed environmental resources inventory prepared in June 2007 with the yet-to-be-done economic resource inventory and analysis that is also required as part of this comprehensive planning effort. Only when information from both sides of this equation are adequately inventoried and analyzed, can the City legitimately integrate environmental and economic resource values and functions within the Harbor.

We hope that River Plan Committee and the Integration Task Group will expand the scope of the City's inventory to include economic resources and functional values, as required under Statewide Goals 5, 9, and 15. From our perspective, it is surprising that at this advanced stage in the process, there has been no discussion of the legal standards that must be met by this comprehensive planning effort, in order to comply with Goals 5, 9, and 15. Until the legal standards required by these regulations are recognized and understood—including the need to inventory, analyze, and protect economic resources and functional values—the City's "integration" effort will be

inadequate. We urge you to add to the City's effort, and adjust your work schedule accordingly.

In the meantime, the WWC and its members are working hard to prepare a draft regulatory approach for your consideration by the next River Plan Integration Task Group meeting on September 12. We hoped to provide you with this material by your September 5 deadline, but are unable to do so. WWC members did not have an opportunity to review a rough draft of our proposed regulatory approach until its September 4 meeting. We are finalizing our draft based on the WWC's comments and will provide you with our materials shortly. Hopefully this letter provides the Task Force with meaningful information to consider in the meantime. We appreciate you continued courtesies in that regard.

Very truly yours,

Phillip E. Grillo
On Behalf of the Working Waterfront Coalition

cc via electronic mail:

Working Waterfront Coalition members

Integration Task Force Members
Mr. Don Hanson, Chair
Mr. Bob Sallinger
Ms. Nancy Munn
Mr. Ron Carley
Ms. Ann Gardner
Ms. Susie Lahsene
Mr. Dee Burch

Portland Bureau of Planning
Mr. Gil Kelley, Planning Director
Mr. Brian Campbell
Ms. Sallie Edmonds
Ms. Roberta Jortner
Mr. Steve Kountz

183694

MILLER NASH LLP
ATTORNEYS AT LAW

PORTLAND, OREGON
SEATTLE, WASHINGTON
VANCOUVER, WASHINGTON
CENTRAL OREGON
WWW.MILLERNASH.COM

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

May 15, 2007

River Plan Committee
City of Portland Bureau of Planning
1900 S.W. Fourth Avenue, Suite 4100
Portland, Oregon 97201-5350

Subject: North Reach Greenway Trail and Viewpoints Staff Report dated May 7, 2007

Dear River Plan Committee:

Thank you for providing me with this opportunity to comment on the greenway trail alignment staff report for the North Reach dated May 7, 2007. I am writing on behalf of my clients Kinder Morgan Energy Partners, BP, and NuStar Energy L.P. (formerly Valero L.P.), who own and operate major petroleum facilities along the waterfront in Linnton.

1. Process.

It is our understanding that the purpose of the above-mentioned report is to provide the River Plan Committee with River Plan staff's preliminary recommendation for new greenway trail alignments. We also understand that the River Plan Committee will discuss these proposals tonight, but will not make a final recommendation on future locations for the greenway trail until all of the River Plan/North Reach task groups have completed their work and an integrated report is prepared.

2. Guiding Principles.

Industrial development in industrially zoned lands along the North Reach must be protected from non-industrial uses and activities that introduce safety, security and operational problems for industrial uses located in IH-zoned lands. In Linnton, the developed portion of the greenway trail is located along Highway 30 outside the IH-zoned area. The proposed location of the greenway trail would re-route the trail into the industrial area, forcing cyclists and pedestrians to cross the railroad at grade, and placing the public directly adjacent to the Linnton Energy Cluster.

MILLER NASH LLP
ATTORNEYS AT LAW

PORTLAND, OREGON
SEATTLE, WASHINGTON
VANCOUVER, WASHINGTON
CENTRAL OREGON
WWW.MILLERNASH.COM

183694

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

The report's Guiding Principles should be amended to better reflect the safety and security needs of all industrial businesses located within the city's riverfront industrial areas, not just river-dependent or river-related industrial businesses. For example, the proposed trail alignment in Linton would require multiple at-grade crossings of an active rail line and would put cyclists and pedestrians directly adjacent to the largest and most important energy clusters in the state. The added risks associated with the proposed location of the trail have not been adequately considered. To the best of my knowledge, none of the key industrial stakeholders support the proposed changes to the trail alignment in Linnton.

3. Recommendations.

We do not support staff's recommendation that the greenway trail alignment shown on Map 1 (Figures 6.3, 6.4, and 6.5) be taken forward. Instead, we recommend that opportunities for designating a safer pedestrian and bicycle facility along Highway 30 right-of-way through Linnton be examined.

Conclusion

Moving pedestrian and bicycle facilities off the Highway 30 right-of-way and into the industrial sanctuary is not a practical alternative in Linnton. Moving the trail onto private property in the adjacent industrial sanctuary creates significant safety, security, and operational hazards, and is contrary to the purposes of the city's industrial sanctuary policy. Instead, we ask that the River Plan Committee direct staff to work with ODOT and other stakeholders, including the Linnton Neighborhood Association and the Working Waterfront Coalition, to develop a safer pedestrian/bicycle facility along Highway 30 in Linnton, where the greenway trail is presently located.

Thank you for this opportunity to provide input into the River Plan process. We look forward to working with you on these matters.

Very truly yours,

Phillip E. Grillo

WWC Submittal

Appendix 3 – Case Studies and Costs

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Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867

November 17, 2009

Ann Gardner and Andy Rohling
3200 N.W. Yeon Avenue
Portland, OR 97210-1524

SUBJECT: COMPARISON OF EXISTING AND PROPOSED CITY CODES RELATIVE TO A SSI NEW DOCK CONSTRUCTION PROJECT

Dear Ms. Gardner and Mr. Rohling:

Floyd|Snider has prepared the attached memorandum that provides a comparison of existing and proposed City of Portland (City) regulations regarding future development of in-water structures within the existing Willamette River Industrial Zone. This comparison was conducted using a case study for construction of a new over-water dock structure at the International Terminals (IT) Facility to highlight key issues of concern regarding the proposed City development codes.

Floyd|Snider is a Seattle-based multi-disciplinary engineering and environmental consulting firm that has provided comprehensive services to clients for 13 years throughout the Pacific Northwest. We offer services in engineering design, scientific expertise, regulatory negotiations, and strategic project management to achieve permanent solutions to environmental concerns. Our leadership on waterfront projects for clients such as Todd Shipyards, The Boeing Company, The Port of Seattle, and The City of Tacoma has helped us develop an exceptional reputation and close working relationships with Federal and State regulatory and resource agencies. Floyd|Snider has proven experience with design, agency negotiation, permitting, and construction activities associated with waterfront facility development in Pacific Northwest estuarine environments, where protection of endangered aquatic species and their habitat is of paramount concern.

Since 2000, Floyd|Snider has provided engineering and environmental strategy services to SSI on sediment-related issues in the Willamette River. We maintain a dedicated group of staff who serve SSI on multiple projects for SSI Environmental and Operations divisions, including evaluation of the Portland Harbor Superfund Cleanup process and assistance with maintenance dredging permitting and construction activities for the IT Facility.

We appreciate the opportunity to assist you with this proposed City code evaluation.

Sincerely yours,
FLOYD | SNIDER

Jessi Massingale, M.S., P.E. Matt Woltman, P.E., L.G.

Encl.: Technical Memorandum - Comparison of Existing and Proposed City Codes Relative to a SSI New Dock Construction Project

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strategy • science • engineering

Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867

Technical Memorandum

To: Ann Gardner and Andy Rohling, Schnitzer Steel Industries

Copies:

From: Jessi Massingale and Matt Woltman, Floyd|Snider

Date: November 17, 2009

Project No: SSI-Oncall

Re: **Comparison of Existing and Proposed City Codes Relative to a SSI New Dock Construction Project**

INTRODUCTION

The purpose of this memorandum is to provide a comparison of existing and proposed City of Portland (City) regulations regarding future development of in-water structures within the existing Willamette River Industrial Zone. Additionally, this document presents a case study for construction of a new over-water pier structure at the International Terminals (IT) Facility (owned by Schnitzer Steel Industries [SSI]) to highlight key issues of concern regarding the proposed City development codes.

The IT Facility is located in the North Reach of the Willamette River at approximate river mile 4.5. SSI is proposing development of an 80-foot by 600-foot over-water pier structure with two 4-foot wide access trestles as part of facility upgrades that will improve steel recycling operations at the site. The pier would be concrete pile-supported and designed to accommodate a container crane which would allow access to a vessel loading/unloading slip in water depths of approximately 40 to 55 feet. The estimated construction cost for this project is $20.6M and the current estimate permitting duration is approximately 2.5 years under the existing Federal, State, and City development codes. Specific details of the proposed development project, including conceptual level drawings and cost estimate information are provided in Attachment A.

A comparison of the existing City Greenway Review code and the proposed City River Review code as well as a summary of the existing Federal and State regulatory and permit requirements are presented in Figure 1.

BREADTH OF THE EXISTING FEDERAL AND STATE PERMITTING PROCESS

As shown in Figure 1 there is a comprehensive existing breadth of Federal and State regulatory authority and associated permitting review that is applicable to in-water work (below the ordinary high water [OHW] mark) within the Willamette River, such as the proposed SSI dock project. The following section briefly summarizes the most relevant components of the Federal and State regulatory requirements, permit and review programs, and the implementation of these components on a development project such as SSI's proposed dock.

Multiple agency environmental and biological assessment requirements which evaluate the potential impact of development activities below OHW are required in several of the Federal and State permitting processes and include the following:

- An Endangered Species Act (ESA) Biological Assessment through the U.S. Army Corps of Engineers (USACE) Section 404/Section 10 permit, with consultation with the National Oceanic and Atmospheric Administration (NOAA) and National Marine Fisheries Service (NMFS). As part of the Section 401 permit process, Oregon Department of Environmental Quality (ODEQ) also reviews the Biological Assessment required for the Section 404 permit.
- The National Environmental Policy Act (NEPA), which also requires that environmental consequences be taken into consideration during project planning and design and may include an environmental assessment (EA) or environmental impact statement (EIS) and project impact mitigation.
- The Department of State Lands (DSL), who administers the Removal/Fill program for the State imposes a higher level of review standards in areas of essential salmonid habitat.
- The Oregon Department of Fish and Wildlife (ODFW) who provides input and oversight of in-water projects to minimize impact to fish and wildlife, including determination of the in-water work window, habitat mitigation recommendations, and Scientific Take Permit.

Comprehensive environmental and biological assessments conducted as part of the Federal and State permitting process evaluate the impact to the aquatic and riparian habitat as well as the relationship of in-water impacts to upland resources. For example the previous SSI USACE maintenance dredging permits also evaluated the potential impact to bald eagles and the plant Howellia, both listed as threatened species, as well as the in-water fish species that are threatened or endangered.

Compliance with the Federal and State agency permits and approvals requires the negotiation and incorporation of environmentally friendly considerations within the construction project design, as well as execution of best management practices (BMPs) during construction to ensure that the project is conducted in the most beneficial manner relative to fish and other wildlife associated with aquatic habitat and that unavoidable environmental impacts are avoided and minimized where possible.

CERCLA and USEPA additional regulatory authority. Although the USEPA administered Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Superfund program does not directly issue a permit for in-water construction, the additional requirements associated with the Portland Harbor Superfund Site play a significant role in the permitting process, project design, construction BMPs, and construction oversight. Due to the contamination located within the Portland Harbor Superfund Site, in-water construction and/or maintenance projects require additional media characterization (sediments and surface water), additional BMPs and controls, additional project considerations for the eventual cleanup of Portland Harbor, and additional agency monitoring and oversight during construction.

Habitat value and impact are also evaluated under the CERCLA and National Resource Damage Assessment (NRDA) program and include Federal, State, and Tribal representation.

Dredging agency approval and coordination. Non-cleanup related dredging, such as dredging related to maintaining navigation and operational elevations, requires the coordination and agency approval of the Regional Sediment Management Team (RSET). RSET includes Federal and State agency representatives from the USACE, ODEQ, and USEPA. The RSET process ensures compliance with the USACE issued permits with additional requirements related to the Portland Harbor Superfund Site.

KEY COMPONENTS OF THE EXISTING GREENWAY PLAN AND REVIEW PROCESS

The Willamette Greenway Plan is based on the Oregon Statewide Planning Goal and Guideline – Goal 15 The Willamette River Greenway. Under the existing Greenway Plan, a Greenway Review for proposed development projects can be required to "ensure that all proposed changes to a site are consistent with the Willamette Greenway Plan, the Willamette Greenway design guidelines and, where applicable, the water quality element of Title 3 of Metro's Urban Growth Management". The key components of the Greenway Review that are applicable to the proposed SSI dock project are summarized below.

Purpose of the greenway review is to ensure that:

- development will not have a detrimental impact on the use and functioning of the river and abutting lands,
- development will conserve, enhance and maintain the scenic qualities and natural habitat of lands along the river,
- development will conserve the water surface of the river by limiting structures and fills riverward of the greenway setback.
- practicable alternative development options are considered, including outside the River Water Quality zone setback,
- mitigation and enhancement activities are considered for development within the River Water Quality zone.

Requirements for the River Industrial Zone (SSI proposed dock location) includes preparation and submittal of a supplemental site plan including an existing conditions plan, a development site plan, and a construction site plan. If the proposed development site is not located in the River Quality Zone then a mitigation and remediation plan and a narrative impact evaluation are not required. For River Industrial zoned projects evaluation of environmental protection, impact, and mitigation is assessed under the Federal and State regulatory agencies with authority below OHW. These agencies and associated permits are shown on Figure 1 and are described in the previous section.

Minimal City review authority under the Greenway Approval Criteria (Chapter 33.440.350(f). A Greenway Review application for the proposed SSI dock project would be required to demonstrate compliance with section f; *Development riverward of the greenway setback* approval criteria, which includes the following:

1. The proposal will not result in the significant loss of biological productivity in the river.
2. The riverbank will be protected from wave and wake damage.
3. The proposal will not:

a. restrict boat access to adjacent properties,

b. interfere with the commercial navigational use of the river, including transiting, turning, passing, and berthing movements,

c. interfere with fishing use of the river.

d. significantly add to recreational boating congestion.

4. The request will not significantly interfere with beaches that are open to the public.

These approval criteria provide the City with minimal review authority below OHW and are substantially less expansive and demanding relative to the proposed River Review requirements as described in the following section.

ADDITIONAL REQUIREMENTS ASSOCIATED WITH THE PROPOSED RIVER REVIEW

As part of the proposed River Plan a new overlay zone, the River Environmental overlay zone, is applied to the high and medium ranked resources as identified in the Willamette River Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008). The proposed River Environmental overlay zone, as illustrated on Map #2 of the River Plan/North Reach, includes all shoreline areas within the North Reach with the exception of bulkheads or sheetpile walls, regardless, in some instances, of current river-dependent uses. Based on the extent of the River Environmental overlay zone shown in Map #2, the shoreline of the entire SSI IT Facility has this River Environmental overly zone on top of the River Industrial zone, with the exception of the slip's sheetpile wall. The mitigation and remediation requirements and regulations of the Greenway River Quality Zone previously did not apply to the River Industrial zones. Under the proposed River Plan even more stringent mitigation and remediation requirements and regulations would apply to River Industrial zones, such as the SSI IT Facility, as the River Environmental overlay zone includes all shoreline areas within the North Reach with the exception of bulkheads or sheetpile walls.

River review nearly always required for property development. Since the River Environmental overlay zone includes all shoreline areas within the North Reach with the exception of bulkheads or sheetpile walls, regardless, in some instances, of current river-dependent uses, there will be a significant increase in the number of projects at industrial properties requiring a River Review relative to those that would have required a Greenway Review. The situation that would apply to the proposed SSI dock project and that is the one that will most frequently trigger the need for a River Review for development/expansion of industrial properties is the following:

> "When a development or regulated activity in the River Environmental overlay zone is not exempt from the River Environmental overlay zone regulations and either does not meet the standards of subsection 33.475.430.B or there are no development standards applicable to the proposal" (Chapter 33.865.020).

As stated in the Chapter 33.475.420 commentary of the proposed River Review, the proposed code diverges from the other environmental overlay codes in the City in that there are no standards that apply to development in general. Rather, the standards in the River Environmental overlay zone have been written to apply only to a narrow set of development types and activities. This means that more development in the River Environmental overlay zone will trigger discretionary review than triggers environmental review in the rest of the City.

River Plan is a significant change from the objectives of the Greenway Plan and Statewide Planning Goal and Guidelines. The purpose of the Greenway Plan/Review is a combination of ensuring that the natural habitat along the Willamette River is conserved, enhanced, and maintained while still supporting and encouraging development and public access, which is consistent with the Willamette River Greenway Plan. The proposed River Plan/Review has a dramatically different purpose that assumes substantially more regulatory authority for the evaluation of environmental impact and mitigation and no longer acts to support and encourage smart and environmentally responsible development, but unfortunately discourages business growth and investment with onerous, extensive, and cost prohibitive requirements. The River Plan objectives include the following: provide a mechanism for evaluating the suitability of river-front sites in the River Industrial overlay zone for river-dependent or river-related uses; help the City meet existing and future requirements pursuant to Federal and State laws; protect, conserve, and enhance identified resources and functional values in the River Environmental overlay zone; compensate for unavoidable harm and ensure the success of mitigation and enhancement activities; provide for the replacement of resources and functional values; and allow for modifications to site-related development standards when modification will result in greater resource protection.

Substantial increase in onerous requirements for industrial properties. For an industrial property owner to invest in their river-dependent business under the proposed River Plan and River Review, there is a substantial increase in review requirements. In addition to the supplemental site plan, similar to that required under the Greenway Review, the proposed SSI dock project would also require an on-site mitigation and remediation plan as the project is located within the River Industrial zone and the River Environmental overlay zone. The project would also require a supplemental narrative impact evaluation, including a biological assessment, based on the resources and functional values identified as significant in the Willamette River Natural Resource Inventory, which is not currently required under the Greenway Review. The impact evaluation would include resource and impact analyses that are far more detailed, expansive, and complex than most environmental assessment evaluations. The River Review (Chapter 33.865.040.B.2) does state that the impact evaluation may use the biological assessment developed for the purposes of a Federal or State permit in place of some or all of the impact evaluation if the biological assessment includes the information required under the River Review. However, typical environmental assessments would not include all of the listed information. The supplemental narrative impact evaluation and associated biological assessment may request more analyses than those conducted for the Federal and State permitting process.

ADDITIONAL ASSESSMENT AND VEGETATION/MITIGATION REQUIREMENTS AND ASSOCIATED COSTS

As stated above, current mitigation requirements for river development projects within River Industrial zones are determined during the Federal and State permitting process with considerably more limited or minimal review from the City of Portland. Under current Federal and state regulations it is estimated that the proposed SSI dock project would require approximately one acre of mitigation to be completed at an on-site or off-site location. Specific mitigation requirements, including either on-site or off-site mitigation, would be determined through the USACE permitting process during evaluation of the proposed development project. Typical costs for engineering design, agency coordination, consultants, construction, and operations and maintenance for an approximate 1-acre on-site mitigation area are on the order

of $200,000. Assuming that for off-site mitigation a larger habitat mitigation area would be required of approximately 2 acres, the typical costs are on the order of $255,000. Figure 1 provides a summary of the estimated additional costs associated with the River Review requirements.

The proposed River Review process introduces additional permitting assessment and vegetation/mitigation requirements that are supplemental to the existing Federal and State process and will result in significant increased project costs to the permit applicant. The following provides a summary of these additional requirements as well as an estimate of increased costs that would be incurred by the permit applicant:

- In addition to the supplemental assessments required by the City under the proposed River Review process, including development of a on-site mitigation and remediation plan and completion of a supplemental narrative impact evaluation, a Habitat Evaluation Procedure (HEP)/Habitat Equivalency Assessment (HEA) evaluation will be completed by the City to evaluate the mitigation and remediation plan and to determine specific mitigation requirements for the proposed redevelopment project. It is estimated that additional costs associated with preparation of these plans and coordination with the City will be approximately $250,000 in consultant fees. The proposed River Review process includes a new vegetation requirement which states that a permit applicant will be required to vegetate a minimum of 15 percent of their total site area that lies within the boundary of the River Environmental overlay zone. If the applicant cannot meet this vegetation requirement, then they are required to pay an in-lieu fee to the City's River Restoration Fund (at a unit cost of $6.70/square foot) for the total amount of area requiring vegetation. A cap has been placed on the vegetation requirement at 1 percent of the total project cost and permit applicants are not required to pay more than the cap amount if costs to vegetate 15 percent of the site area exceed the cap value. For the SSI proposed dock project, 15 percent of the total site area could not be vegetated for less than the cap amount and SSI would be required to perform approximately $200,000 of on-site revegetation or contribute an equal amount to the River Restoration Fund.
- Mitigation requirements under the proposed River Review process require the permit applicant to complete on-site or off-site mitigation at another property located within the River Environmental overlay zone, purchase mitigation credits from a mitigation bank, or contribute to the City's River Restoration Fund as follows:
    - **On-site mitigation** requirements will be determined based on the existing Federal and State permitting process as well as the City's evaluation of the applicant's mitigation and remediation plan. On-site mitigation is preferred over off-site mitigation by the City and will be required for an area that is 1.5 times larger than the disturbed area within the River Environmental overlay zone. For the proposed SSI dock project, the estimated additional cost for on-site mitigation will be approximately $105,000.
    - **Off-site mitigation** requirements at another SSI-owned property within the River Environmental overlay zone will be determined based on the existing Federal and State permitting process as well as the City's evaluation of the applicant's mitigation and remediation plan. Off-site mitigation will be required for an area that is three times larger than the disturbed area within the River Environmental overlay zone. For the proposed SSI dock project, the estimated additional cost for off-site mitigation will be approximately $210,000.

Details for purchase of mitigation credits are not provided in the proposed River Review code and therefore, additional cost estimates cannot be prepared for this mitigation option.

- **Mitigation at an off-site property owned by the City** can be completed through an in-lieu fee contribution to the City's River Restoration Fund. For the proposed SSI dock project, fees would be required for bulkhead placement along 600 feet of shoreline (at $1,000 per lineal foot) and for construction of a 60,800 square-foot dock within the River Environmental overlay zone (at $22.50 per square-foot). The City also proposes a 20 percent management fee be applied to the total contribution amount to cover costs associated with long-term maintenance of the mitigation site. According to these proposed requirements, the total in-lieu fee required for this option is approximately $2.4M.

In summary, the estimated cost increase under the proposed River Review process for construction of a new dock within the River Environmental overlay zone will range from approximately $555,000 (with on-site mitigation) to $2.85M (with off-site mitigation on City property). It is important to note that these costs do not include potential loss of on-site operational value to the permit applicant's site due to the long-term restrictions required by the vegetation and mitigation requirements. The majority of riverfront property owners may not have the on-site area for the on-site mitigation option and would then be required to make an in-lieu fee contribution to the City's River Restoration Fund for off-site mitigation. The off-site mitigation in-lieu fee contribution is the most expensive mitigation option and is likely not economically feasible for the majority of industrial riverfront property owners.

ISSUES OF CONCERN RELATED TO THE PROPOSED RIVER REVIEW REQUIREMENTS

The existing Federal and State regulatory agencies and permitting processes for in-water work in the Willamette River, in coordination with the City Greenway Review, already exhibit comprehensive and adequate authority below OHW. In addition to the Federal and State agencies that typically regulate in-water work and issue permit approvals, such as the USACE in consultation with the NMFS, NOAA, U.S. Fish and Wildlife Service (USFWS), ODEQ, DSL, ODFW, there is additional regulatory authority in place in the Willamette River due to the Superfund cleanup and recent program development. For in-water dredging work related to maintenance or construction additional requirements and agency coordination is required by the RSET and the Project Review Group (PRG) with Federal and State agency representation. The Superfund cleanup of Portland Harbor also brings additional USEPA authority with additional restrictions and construction BMPs for non-cleanup related projects to ensure contamination is not relocated, resuspended, or exposed during in-water work. The CERCLA Superfund process also includes additional Tribal coordination and commitments, such as the protection of the Pacific lamprey. The existing permit requirements and regulations already require significant design enhancements and construction BMPs beyond what would be the least expensive and most efficient construction methods and result in a project that is the most beneficial to the environment, fish, and wildlife and minimize any unavoidable potential adverse impacts to the waterway ecosystem.

Therefore, there is already substantial coordinated regulatory authority and review for all work below OHW and the proposed City River Plan provides additional potential for agency conflict, additional challenges for agency coordination, and additional likelihood of River Review appeals.

Biological assessment requirements above and beyond existing regulatory requirements. The existing Federal and State framework for biological assessments and evaluation of environmental impact address the most sensitive species, such as the ESA endangered or threatened species and the Magnuson Stevens Act (MSA) listed species. These species, such as the salmonid species, are also keystone indicator species. The multi-agency extensive project review and protection of these species with agency negotiated project design considerations, in-water work windows, construction BMPs, and permit approval requirements aim to project the larger ecosystem by ensuring protection of the most sensitive and keystone indicator species. The ability of the City under the River Review supplemental narrative impact evaluation and biological assessment to request additional evaluations and assessments above and beyond that of the Federal and State agencies creates uncertainty for the applicant on what may require evaluation, increases the potential for agency inconsistency, and undermines the Federal and State environmental and biological assessments that are in place.

Uncertainty and inconsistency with mitigation requirements. There is substantial uncertainty and inconsistency related to the mitigation requirements and coordination with other Federal and State agencies. Chapter 33.475.430.B.10 of the River Plan states that on-site mitigation must occur at a 1.5:1 ratio of the mitigation area to the project impact area. However, Chapter 33.865.100.B.2.d states that the amount of mitigation due may be increased or decreased from a 1:1 mitigation area ratio based on the amount and relative condition of the resources impacted by the proposal, the number of functional values displaced by the impacts from the proposal, the impact of the project design, the uniqueness of the resources and functional values, and the time lag between when the resources and functional values are lost due to the impacts and the point when the mitigation site achieves full function. The HEP and HEA are stated to potentially be used to quantify these factors. Yet it is unknown what process will be used to derive habitat values for these models and what input or coordination there will be with the Portland Harbor Natural Resource Trustee Council who is currently assessing natural resource damage and habitat values under the CERCLA NRDA process.

The mitigation requirements under the proposed River Review state that, "Project impact area is the total area within the River Environmental overlay zone where structures will be built, vegetation will be removed, or ground disturbance will occur as a result of the proposal. Mitigation area is not counted as part of the project impact area" (Chapter 33.475.430.B.10). The proposed mitigation determination and project impact area does not take into account the incorporation of habitat, fish, and/or wildlife design components or BMPs that are negotiated and determined in coordination with the Federal and State regulatory agencies to avoid adverse impact where possible and minimize impacts where they are unavoidable. For example, in-water construction projects can include design considerations such as grated decking to minimize shading, dock location placement considerations, and use of single piles rather than three pile mooring dolphins to minimize migratory impacts to salmonids. The River Review assigns mitigation requirements and/or associated in-lieu fees as if all in-water structures are the same and only based on total size. The existing permit requirements and regulations already require significant design enhancements and construction BMPs beyond what would be the least expensive and most efficient construction methods; however, the risk of additional City requirements beyond the existing permit requirements and regulations and the lack of accounting for environmentally based design components and construction BMPs again increases the uncertainty and significant expense for the applicant.

Additional uncertainty and risk of agency inconsistency related to habitat value assessment. Although the goal of the City River Review is to streamline the project permitting and review process, as stated above, there is significant uncertainty associated with the derivation of required mitigation and habitat values. The Willamette River is a unique regulatory environment—as the City codes and permit requirements are being revised, the CERLA Superfund process and NRDA process is moving forward. As part of the NRDA process, the Portland Harbor Natural Resource Trustee Council, consisting of NOAA, USFWS, ODFW, the Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of Siletz Indians, and the Confederated Tribes of the Grand Ronde Community of Oregon, is working with Potentially Liable Parties (PLPs) to develop habitat values for the assessment of habitat damages due to the discharge of contaminants over time. This multi-agency effort will derive habitat values for use in a habitat impact model, such as HEA, to assess CERLA liability. The City River Review proposes use of a HEP and/or HEA approach to quantify habitat mitigation requirements associated with development. The City development of HEP/HEA habitat values and mitigation requirements is duplicative and potentially inconsistent with the multi-agency collaborative effort under the Federal NEPA, CERCLA, and NRDA processes. The duplication of quantifying habitat values and determining impact mitigation by the City will result in increased risk of River Review appeals, a substantial delay in project permitting and construction schedules, and uncertainty for river-dependent businesses that can discourage industrial and economic growth on the Willamette River.

The derivation of habitat values is a necessary evaluation for CERCLA NRDA restoration and project mitigation under the existing Federal and State regulations, and provides property owners with the knowledge to understand the value and benefit associated with habitat mitigation. For example, additional certainty is provided to the property owner if they can assess the value and benefit associated with restoring a riprap steep shoreline to a shallow subtidal habitat with fine grained substrates. However, this is administered through the existing framework, and duplication of City developed habitat values adds additional project uncertainty and complexity.

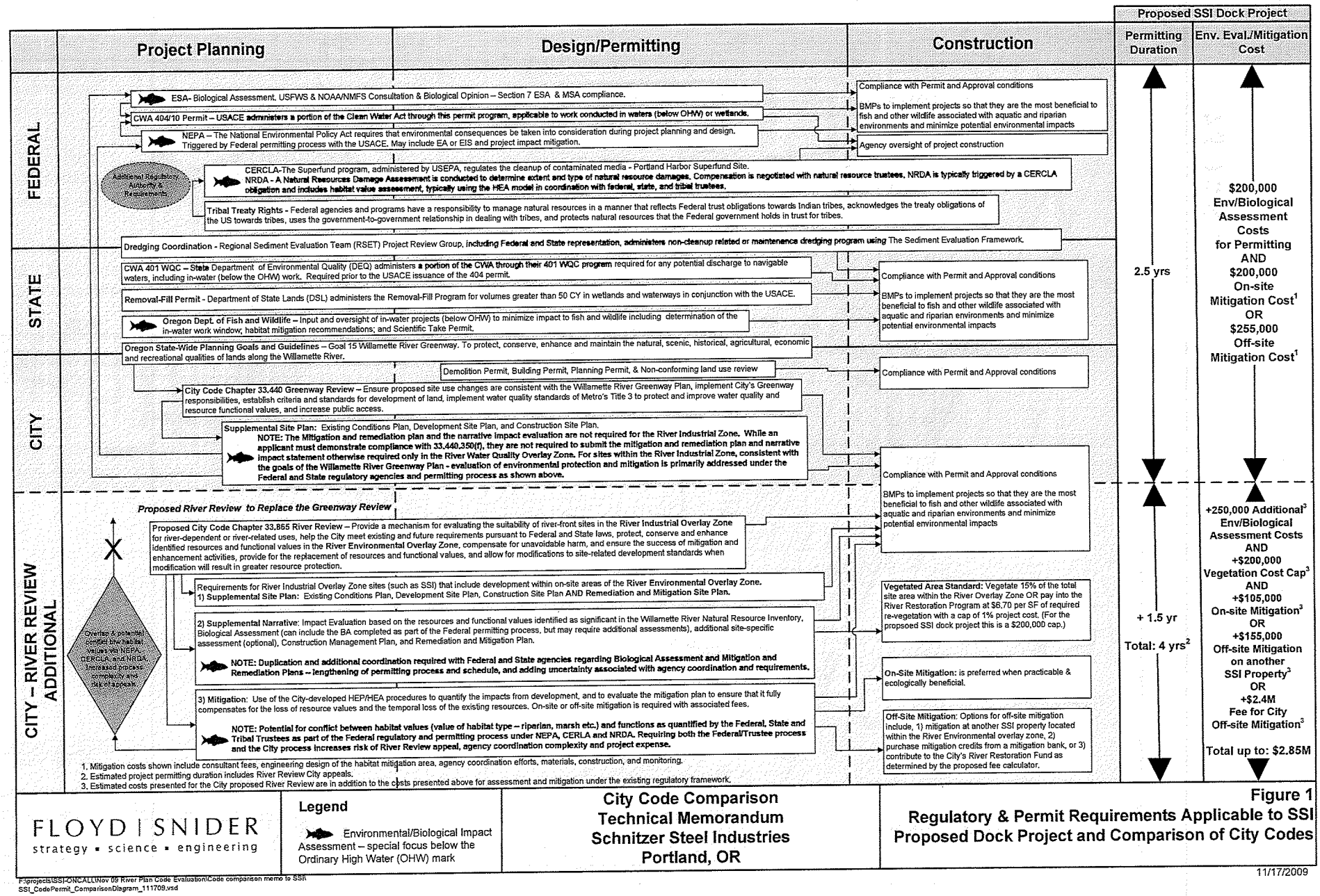
Increased project permitting timeline and process complexity. The Federal and State permitting process cannot necessarily happen concurrently with the City River Review process. If project impact mitigation is required under the Federal and State process and that mitigation can be given credit within the City River Review process, the applicant would need to have in hand all Federal and State permits, project conditions, and mitigation requirements prior to development of the mitigation and remediation plan and engaging in the City River Review mitigation determination process. Similarly, if part or all of the biological assessment developed for the Federal and State permitting process can be used as part of the River Review impact evaluation, the applicant would need to have the assessment completed and have received agency approval prior to development of the River Review impact evaluation. The River Review additional mitigation and biological assessment requirements, above and beyond that of the Federal and State process, increases the risk for agency inconsistency within the City, and between the City, Federal and State agencies, therefore increasing the risk of appeals and further lengthening the project permitting process. As shown on Figure 1 it is estimated that under the existing permitting framework, permitting the proposed SSI dock project would take approximately 2.5 years and that with the proposed River Review process this permitting duration would increase by 1.5 years, to a total of 4 years, including appeal time. Additionally, the complex nature of the River Review regulations as currently proposed will be especially

cumbersome to implement during the first years and may result in the need to amend or revise the regulations based on applicant appeals and agency inconsistency.

CONCLUSIONS

In summary, relative to the proposed SSI dock project, the impact of the City's proposed River Review process would include an increase in project permitting duration of approximately 1.5 years to a total of 4 years, an increase in environmental and biological assessments costs above what is estimated under the existing regulatory framework of $250,000, an additional vegetation fee of $200,000, and if off-site mitigation is necessary as on-site mitigation is not feasible due to current and future anticipated site operations and potential NRDA liability and site restoration requirements, an off-site mitigation fee of approximately $2.5 million. This would result in a total project increase cost of approximately $2.85M on a $20M dock construction project. There is also uncertainty associated with agency coordination, agency consistency, and implementation challenges of the complex proposed regulations.

Encl.: Figure 1 – Regulatory & Permit Requirements Applicable to SSI Proposed Dock Project and Comparison of City Codes
Attachment A – Conceptual design drawings and cost estimates for the SSI Proposed Dock Project



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Legend

Environmental/Biological Impact Assessment – special focus below the Ordinary High Water (OHW) mark

City Code Comparison Technical Memorandum Schnitzer Steel Industries Portland, OR

Figure 1
Regulatory & Permit Requirements Applicable to SSI Proposed Dock Project and Comparison of City Codes

11/17/2009

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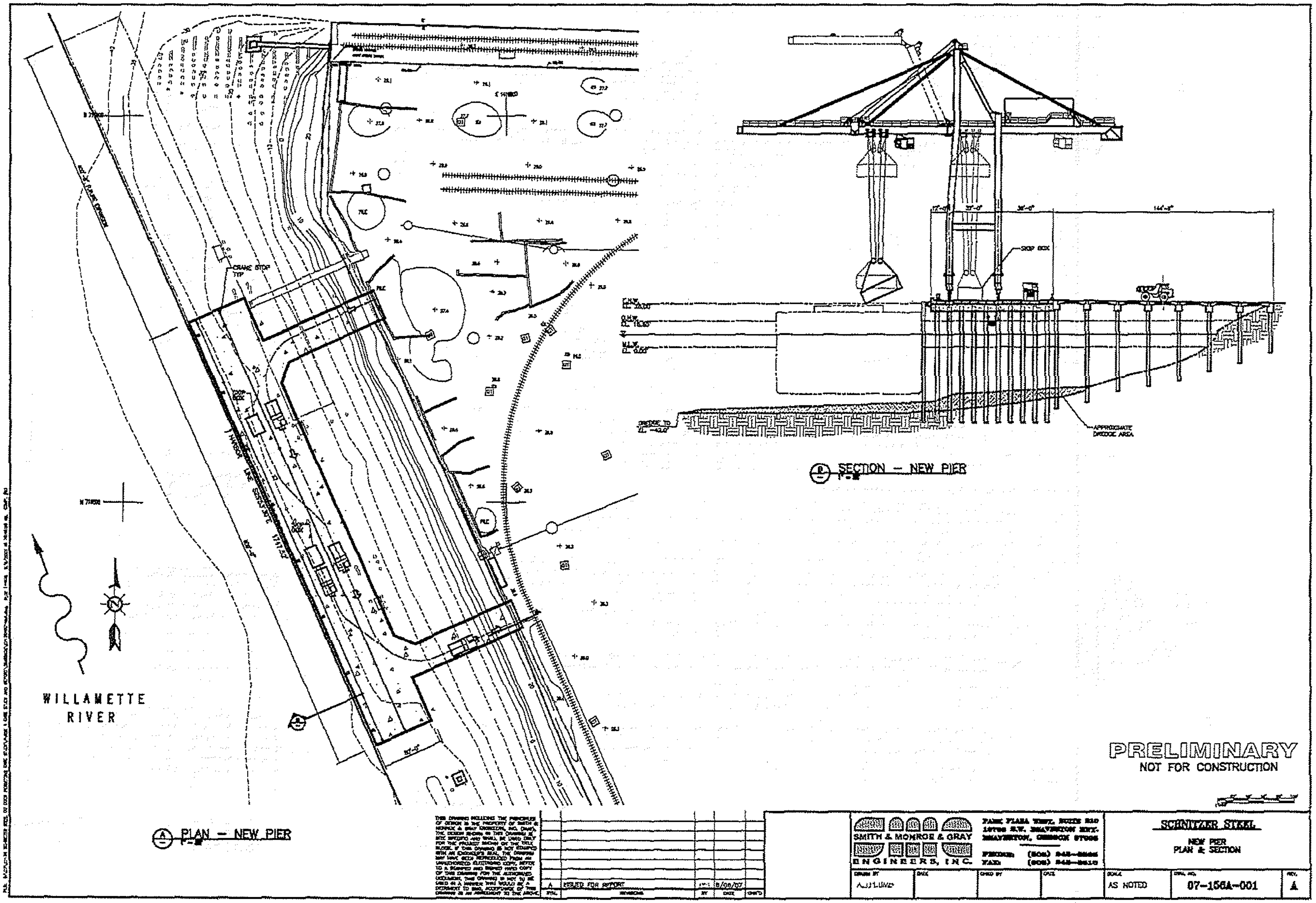
WILLAMETTE RIVER
CRANE STOP TYP
SKIP BOX
APPROXIMATE DREDGE AREA
A PLAN – NEW PIER
B SECTION – NEW PIER
PRELIMINARY
NOT FOR CONSTRUCTION
A ISSUED FOR REPORT 8/08/07
SMITH & MONROE & GRAY ENGINEERS, INC.
SCHNITZER STEEL
NEW PIER
PLAN & SECTION
AS NOTED
07-156A-001
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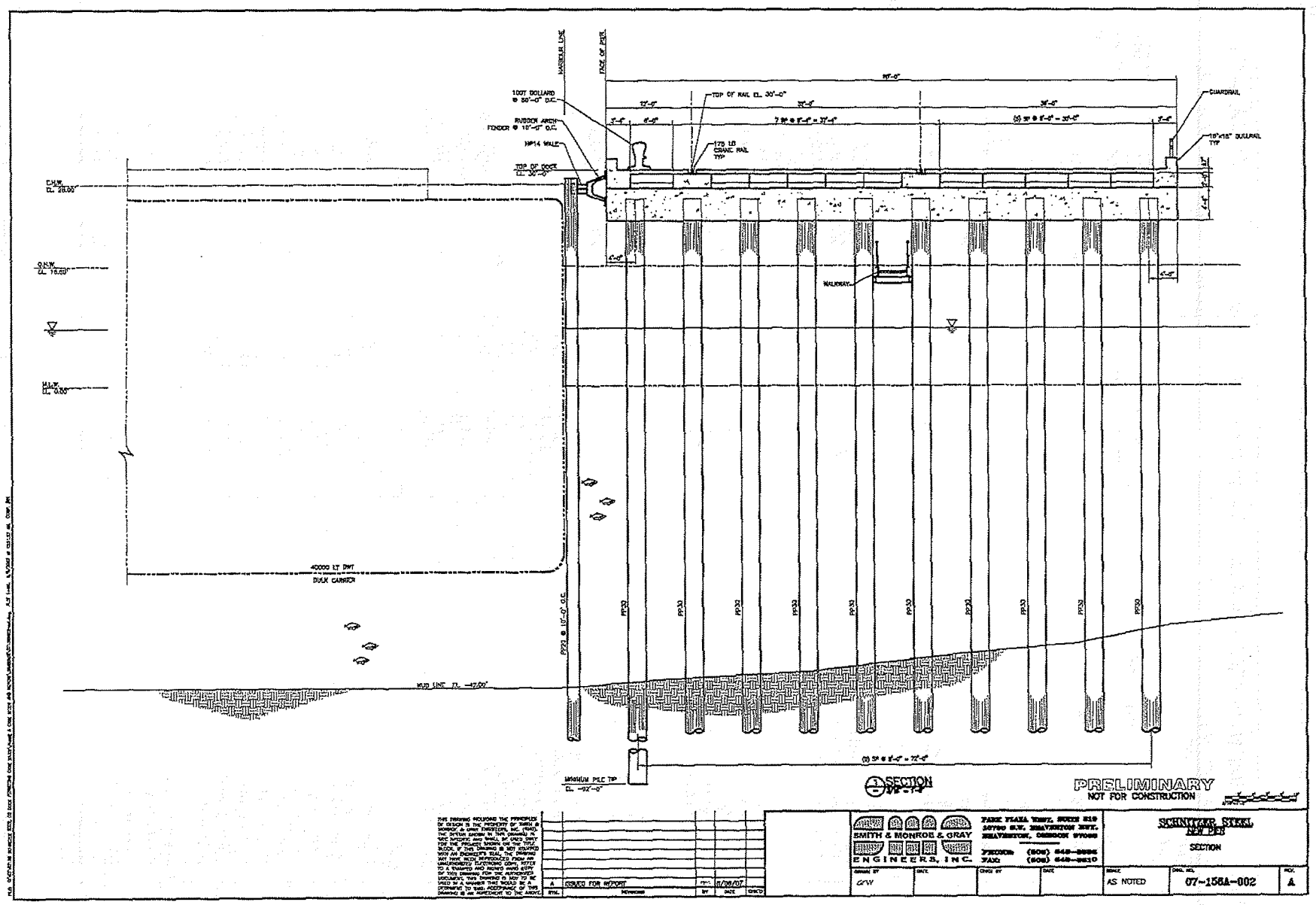
MASKLAN LINE
FACE OF PILE
100T BOLLARD @ 50'-0" O.C.
RUBBER ARCH FENDER @ 10'-0" O.C.
HP14 WALE
TOP OF DOCK EL. 30'-0"
TOP OF RAIL EL. 30'-0"
175 LB CRANE RAIL TYP
GUARDRAIL
10"x10" GUILRAIL TYP
WALKWAY
C.H.W. EL. 26.00'
O.H.W. EL. 16.00'
M.L.W. EL. 0.00'
40000 LT DWT BULK CARRIER
MUD LINE EL. -47.00'
MINIMUM PILE TIP EL. -92'-0"
SECTION
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SMITH & MONROE & GRAY ENGINEERS, INC.
SCHNITZER STEEL NEW DEB
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SMG	OPINION OF PROBABLE CONSTRUCTION COST			Status:	CONCEPT	
Client:	SCHNITZER STEEL			Est By:	BOB SCHERZINGER	
Owner:	SCHNITZER STEEL			Job No:	07-156	
Project:	NEW PIER			Date:	August 2007	
Item No.	Description	Quantity		Engineering Estimate		Item Subtotal
		Number	Unit	Unit Cost	Total	
1	**Demolition**					**$81,600**
	Breasting dolphins piles	24	EA	$2,700	$64,800	
	Access walkway	140	LF	$120	$16,800	
2	**Site Construction**					**$9,749**
	Mobilization	1	EA	$360	$360	
	Excavation	165	CY	$48	$7,920	
	Backfilling	15	CY	$48	$720	
	Dredging					
	Asphalt pavement patching	770	SF	$1	$1,109	
3	**Piling**					**$4,072,440**
	Mobilization (on-barge)	1	EA	$20,160	$20,160	
	Mobilization (on-shore)	2	EA	$13,440	$26,880	
	Piling - pier (in-water)	36580	LF	$82	$2,984,928	
	Piling - access trestles (in-water)	6160	LF	$71	$436,128	
	Piling - abutments (on-shore)	530	LF	$71	$37,524	
	Fender piles	6720	LF	$54	$362,880	
	Pile splices	310	EA	$444	$137,640	
	Pile splices	60	EA	$300	$18,000	
	Pile splices	70	EA	$384	$26,880	
	Pile cut-offs (on-shore)	10	EA	$30	$300	
	Pile cut-offs (over water)	440	EA	$48	$21,120	
4	**Concrete**					**$7,604,515**
	Deck topping concrete	48400	SF	$5	$261,360	
	Access trestle topping slab	11560	SF	$3	$39,535	
	Bullrail	147	CY	$276	$40,572	
	Precast concrete deck panels	59200	SF	$50	$2,983,680	
	Pile head dowels	3350	EA	$17	$56,280	
	Dowel connection welds	6700	EA	$34	$225,120	
	Abutment caps - upper	20	CY	$240	$4,800	
	Abutment caps - lower	55	CY	$1,008	$55,440	
	Pile caps - upper	500	CY	$240	$120,000	
	Pile caps - lower	2445	CY	$1,512	$3,696,840	
	Pile top plugs	307	CY	$240	$73,680	
	Grouting (cementitious)	1405	SF	$34	$47,208	
5	**Steel**					**$774,379**
	Shear connectors	7440	EA	$4	$26,784	
	Shear connectors	720	EA	$3	$2,333	
	Crane rail (w/ sole plate, clips, & AB's)	1200	LF	$360	$432,000	
	Crane stop	5600	LBS	$2	$9,072	
	Anchor bolts	40	EA	$46	$1,824	
	Vehicle guardrail	31320	LBS	$5	$161,611	
	Anchor bolts	540	EA	$24	$12,960	
	Fender wale	43800	LBS	$2	$70,956	
	Pile cap plates	4830	LBS	$5	$22,315	
	Stiffeners	9590	LBS	$4	$34,524	
6	**Miscellaneous Metals**					**$230,264**
	Walkway supports	4105	LBS	$2	$8,621	
	Walkway stringers	28155	LBS	$2	$55,747	
	Walkway horizontal truss	5875	LBS	$8	$48,645	
	Walkway grating	2040	SF	$20	$39,780	
	Guardrail	1360	LF	$37	$50,592	
	Ladders	280	LF	$96	$26,880	
7	**Marine Fittings**					**$99,456**
	Fenders	60	EA	$840	$50,400	
	Bollards (installation only)	8	EA	$4,080	$32,640	

Project:	NEW PIER				Date:	August 2007	
Item No.	Description	Quantity			Engineering Estimate		Item Subtotal
		Number	Unit		Unit Cost	Total	
	Anchor bolts	304	EA		$54	$16,416	
8	**Expansion Control**						**$24,000**
	Joint assemblies	80	LF		$300	$24,000	
9	**Drainage**						**$257,100**
	Piping	1100	LF		$156	$171,600	
	Drains	30	EA		$2,850	$85,500	
10	**Cranes**						**$248,400**
	Electrification	600	LF		$240	$144,000	
	Electrical reel	1	EA		$24,000	$24,000	
	Crane modifications	1	EA		$73,200	$73,200	
	Stowage pins	2	EA		$1,200	$2,400	
	Tie downs	4	EA		$1,200	$4,800	
TOTALS							
					Project Sub Total:		$13,401,903
				6%	Engineering		$804,114
				1%	Permits		$134,019
				10%	General Conditions		$1,340,190
				15%	Overhead and Profit		$2,010,285
				2%	Special Inspections		$268,038
				20%	Contingency		$2,680,381
				(round up to nearest $1000)	**PROJECT TOTAL:**		**$20,639,000**

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Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867

Technical Memorandum

To: Dave Harvey, Gunderson

Copies:

From: Jessi Massingale and Matt Woltman, Floyd|Snider

Date: March 19, 2010

Project No: SSI-Oncall

Re: **Preliminary Evaluation of the Additional Vegetation, Mitigation and Process Support Cost Associated with the Gunderson Launch Ways Extension Case Study**

INTRODUCTION

The purpose of this memorandum is to present a preliminary estimate of the additional vegetation and mitigation in-lieu fees and process support (i.e., assessment and consultant services) associated with the Launch Ways Extension Project Case Study at the Gunderson Facility, in Portland, Oregon. Costs presented in this memorandum should be considered additional to estimated costs and fees associated with the current permitting and mitigation codes in place with the City of Portland (City) Greenway Review process.

The Gunderson Facility is located in the North Reach of the Willamette River. The Launch Ways Extension Project Case Study includes the following:

- Demolition of an existing small pier structure and removal of support piling;
- Construction of four new launch way structures and a new upland assembly and launch cradle.

The total project area for the proposed Case Study is approximately 0.5 acres.Additional details regarding this new construction development project, including conceptual level drawings are provided in Attachment A.

ESTIMATED VEGETATION AND OFF-SITE MITIGATION COSTS

The proposed River Review process introduces additional process support, vegetation and mitigation costs to the existing Federal and State process and will result increased project costs to the permit applicant. The following provides a summary of these additional requirements as well as an estimate of increased costs that would be incurred by the permit applicant:

- Additional assessments required by the City under the proposed River Review process include development of an on-site mitigation and remediation plan and completion of a supplemental narrative impact evaluation. A Habitat Evaluation

Procedure (HEP)/Habitat Equivalency Assessment (HEA) evaluation will also be completed by the City to evaluate the mitigation and remediation plan and to determine specific mitigation requirements for the proposed redevelopment project. According to estimates provided by the US Army Corps of Engineers (USACE, http://el.erdc.usace.army.mil/emrrp/emris/emrishelp6/habitat_evaluation_procedure_and_habitat_suitability_indices_tools.htm), completion of the HEP analyses and development of the Habitat Suitability Indices (HSI), for sites where models have not already been established, can require up to 2 months of time (approximately 336 hours) for a 1 acre site. Given that the Gunderson site is approximately a half an acre, it would be estimated that the level of effort for the HIS/HEP evaluation would be approximately half of the USACE estimated duration. However, in the initial implementation of the HEP/HEA evaluation review process it is anticipated that a higher level of effort will be required by both the City and the applicant and applicant's consultant. Assuming typical consultant billing rates within the range of $130 to $140/hour and approximately 330 hrs based on the USACE suggested level of effort, it is estimated that the HEP/HEA evaluation can result in consultant costs of approximately $40,000 to 50,000.

Following completion of the HEP/HSI and HEA evaluations, the permit applicant is required to discuss results with the City and develop an on-site mitigation and remediation plan that takes into account the results of the habitat evaluations. For new sites and under the new permitting process, it is anticipated that coordination and planning meetings will be required with the City to ensure that all requirements of the habitat evaluations have been developed. The cost for completion of these planning and coordination meetings, as well as development of the mitigation and remediation plans is anticipated to be approximately $100,000, resulting in a total additional total assessment cost of approximately $150,000.

- A new vegetation requirement has been proposed which states that a permit applicant will be required to vegetate a minimum of 15 percent of their total site area that lies within the boundary of the River Environmental overlay zone. If the applicant cannot meet this on-site vegetation requirement, then they will be required to pay an in-lieu fee to the City's River Restoration Fund (at a unit cost of $6.70/square foot) for the total amount of area requiring vegetation. A cap has been placed on the vegetation requirement at 1 percent of the total project cost or $200,000, whichever is less. For the Gunderson Launch Ways Extension Case Study, it is assumed that $50,000 fee will be required to meet the vegetation requirement which is based on an assumed total project cost of $5 million. The $50,000 vegetation fee will also cover mitigation costs associated with disturbance to the existing riparian area during construction of the new launch ways and upland operational area.
- A mitigation fee will also be assessed to the permit applicant under the proposed River Review process, based on results of the City's HEP/HEA analysis. Mitigation at an off-site property owned by the City can be completed through an in-lieu fee contribution to the City's River Restoration Fund. Currently, the process for calculation of the mitigation in-lieu fee via the HEP/HEA analysis has not been fully developed so the Fee Calculator method has been applied for the purposes of this memorandum and extrapolation to the HEP/HEA approach as described below. For the Gunderson Launch Ways Extension Case Study (see details presented in Appendix A), mitigation in-lieu fees would be required as follows:

- Upland clearing and grading of approximately 3,600 square feet at a cost of $1.00 per square foot;
- New bank treatment of approximately 125 lineal feet of shoreline at a cost of $1,000 per lineal foot;
- New over-water coverage (for launch way structures) of approximately 1,200 square feet at a cost of $22.50 per square foot.
- Application of a 20% City management fee to the total of the costs described above.

According to the requirements of the Fee Calculator, the estimated total in-lieu fee for off-site mitigation associated with this proposed Case Study is approximately $190,000.

EXTRAPOLATION OF THE FEE CALCULATOR APPROACH TO THE HEP/HEA DERIVED MITIGATION FEE

Given the analysis above, the estimated cost increase to the Gunderson Launch Way Extension Case Study for vegetation and mitigation in-lieu fees (using the superseded Fee Calculator approach) under the proposed River Review process is approximately $240,000. However, according to the most recent February 2010 code amendments, the City is now proposing use of the HEP/HEA analysis in place of the Fee Calculator for derivation of mitigation in-lieu fees.

In November 24, 2009 the City provided a *River Plan/North Reach Calculating the Mitigation and Vegetation In-Lieu fees Memorandum* (Appendix B). In the memorandum three in-lieu fee scenarios were evaluated using the HEP/HEA analysis for construction of a new dock at the Schnitzer Steel Industries (SSI) facility, also located in the North Reach of the Willamette River. The scenarios did not include a fee component for temporal loss, but did include a vegetation in-lieu fee. Of particular interest was the City's Scenario 1, which presented a total in-lieu mitigation fee estimate of $846,990 for the proposed new dock project at the SSI facility.

In a January 6, 2010 meeting with the City, the City staff reinforced that the mitigation in-lieu fee for construction of the proposed new dock at the SSI facility using the HEP/HEA analysis and the City's current approach, would be approximately $650,000, with the $200,000 vegetation in-lieu fee cap, for a total of $850,000, consistent with Scenario 1, as described in their November 2009 memorandum. The Fee Calculator methodology for mitigation in-lieu fee determination was approximately $2.6 million for the SSI proposed new dock project (including the $200,000 vegetation fee). The November 2009 City HEP/HEA analysis resulted in a mitigation in-lieu fee of $850,000, or approximately 30% of the Fee Calculator value. Therefore, since the November 2009 City HEP/HEA analysis is the only new construction mitigation fee example that has been discussed to date and the City's approach to the HEP/HEA analysis is still being developed, it is appropriate to assume that the SSI and Gunderson projects would be evaluated in a similar manner and that an approximate 70% reduction factor is applicable to the Fee Calculator mitigation and vegetation requirement fee estimates.

The Fee Calculator mitigation fee and vegetation requirement estimated for the Gunderson Launch Ways Extension Case Study is $240,000, and application of the 70% reduction factor for extrapolation to a HEP/HEA approach results in an adjusted mitigation and vegetation in-lieu fee estimate of approximately $72,000.

CONCLUSIONS

It is estimated that relative to the Gunderson Case study, the impact of the City's proposed River Review process would include an increase in project permitting duration, and an increase in environmental and biological assessments costs (above what is estimated under the existing regulatory framework) of approximately $150,000. If off-site mitigation is necessary as on-site mitigation is not feasible due to current and future anticipated site operations, a HEP/HEA based off-site mitigation and vegetation in-lieu fee of approximately $72,000 would be applicable to the Gunderson Case Study. This would result in a total project increase cost of approximately $222,000 for this new construction project.

Encl.: Attachment A – Conceptual design drawings for the Gunderson Launch Ways Extension Case Study
Attachment B – City prepared -River Plan/North Reach Calculating the mitigation and vegetation in-lieu fees memorandum dated November 24, 2009.

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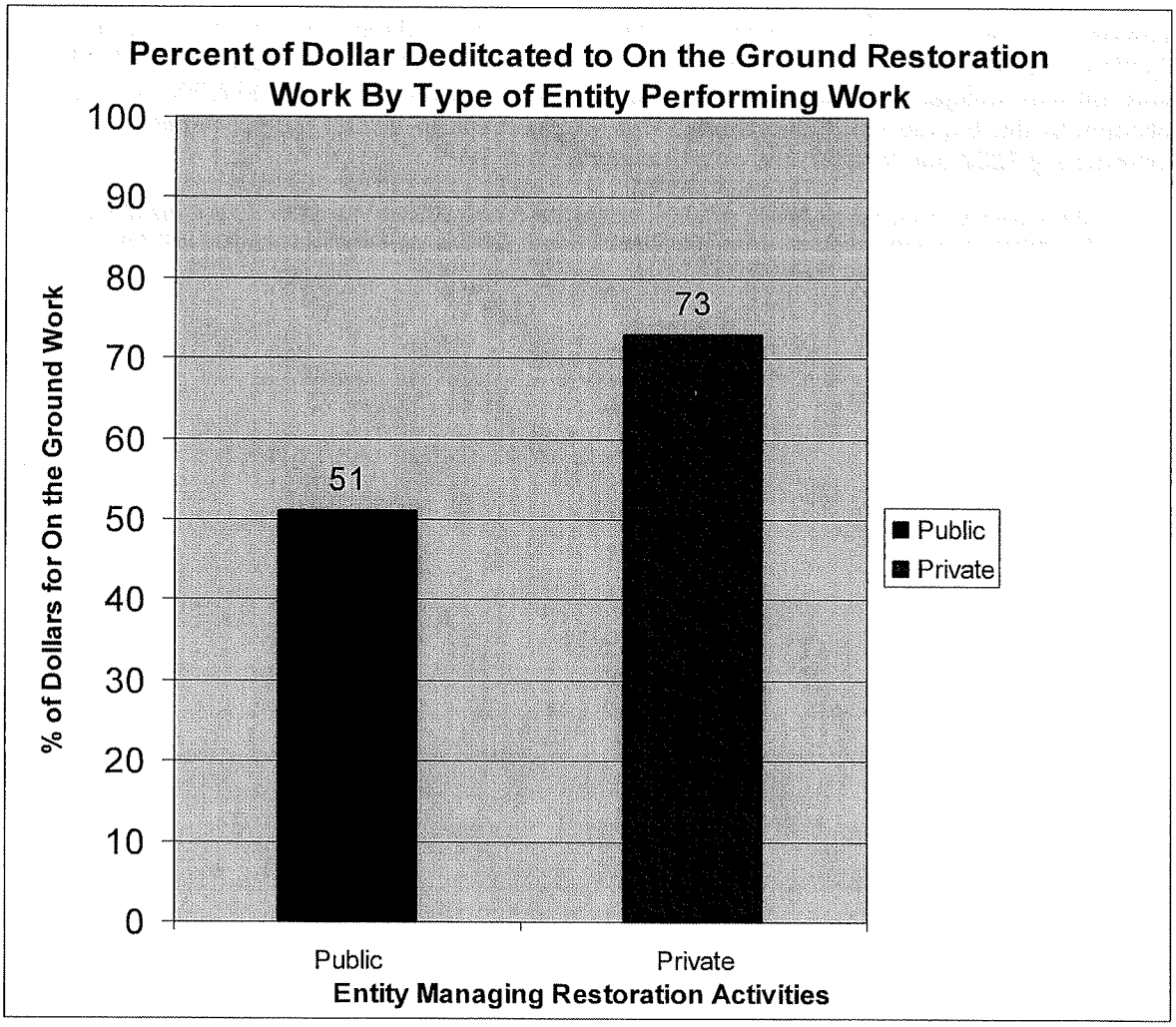
Portland, OR 97225
(503) 297-6311P
(503) 297-6053F

Cost Comparison of River Restoration Project Efficiency by Class of Entity Managing the Work



Based on our review of ten recent restoration projects of varying size and complexity, private industry is able to convert 73% of a dollar into on the ground restoration activity, while public sector is able to convert 51% of a dollar into on the ground restoration. This can be viewed as efficiency, and is based on cost of construction relative to total cost including planning, design construction and monitoring and maintenance. Details of the projects used in developing this comparison are found on the following pages.

183694

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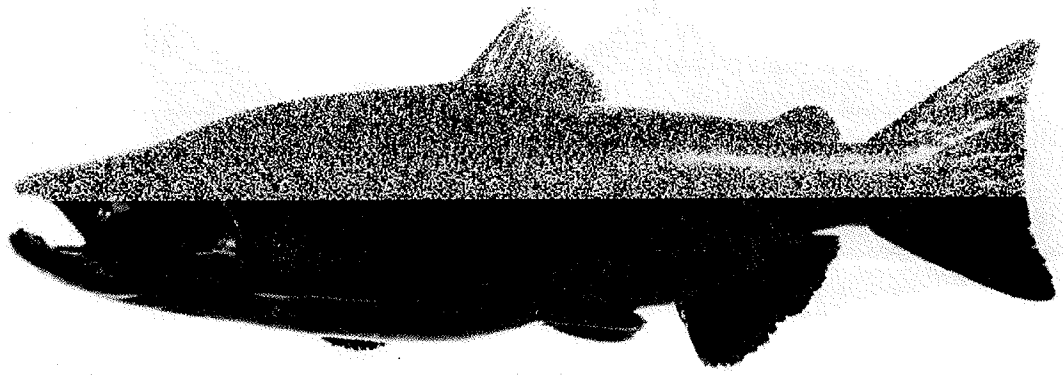
(503) 297-6311P
(503) 297-6053F

Restoration Cost Perspective: Stevens Creek Confluence Habitat Enhancement



Percent of Dollars Applied to Actual Restoration Work 53%

Project: Stevens Creek Confluence Habitat Enhancement
Sponsor: City of Portland
Year: 2009
Construction Cost: $552,006
Soft Costs: $482,833
Total Cost: $1,034,839
Construction Efficiency=0.53
Riverbank: Approximately 350 lf
Dollars/LF of impact $2956

Goals:

- Removed artificial structures, such as the combined sewer overflow (CSO) pipe, which limited natural floodplain connectivity
- Re-sloped stream banks to increase stability and facilitate revegetation
- Installed large wood in the project area to increase cover, shelter, and refuge potential (large wood complexes encourage formation of scour pools that provide deep, shady, cool refuge areas)
- Created off-channel habitat to provide low-velocity refuge for fish during high flows
- Revegetated the site to increase habitat complexity and provide shade and overhanging vegetation cover to Stephens Creek and the Willamette River
- Installed brush piles and snags to improve wildlife habitat

Notes: Project experienced some issues with high creek flow erosion during construction Project includes budget for review vegetation, hydrology, wildlife, topography , fish survey and photo point monitor to track success through 2014.

Special Note: Each project has elements not directly associated with habitat restoration which increase cost. These costs have not been removed as each project will have such elements.

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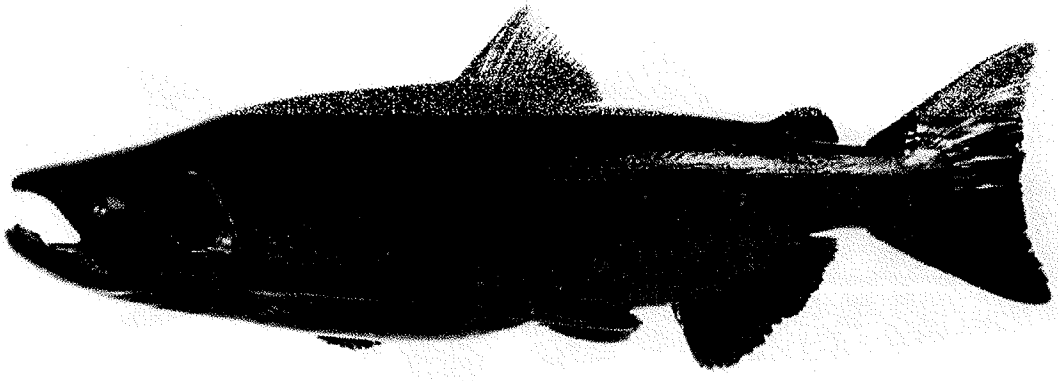
(503) 297-6053F

Restoration Cost Perspective: South Waterfront Shoreline Restoration and Bioswale



Percent of Dollars Applied to Actual Restoration Work 88%

Project: South Waterfront Shoreline Restoration and Bioswale
Sponsor: Private Land Owner
Year: 2003
Construction Cost: $384,300
Soft cost: 9,800 permit consultant+9,500 City + 25,000 Design+ $10,000 CM=$54,300
Total Cost: $438,600
Construction Efficiency=0.88
Riverbank: Approximately 250 lf
Dollars/LF of impact $1754

Goals:

- Removed artificial structures including a large overwater pier with creosote pile
- Re-sloped stream banks to increase stability and facilitate revegetation
- Installed large wood in the project area to increase cover, shelter, and refuge potential (large wood complexes encourage formation of scour pools that provide deep, shady, cool refuge areas)
- Revegetated the site to increase habitat complexity and provide shade and overhanging vegetation over the Willamette River

Notes: Monitoring and maintenance was assumed by the City. Irrigation water was cut off during first summer and plantings were damaged. Reestablishment of some plantings has proved to be a challenge.

Special Note: Each project has elements not directly associated with habitat restoration which increase cost. These costs have not been removed as each project will have such elements.

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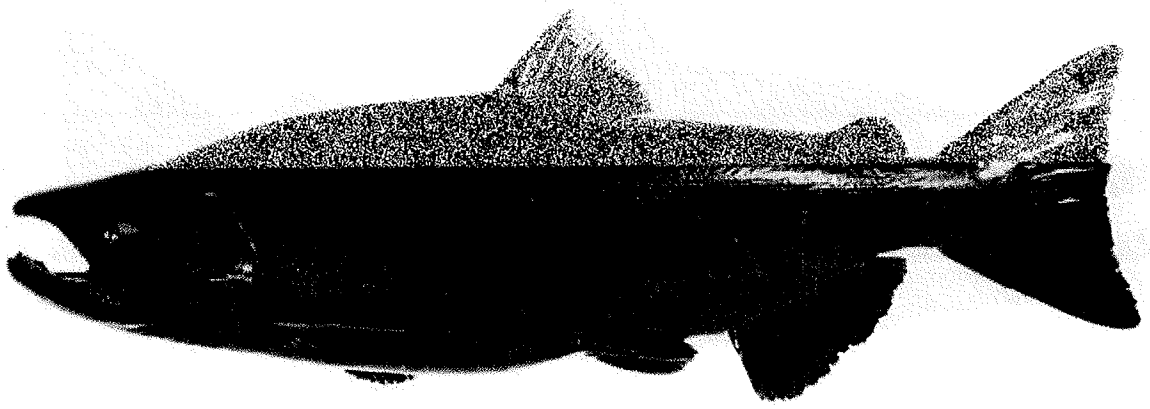
(503) 297-6053F

Restoration Cost Perspective: Germany Creek Enhancement and Flood Plain Reconnection



Percent of Dollars Applied to Actual Restoration Work 65%

Project: Germany Creek Enhancement and Flood Plain Reconnection
Sponsor: Non Profit (Columbia Land Trust)
Year: 2008
Construction Cost: $69,443
Soft cost: 27,300+10,000 Owner time - Total $37,300
Total Cost: $106,743
Construction Efficiency=.65
Riverbank: 1150 LF
Dollars/LF of impact $93

Goals:

- Remove artificial dikes which limited flood plain migration and connectivity
- Remove 5000 cy of material from flood plain
- Recontour and plant native vegetation over 2 acre gravel parking
- Develop wetland connection to spring
- Reconnect existing ponds and establish flow to enhance off channel refuge
- Introduce large wood structures into main channel to provide velocity and bed load controls

Project includes monitoring by the Wild Fish Conservancy and Columbia Land Trust. Photo point monitoring, fish surveys and other field work will be conducted. No changes or response to natural events are planned. Restoration to be completed by creek/river processes.

Special Note: Each project has elements not directly associated with habitat restoration which increase cost. These costs have not been removed as each project will have such elements.

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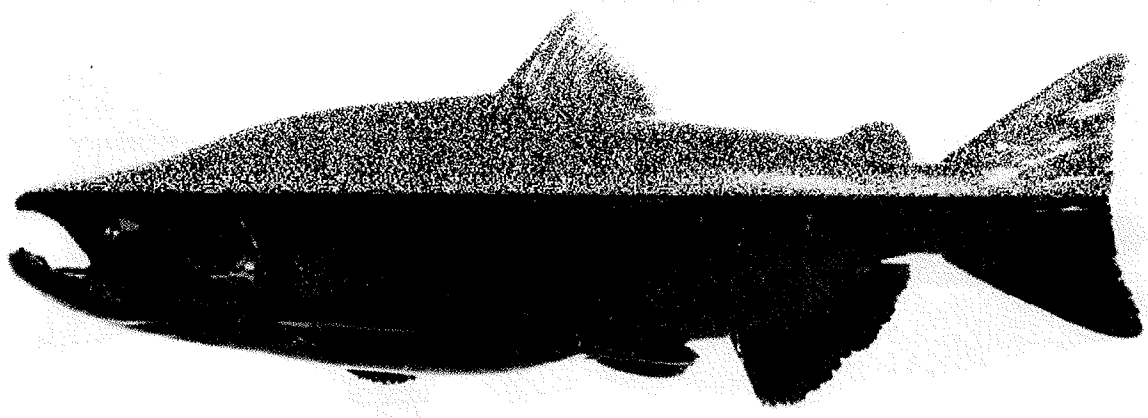
Restoration Cost Perspective: Terminal 4, Port of Portland



Percent of Dollars Applied to Actual Restoration Work 68%

Project:Terminal 4 Port of Portland
Sponsor: Port
Year: 2002-2003
Construction Cost: $2,100,000
Soft cost: $990,000
Total Cost: $3,090,000
Construction Efficiency=.68
Riverbank: 1800 LF
Dollars/LF of impact $1716

Goals:
Project was completed as part of a facility renovation in the working harbor to attract a large industrial business. Restoration elements included:

- Lay back slope to a shallow fish friendly slope
- Introduce structure to encourage additional natural wood structure accumulation
- Install 7.5 acres of riparian plantings

Project includes monitoring as described in the permit conditions issued by COE and DSL.

Special Note: Each project has elements not directly associated with habitat restoration which increase cost. These costs have not been removed as each project will have such elements.

Additional projects not pictured included in the percentage average include, Brownwood, Kelly Confluence, Tryon Confluence, Columbia Slough Confluence, Errol Confluence and Errol Heights wetland.

PORT OF PORTLAND

Box 3529, Portland, Oregon 97208
(503) 944-7000

183694

MEMORANDUM from MID Planning

Date: June 15, 2009

To: Sallie Edmunds

From: Greg Theisen

Re: Restoration Site Cost Estimates

This memo follows the path laid by Paul Ketcham's BES memo dated 6/9/09 to you regarding clarifying cost estimates for restoration sites identified in the River Plan North Reach.

It is the Port's practice to describe mitigation construction costs in our accounting system as capital costs and maintenance costs. Capital costs cover the cost of completing the initial construction project. Capital costs include, using BES terminology, pre-design and design, construction, and construction oversight. Further broken down these costs include planning, permitting, engineering, design, construction management and actual construction. Excluding construction costs BES defines all of these costs as soft costs. The Port generally does not break out these soft costs from the total capital cost of construction. Following construction the Port does break out ongoing maintenance, management and monitoring costs for our mitigation sites (henceforth referred to summarily as maintenance costs). The Port does not break out the cost of land in assessing the cost of mitigation. Most of our mitigation sites are constructed on existing Port land and therefore do not have a line item for land acquisition.

COSTS

Using capital and maintenance costs tracked in our accounting system, provided by project managers and listed by our monitoring staff, the Port can share the following figures associated with specific mitigation sites. Note that these are best estimates on actual capital and maintenance costs[1]. For a brief description of each mitigation project see Attachment A.

---

[1] Calculating capital and maintenance costs on a per acre or square footage basis is complicated by the actual amount of acreage included in the calculation. I have included total mitigation acres as per the issued permit and total site acreage in the calculation in consideration that the total site is managed as habitat.

Table 1 illustrates the cost of construction and maintenance per acre for three Port mitigation sites. Each site has unique characteristics with varying degrees of

Table 1. Mitigation Construction and Maintenance Costs by Acreage

Project	Total Property Acres	Total Mitigation Acres	Capital Costs (construction and soft costs)	Average Annual Maintenance Costs	Average Annual Maintenance/ Total Acres	Average Annual Maintenance/ Mitigation Acres	Capital Cost per Mitigation Acre (excluding purchase)
Vanport Wetlands	90.44	69.2	$1,332,462	$132,000	$1,460	$1,908	$19,255
Randall	22.3	11.8	$1,233,197	$98,900	$4,435	$8,381	$104,508
Rivergate Enhancement Sites	38.7	38.7	$6,510,000	$138,500	$3,579	$3,579	$168,217

complexity built into the design and function. This variation is reflected in their construction costs and ongoing maintenance costs.

Vanport is a large, less complex open water site adjacent to I-5 and the Multnomah County Expo Center. Minimal grading and some berm placement occurred during construction. Adding to the cost was the construction of water control devices to manage water levels. Spreading the 1.3 million dollar capital cost over 90 acres results in a lower cost per acre. Average annual maintenance costs are also lower spread across this larger less complex site. This site is similar to what the River Plan might call a floodplain restoration project.

Table 2. Mitigation Construction and Maintenance Costs by Square Foot

Project	Total Property Square Feet	Total Mitigation Square Feet	Capital Costs (construction and soft costs)	Average Annual Maintenance Costs	Average Annual Maintenance/ Total sqft	Average Annual Maintenance/ Mitigation sqft	Capital Cost per Mitigation sqft (excluding purchase)
Vanport Wetlands	3939566	3014352	$1,332,462	$132,000	$0.03	$0.04	$0.44
Randall	971388	514008	$1,233,197	$98,900	$0.10	$0.19	$2.40
Rivergate Enhancement Sites	1685772	1685772	$6,510,000	$138,500	$0.08	$0.08	$3.86

Randall is a smaller, relatively complex site located in Washington County near Hillsboro. Considerable grading and site development occurred during its construction. Additional work has been completed on the site over the years since its completion. This work has added to on-going maintenance costs. The need for on-going work at these sites, beyond normal maintenance is fairly common across Port

mitigation sites, especially in the first few years of a site's existence when meeting performance goals often requires altering the layout, plantings or management at considerable expense. These costs are captured in the average annual maintenance costs, which would be even lower if re-engineering, planting or management changes were not occasionally necessary.

Rivergate Enhancement Sites are made up of several constructed swales, berms, paths and other natural and recreational features close to the north end of the Columbia Slough. It is a very complex site that serves multiple purposes. Its construction costs were high relative to its size, while average annual maintenance costs have been low. This site is probably much more complex in type and function compared to the revegetation and floodplain restoration cited in the River Plan code dated June 8, 2009.

COSTS RELATIVE TO RIVER PLAN PROPOSAL

The River Plan proposed in-lieu fee for meeting the vegetated area standard is $6.70 per square foot. The fee is made up of two components, a proportional land cost of $2.75 per square foot and an averaged restoration and management cost of $3.95 per square foot.

The Port's capital costs for the mitigation area alone range from $.44 to $3.86 per square foot, excluding the cost of property. Average annual maintenance costs for the mitigation area alone range from $.04 to $.19 per square foot. Capital and maintenance costs are even lower if dispersed across the total property acreage, a viable assumption given that the entire site is maintained as a whole mitigation or habitat unit. If you were to add in the City's cost of property, $2.75, to the Port's capital and maintenance cost averages the result is a meaningful difference between the two.

The Port's average cost for construction and maintenance between the three examples is $2.33 per square foot of mitigation area. Exclusive of land costs the City's mitigation or landscaping costs are about 40% higher than the Port's. Adding $2.33 to the City's $2.75 average discounted cost of property equals $5.08 per square foot of mitigation area. Inclusive of a land cost of $2.75 per square foot the Port's average capital, maintenance and acquisition cost is 25% less than the City's. Spread across Vanport's 3+ million square feet of mitigation area or the Rivergate Enhancement Sites' 1.7 million square feet the cost difference is considerable.

Attachment A

SITES

The sites selected are representative of more complex mitigation projects. They vary greatly by size and construction costs but were each completed within the same timeframe, 2003/2004.

Vanport Wetlands

The Vanport Wetland site consists of 90.4 acres. The total mitigation area consists of approximately 69 acres. The goal of the mitigation plan is to establish a more diverse, native dominated wetland habitat with a surrounding vegetative buffer. The mitigation plan was designed to alter the hydrology of the site by capturing precipitation during the rainy season and modifying the existing pumping/drainage regime to allow increased water depth within the wetland basin. The design also incorporates a number of physical modifications to the site, including a low earthen berm in the northern portion of the property in order to prevent flooding of Expo Road and the site's north ditch; reconfiguration of the drainage channels to provide a more meandering swale system; and chemically spraying, mowing, plowing, disking and seeding of the central wetland in order to further stress the reed canarygrass. The plan includes enhancement of the upland habitat and enhancing the vegetated buffer around the boundary of the property.

Randall

The Randall site consists of 22.3 acres. The mitigation plan provides for 6.65 acres of enhanced wetland, 4.20 acres of created wetland and 1.52 acres of restored wetland area. Site preparation included the removal of all structures, the abandonment of two water wells and the installation or 13 groundwater monitoring piezometers. Removal of reed canary grass and grading started in 2001 and was completed in 2002. Large woody debris was anchored in the wetland areas with 25 logs and 15 stumps anchored and placed in the upland. Additional regrading, irrigation, planting and seeding have occurred over time at the site. Management of invasives continues.

Rivergate Enhancement Sites

The Rivergate Enhancement Site consists of 38.7 acres. Mitigation was designed to result in the restoration and enhancement of approximately 38.7 acres of wetland and riparian habitat. The goals of the mitigation are to increase or restore wetland functions. The mitigation plan is composed of eight discrete elements:

1. Construction of an 8-foot wide asphalt path with a 2-foot wide unpaved shoulder on the down-slope for a distance of approximately 140 feet under the Lombard Street bridge.
2. North bank, Columbia Slough: removal of fill to native soils over a width of 150 feet and length of approximately 1400 feet between the Lombard Street

bridge and Columbia Slough rail bridge; slopes no steeper than 3:1, construction of 800 feet of swale at least 10 feet wide and 1-2 feet below native soils and parallel to the Columbia Slough; vegetation.

3. South bank, Columbia Slough: removal of fill to native soils over a width of 50 feet and length of approximately 1550 feet between the Lombard Street bridge and Columbia Slough rail bridge; slopes no steeper than 3:1, vegetation.
4. Leadbetter Peninsula: removal of fill to native soil over a width of 25 feet around the eastern, southern and western boundaries of the peninsula, and a contoured slope to have an average of no greater than 4:1 grade for approximately 75 feet on the upland edge beyond the excavated area; construction of 1500 feet of swale at least 10 feet wide and 2-4 feet below native soils and parallel to the toe of the fill slope; vegetation.
5. Ramsey Lake visual buffer of native shrubs and trees along a corridor with a width of 10-100 feet at the top of slope west and north of Ramsey Lake mitigation area; vegetation.
6. Ramsey Lake enhancements: removal of fill to 14 feet NGVD and construction of two meandering swales with a combined length of 2000 feet and individual width of at least 50 feet at approximately elevation 10 feet NGVD; swales to connect to the slough at the upstream and downstream ends; vegetation.
7. Culvert removal and removal of existing fill to the bottom of the elevation of the culvert adjacent to and east of the railroad bridge on the south side of the Columbia Slough.
8. 40 mile loop trail from the rail bridge east to the Port's property line and along the north bank of the Columbia Slough.

WWC Submittal

Appendix 4 – Greenway Trails

Dunn Carney Allen Higgins & Tongue LLP ATTORNEYS AT LAW

TY K. WYMAN

DIRECT DIAL
503.417.5478

E-MAIL
tkw@dunn-carney.com

ADDRESS
Suite 1500
851 S.W. Sixth Avenue
Portland, Oregon
97204-1357

Phone 503.224.6440
Fax 503.224.7324

INTERNET
www.dunncarney.com

May 14, 2007

River Plan Greenway Trail Alignment and Design Task Group
c/o Shannon Buono, Portland Planning Bureau
1901 SW Fourth Ave.
Portland, OR 97204

Re: Greenway Trail Alignment
Our File No. UNI45-27

Dear Committee:

This firm represents Union Pacific Railroad Company, which owns and operates the Albina rail yard and the St. Johns industrial lead track that runs along the river from Albina Yard, past the University of Portland to Cathedral Park. Having reviewed the staff proposal depicting recreational trails at Albina Yard and along the St. Johns line, we offer this preliminary response.[1]

Albina Yard. Inviting pedestrians and bicyclists to a trail at Albina Yard will create accident hazards and security risks not worth any recreational benefit. The City should not just de-prioritize this alignment option; rather, it should abandon it altogether.

We are unsure what misunderstanding of railroad operations has led to this proposed trail alignment. The reality of public interaction with heavy rail cars is at least unsafe and too often tragic. UP employs its own full-time police force just to keep the public off its tracks. Nationwide last year over 500 trespassers[2] were killed on tracks other than at crossings - more than occurred in crossing accidents.

Perhaps staff assumes that the proposed trail would operate like the Springwater Trail through Oaks Bottom. There are three distinctions. First, at Oaks Bottom, the trail does not cross the adjacent rail tracks, as this one would. Union Pacific switches industries to the west of Albina Yard and would need to cross—and block—the trail to do so. There is no safe way for trail users to get around a train that might be blocking their path. Taking a detour by entering the yard would involve climbing through trains or crossing tracks onto which railcars

[1] This letter explains only the accident hazard that the trail would pose. For your reference, I attach a letter on the issue from UP's Bay Area counsel to Alameda County. This letter evidences both the broader scope of the problem that the proposed trail would create and the seriousness with which UP takes this issue.

[2] Rail trespass is not confined to the homeless or criminals (which would be plenty enough cause for concern). We now see families on bikes and urban singles running on our tracks wearing their iPods.

are being switched. Trespassing through the shipper's facility to get around the other end of the train would similarly be hazardous.

Second, there is a continuous fence along the Oaks Bottom trail separating the trail from the tracks.[3] For a trail through Albina Yard, a fence would not be feasible. The location identified for the trail is a private industrial roadway immediately adjacent to yard tracks. Union Pacific needs to use this roadway area when maintaining its tracks, delivering ballast and removing or replacing ties. Employees need space to walk along the west side of trains on the adjacent track. There is no room for a fence that would give Ash Grove Cement the space needed for its trucks and give UP the access it needs to its tracks.

The third difference between the proposed trail and that at Oaks Bottom is that the latter runs next to a single track, used in the morning and early evening for through-movements of freight trains. The Albina Yard is an active industrial environment. A high volume of trains move back and forth on multiple tracks at all times of the day and night, frequently blowing their whistles (100 decibels in the ear of a child on the trail).

What's more, employees at Albina Yard are devoting their full attention to rail car switching activities, sorting cars onto various tracks or pulling cars from tracks to make new trains. Unlike the general public, railroad employees are fully aware of the rules for being around moving equipment and expect, when shoving cars into a track, that the only people near that track will be fellow employees who also know the rail safety rules. A rail yard is an inappropriate place for interaction with the public.[4]

Switching yards also provide more opportunity for mischief—or worse. A teenager recently walked into Albina Yard and threw a switch as a train passed. Several train cars tipped, damaging their freight. The damage caused by teenage vandals hints at the greater harm that could come from terrorists. The Department of Homeland Security is putting more stringent requirements on railroads to limit access to railroad property. Currently, all railroad employees and contractors must carry identification cards while on railroad property. We would have no control over who could come onto railroad property by way of the trail. A bike trail is contrary to what the Department of Homeland Security is requiring to safeguard

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[3] Even at Oaks Bottom, there is a conflict area for trail users and trains where the train ends. Oregon Pacific Railroad recently experienced a near miss with a trail user's dog who ran onto the tracks around the end of the fence.

[4] Tri-Met, having experienced more pedestrian/MAX train accidents than it anticipated, has undertaken a substantial public information campaign warning of the danger. That this has occurred with MAX cars, which are designed to operate close to and carry the public, further evidences the hazard of inviting the public to the Albina Yard.

rail shipments. It is unthinkable to site a trail within an area where UP has been diligently working to keep out trespassers.

St. Johns Line. The cantilevered walkway proposed for the narrow, steep right of way between the St. Johns industrial lead and the river is incompatible with railroad maintenance needs. To maintain its track, Union Pacific uses locomotive cranes, ballast drainage cars, brush cutters, tie tampers and off-track equipment, some of which have swinging parts. A fence installed near the tracks could be damaged or destroyed during track renewals by steel track back hoes with tamper heads or tie heads, which remove the ties from the side of the track. This equipment has a 25-foot work radius on the side of the track. The cantilevered walkway envisioned in the proposed plans would be in the way of this equipment. There simply is not enough room for trains and a trail to share the narrow ledge at the base of the bluff.

Thank you for the opportunity to comment. We plan to attend your May 15 meeting and look forward to further discussing this issue with you.

Very truly yours,

Ty K. Wyman

TKW/CLL:jcm
DCAPDX_417892_v1_comment_letter_re_trail_alignment-comments
cc: Union Pacific Railroad Company
Ann Gardner, Schnitzer Steel

STEEFEL, LEVITT & WEISS
A Professional Corporation

Author's Direct Dial: (415) 403-3273
E-Mail: jferrucci@steefel.com

March 28, 2007

VIA EMAIL, FACSIMILE AND US MAIL

George Sukkar, P.E. and Jim Browne
Office of the Deputy Director of Public Works
Alameda County Public Works Agency
399 Elmhurst Street
Hayward, CA 94544
510-782-1959 (fax)
jimb@acpwa.org.

Re: Notice of Intent to Adopt a Negative Declaration for the Coliseum BART to Bay Trail Connector

Dear Mr. Sukkar and Mr. Browne:

We represent Union Pacific Railroad Company ("UP"). UP appreciates this opportunity to comment on the County's Notice of Intent ("NOI") to adopt a Negative Declaration for the Coliseum BART to Bay Trail Connector (the "Project"). By this letter, UP presents its comments.

UP owns a railroad line and right of way in Alameda County (the "UP mainline") that roughly parallels the I-880 freeway. UP operates freight services, and Amtrak operates passenger services, on the UP mainline. The UP mainline experiences a very high volume of rail traffic, as it serves the entire metropolitan Bay Area and is a major transportation corridor through Northern California. Notably, both freight and passenger rail activity are increasing along the UP mainline.

Given UP's significant presence throughout Alameda County, UP takes great interest in both private-sector real estate development and public-sector projects occurring in the County. It is with this perspective that UP respectfully submits the comments in this letter. On UP's behalf, we would welcome an opportunity to sit down together with County officials and staff to discuss any aspect of this Project or any other project that may relate to UP's property or operations within Alameda County.

1. The Big Picture: Pedestrian/Bicycle Activity and UP

Before addressing the Project specifically, we thought it might be helpful to comment, more generally, on current development trends and the relationship between pedestrian/bicycle activity and UP. One of the most positive trends in development and planning

in recent years has been the focus on "alternative" modes of transportation. Recognizing the limitations and side effects of automobile dependence, both developers and local jurisdictions have been finding ways to support and encourage the use of mass transit, walking, and bicycling. In many cases, this trend has led to the development of more convenient and attractive places to live and work. UP recognizes that transit and pedestrian-supportive development may promote passenger rail service over time.

Nevertheless, UP strongly advises developers and local jurisdictions to pay careful attention to the impacts of encouraging pedestrian or bicycle activity near UP lines. At the risk of stating the obvious, pedestrian/bicycle activity near UP lines can create unintended consequences that are in neither UP's nor the County's best interests. Where such pedestrian/bicycle activity exists in the vicinity of UP property, people cross UP lines at existing at-grade crossings, and also at times trespass onto the railroad right of way. In addition to raising safety concerns of which UP remains vigilantly aware, such activity may force trains to proceed more slowly through the County and/or make more frequent emergency stops, which makes rail service less reliable. Moreover, the interaction of people and trains may make people all the more aware of the natural and unavoidable features of rail service, including noise, mechanical odors, and vibration.

Ever realistic, UP recognizes that as Alameda County continues to grow and thrive, new development and public projects will continue occurring on sites near UP lines. Accordingly, new pedestrian and bicycle activity may spring up in areas adjacent to UP lines. In general, UP requests that the County help mitigate the impacts of new development on UP's lines and rail services by finding appropriate locations for pedestrian and bicycle facilities and by requiring appropriate mitigation measures for both public and private projects. UP would welcome the opportunity to work collaboratively with County officials and staff to develop long-range public policies to help guide new public and private projects near UP lines, with the goal of avoiding or reducing detrimental impacts.

2. Coliseum BART to Bay Trail Connector

The Project proposes development of a pedestrian/bicycle trail (the "trail") linking the Coliseum BART Station (the "BART Station") with the Bay Trail, within the City of Oakland. From the BART Station, which is located on San Leandro Street, the trail would run west along 73rd Avenue. It would then either (1) cross the UP mainline at-grade, or (2) cross over the UP mainline via a new connection to the elevated walkway (the "elevated walkway") that connects the BART Station with the Oakland Raiders Coliseum (the "Coliseum"). It would then run in between the Damon Slough and the UP line, along an existing flood control maintenance road. Continuing north along the Slough, the trail then would turn west toward the Bay Trail, away from the UP mainline. Next, it would turn onto Coliseum Way and then onto 66th Avenue, leading finally leading to the Bay Trail.

The Draft Negative Declaration prepared in conjunction with the NOI identifies

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no potentially significant impacts. UP hereby brings to the County's attention a number of concerns regarding encroachment, land use, pedestrian/bicycle safety, trespassing, emergency access, mechanical odor, noise, and vibration.

UP examines the Draft Negative Declaration in light of the applicable standard of review under the law. Even if there is substantial evidence that a project would cause no environmental impact, the lead agency must prepare an Environmental Impact Report ("EIR") if there is even a "fair argument" that the project could cause a significant environmental impact. *Friends of "B" Street v. City of Hayward*, 106 Cal. App. 3d 988, 1002 (1980); CEQA Guidelines § 15063(b)(2). That is, to justify doing a Negative Declaration instead of an EIR on the Project, the County must show that there is no "fair argument" that an environmental impact would occur. In the following comments, however, we will show that there is a fair, indeed a compelling, argument that several significant impacts could result from the Project.

3. Encroachment

Approximately one-quarter mile of the length of the trail runs alongside the UP mainline. Before the County moves forward with the project, the County must make absolutely certain that the trail does not encroach upon the UP mainline's right of way. Otherwise, the County must seek permission from UP to use the right of way. Notably, the right of way is wider than the track itself, and UP uses areas alongside the track for maintenance work. Thus, UP may not be able to make any part of the right of way available for trail use.

4. Land Use

The Draft Negative Declaration includes no discussion of the existing land uses around the trail. In addition to the Coliseum, the BART Station, the Amtrak Station, and the UP mainline, the predominant land uses in the area are industrial and commercial. It is foreseeable that such industrial and commercial uses have emitted or now emit substances that result in soil or water contamination. In addition, it is foreseeable that such uses currently emit air contaminants.

As a result, the Project could expose trail users to industrial and commercial contaminants. Trail users may inhale air contaminants generated nearby. Walking along the trail, they may come into contact with contaminated soil or water along Damon Slough. Although a fence is proposed to separate the trail from Damon Slough, the type of fence is not specified. (Draft Negative Declaration, at 2.) A person could foreseeably climb or penetrate the fence and contact the soil or water. The Draft Mitigated Declaration is inadequate because it fails to discuss these potential impacts. The County should explore this issue further.

5. Pedestrian/Bicycle Safety

UP also has concerns about pedestrian/bicycle safety. The Draft Negative

Declaration concludes that the Project would not "substantially increase hazards due to a design feature." (*Id.* at 13.) In proposing a new at-grade pedestrian/bicycle crossing of the UP mainline, however, the Project would result in potential intermodal conflicts between trains and pedestrians/bicyclists. The Draft Negative Declaration fails to identify, much less mitigate, this significant impact.

As an initial matter, we note that any proposed at-grade crossing of the UP mainline would require permission from the California Public Utilities Commission (the "PUC"). In a letter sent to your office and dated March 2, 2007, the PUC indicated that it would *not* support the finding of no significant impact for the proposed at-grade crossing, nor would it support the installation of the crossing. Similarly, UP strongly objects to the proposed crossing, because it has obvious safety implications, and because it could effect train operations.

The alternative project design that is mentioned in the NOI—the use of the elevated walkway as a link in the trail—would fully mitigate this impact. Another option is to re-route the trail along San Leandro Avenue and 66th Avenue, which has an existing grade-separated crossing over the UP mainline. Either of these alternative designs would fully mitigate the impacts of the proposed at-grade crossing. UP strongly urges the County to adopt a grade-separated option such as these.

6. Trespassing

The proposed trail also raises concerns about trespassing. As noted, about one-quarter mile of the length of the trail runs alongside the UP mainline, raising the likelihood that trespassers will intrude on the right of way. Some trail users could decide to trespass onto the right of way, either as a shortcut for reaching their destinations or for the purpose of extending their walks, jogs, or bicycle trips. Trespassing raises obvious safety issues, and it also could impact rail service through the County by forcing trains to stop or slow down unexpectedly. The Draft Negative Declaration fails to identify this potentially significant impact.

The crossing of the UP mainline raises particular trespassing concerns. If the trail were to cross the UP mainline at grade, people could easily leave the trail crossing and walk into the right of way, since no barriers would separate the trail crossing from the rest of the right of way. This suggests that it would be preferable to direct the trail up onto the elevated walkway. Nevertheless, the elevated walkway raises trespassing concerns as well. People might try to avoid the elevated walkway by trespassing onto the UP mainline to skirt across to the other side. Thus, sufficient at-grade barriers would be needed at the base of the elevated walkway to deter potential trespassers.

The Draft Negative Declaration does note that "fences" will be installed "along both sides of the trail." (*Id.* at 2.) However, it does not specify what type of fences may be installed, nor does it identify the entity responsible for maintaining those fences. In UP's experience, chain link fences are not effective barriers for trespassers, since they can be scaled or

cut open, and they suffer maintenance problems over time. As an appropriate mitigation measure for this impact, the County should install, and commit to maintaining, a solid barrier that effectively deters penetration or climbing.

7. Emergency Access

The Draft Negative Declaration includes no discussion of emergency access to the trail. Part of the trail would be sandwiched in between Damon Slough and the UP mainline. In this location, it is unclear how an emergency vehicle such as an ambulance would gain access to the trail. A trail user in peril may not be able to receive effective emergency assistance. The County should further explore this issue.

8. Mechanical Odor

The Draft Negative Declaration identifies no odor impacts associated with the Project, aside from temporary construction-related impacts. (*Id.* at 18.) Nevertheless, because of existing odors in the area, the Project would expose trail users to those odors. It is well known that train locomotives may emit mechanical odors. In addition, we note that the Project is located in a predominantly industrial area, and surrounding industrial uses may emit mechanical or other odors. Thus, there is a "fair argument" that the Project would subject trail users to existing mechanical odors in the area, which impact should be studied.

9. Noise

It is well-known that UP's rail operations generate the noise one would expect from an active railway. Also, for safety reasons, trains are required to sound their horns at at-grade crossings. The Draft Negative Declaration fails to examine the extent to which the Project would expose trail users to these existing noise conditions. (*Id.* at 22.) As noted, approximately one-quarter mile of the length of the trail runs alongside the UP mainline. The trail's location immediately adjacent to the UP mainline suggests that the noise impacts on trail users could be significant, particularly for children or senior citizens who might use the trail. The County should analyze these potential noise impacts and consider implementing appropriate mitigation measures, such as construction of a sound barrier and installation a landscape buffer.

10. Vibration

It is also well-known that freight and passenger trains generate both airborne and ground vibration. Nowhere, however, does the Draft Negative Declaration mention or evaluate the fact that the Project would expose trail users to these existing vibration conditions. The County should analyze this possible impact. As a mitigation measure, the County should consider building a sound wall, to deter airborne vibration effects, as well as constructing vibration-absorption trenches, which can mitigate ground vibration.

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UP will appreciate it if the County, as lead agency, gives dué consideration to the above concerns. Because there is a fair argument that significant environmental impacts may result with respect to land use, pedestrian/bicycle safety, trespassing, emergency access, mechanical odor, noise, and vibration, UP requests that the County not adopt the Draft Negative Declaration in its current form. Rather, the County should study these issues further and prepare either a Draft Mitigated Negative Declaration or a full EIR. In that way, not only UP but other interested parties, members of the public, and County officials can better understand the potential impacts of the Project.

More importantly, UP looks forward to working in collaboration with the County to ensure that all future development and planning near UP lines is compatible with the rail services that will continue to serve the County for decades to come. Please give notice to UP of all future developments with respect to the Project as follows:

Mr. Terrel Anderson
Manager of Industry and Public Projects
Union Pacific Railroad Company
10031 Foothills Boulevard
Roseville, California 95747-7101

With a copy to:

Lisa M. Carvalho, Esq.
Steefel, Levitt & Weiss
One Embarcadero Center, 30th Floor
San Francisco, California 94111

Please do not hesitate to contact our office if you have any questions or concerns.

Sincerely,

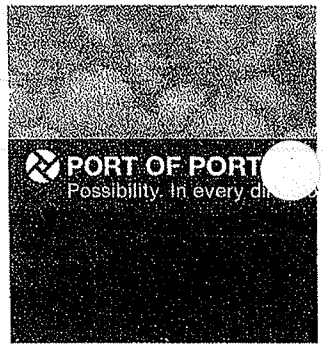
Joseph Ferrucci

JF/JF

cc: Mr. Terrel Anderson (via email in .pdf format)
Union Pacific Railroad Company
Mr. Kevin Boles (via email in .pdf format)
CA Public Utilities Commission

WWC Submittal

Appendix 5 – Superfund Legal Requirements



February 26, 2010

Commissioner Randy Leonard
City of Portland
1221 SW 4th Ave, Rm. 210
Portland, Oregon 97204

183694

Re: North Reach River Plan

Dear Commissioner Leonard:

Thank you for your attention to the Port of Portland's concerns about the proposed River Plan. During my testimony at the hearing on February 17, 2010, you asked whether the Port had reviewed Mayor Adams' proposed amendments and if the amendments addressed our concerns. I responded that my staff had reviewed those changes, there were remaining concerns, and that we would provide you with more specific information.

It is my understanding that the Working Waterfront Coalition (WWC) will be submitting information about the amendments and whether they address the eight identified issues in WWC's February 5, 2010 letter. The Port supports the WWC's position in this regard. There is one additional concern the Port has that is related to the Portland Harbor Superfund Site which needs to be addressed separately because of the Port's unique involvement in that matter. It is my understanding that this is not an amendment that Mayor Adams requested, but rather stems from changes made by the City Attorney late in the process.

The River Plan adds a new code section entitled "Clean Up of Contaminated Sites." The purpose is to provide standards for parties who perform cleanup under Oregon Department of Environmental Quality (DEQ) requirements. This is because, under state law, although an entity performing a cleanup is not required to obtain local land use permits, it does have to comply with underlying substantive requirements of those local laws. The Port initially disagreed with the new code section because it applies a prescriptive design formula to every site. We believe that engineering designs for cleaning up contamination should be left to experts at DEQ, EPA and environmental engineering firms, and that additional City staff review is neither warranted nor appropriate since they do not have expertise in this particular area.

In response to these comments, City staff revised some of the language in the code, as represented in the June 2009 and November 2009 Drafts. Although the code continued to take a prescriptive approach and we do not believe the City has the expertise to dictate how to design cleanups, we decided to agree to disagree and focus on more pressing concerns with the River Plan. A major factor in this decision was that the City cleanup code applied only to DEQ-led cleanups. Application to EPA-led cleanups was left as voluntary.

In the February 12, 2010 amendments, the City Attorney made changes to the November 2009 Draft to clarify that the Clean Up of Contaminated Sites section also applies to EPA-led cleanups. This is a significant problem for several reasons.

121 NW Everett Portland OR
Box 3529 Portland OR 97208
503 944 7000

First, this statement is inconsistent with federal law and contrary to EPA's communications to the Port and the Lower Willamette Group (LWG), of which both the City and Port are members. Federal law is clear that cleanups under the Superfund law (CERCLA) do not have to obtain any federal, state or local permit for on-site actions. Instead, EPA determines which federal and state substantive requirements apply to the on-site cleanup actions. Local laws are rarely identified by EPA as an applicable requirement. For the Portland Harbor Superfund Site, EPA has been asked twice to make a determination as to whether City requirements apply and on both occasions EPA has concluded they do not.

The first instance was in 2005 for the Terminal 4 Removal Action, for which EPA determined that the Greenway Code and Balanced Cut and Fill requirements were not applicable. The second situation happened more recently, when EPA decided whether the City Greenway Code should be considered in the harborwide cleanup evaluation. EPA again decided in that instance not to include the Greenway Code as a requirement.

The Port was therefore surprised to see, immediately before the public hearing, a revision to the code indicating that the City code would be applicable to EPA actions. The Port and City do not always have to agree. We should, however, follow the regulatory process and respect the outcomes of that process. It was disappointing to receive this last minute change with no advance communication.

Finally, we have concerns given the City's role in the Superfund Site. Essentially, the City of Portland, itself a potentially responsible party (PRP) subject to its own obligations to EPA, appears to be using its land use regulatory authority to influence and control what other PRPs must do to address their legal obligations to EPA. While we agree with the City's concern that clean-up should not render sites unusable for future uses, there is already a process to consider likely anticipated land uses as part of the EPA cleanup plan. The fact is cleanup of contamination is not related to the central topic of the City's land use regulation and, as explained above, the code appears to be legally incorrect. Thus, it may appear that the code is being adopted specifically to govern cleanup actions in an attempt to put the City in a decision-making role over other PRPs, or otherwise gain an advantage in the Superfund proceeding. For this reason, we cannot support it.

Thank you for taking the time to listen to our concerns on this issue. I have enclosed a summary of the specific code language that is problematic, as well as a table of EPA's legal requirements that are applicable to the Superfund Site (which does not include any City code). I would be happy to make additional background information available to you and your staff.

Sincerely,

Bill Wyatt
Executive Director

cc:
Mayor Sam Adams
Commissioner Nick Fish
Commissioner Amanda Fritz
Commissioner Dan Saltzman
Lori Cohen, U.S. Environmental Protection Agency
Dick Pedersen, Oregon Department of Environmental Quality

33.475. 460 Clean Up of Contaminated Sites
Problematic language from the February 2010 Proposed Amendments to the River Plan

Code Language:

"C. Review procedure. The regulations of this section are not necessarily implemented through a permit as are other regulations in this Title. Oregon State Statute and United States Code waive the procedural requirement that entities performing removal or remediation actions obtain permits or other authorizations from a local government. However, the exemptions do not waive or exempt compliance with a local governments substantive requirements. For those cleanup actions that are exempt from the permit process, the following regulations are incorporated into the removal or remediation process administered by the Oregon Department of Environmental Quality or the Environmental Protection Agency, rather than administered through the City's land use process." (February 2010 Amendments, Replacement Page 79) (emphasis added).

Problem:
Under federal law, City code is not incorporated into the removal or remediation process. For the Portland Harbor Superfund Site, EPA has not identified City code as an applicable requirement.

Solution:
Remove references to the United State Code, the Environmental Protection Agency and Federal cleanup law. Specifically relate this section to the Oregon statute only.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
OREGON OPERATIONS OFFICE
805 SW Broadway, Suite 500
Portland, Oregon 97205

January 6, 2010

Mr. Robert Wyatt
Northwest Natural & Chairman, Lower Willamette Group
220 Northwest Second Avenue
Portland, Oregon 97209

Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240 – EPA's Preliminary Identification of ARARS at the Portland Harbor Site for Development of the Feasibility Study

Dear Mr. Wyatt:

This letter provides EPA's current list of potential applicable or relevant and appropriate requirements (ARARs) for the Portland Harbor Superfund Site. Based on information presented in the draft Remedial Investigation (RI) Report and the draft baseline human health and ecological risk assessments, EPA has updated and refined the list of state and federal standards and requirements that the Portland Harbor cleanup will likely need to meet. Enclosure 1 to this letter presents the comprehensive list of federal and state standards that EPA has determined are ARARs or likely will be ARARs for one or more remedial alternatives analyzed in the feasibility study. EPA expects that the ARARs presented in Enclosure 1 will be used in the development, screening and detailed evaluation of remedial action alternatives in the draft feasibility study (FS) for the Portland Harbor Site.

In developing the current list of ARARs, EPA has considered the remedial investigation and risk assessment information discussed above, and the following documents:

1. Portland Harbor RI/FS Programmatic Work Plan dated April 23, 2004;
2. EPA's letter to the Lower Willamette Group regarding application of Safe Drinking Water Act Maximum Contaminant Levels (MCLs) dated September 27, 2005;
3. Two background documents developed by the Lower Willamette Group (LWG) on application of Oregon Water Quality Standards dated July 2, 2008 and the Weight to be Given to Attaining MCLs in Portland Harbor dated September 4, 2008;
4. The table of potential ARARs developed by the Lower Willamette Group dated March 19, 2009;
5. The State of Oregon's June 12, 2009 response to EPA's April 10, 2009 request for the identification of ARARs;

6. EPA's direction on remedial action objectives for the Portland Harbor site dated September 30, 2009; and

7.The LWGs October 7, 2009 response to EPA's direction on RAOs.

Additionally, we considered other information discussed in various meetings between EPA and the LWG on the topic of ARARs including, but not limited to meetings that took place on April 13, 2009, September 8, 2009 and September 25, 2009.

As more specifics are developed about the remedial alternatives that will be analyzed in the FS, further refinement of the specific standards or requirements listed in Enclosure 1 will need to occur and other laws and regulations may be identified. For example, if an on-site upland disposal site for dredged materials is considered, more specific requirements for siting, construction or operation of a landfill or other groundwater protection requirements will need to be identified under federal and state solid waste regulations. Likewise, if any alternative includes on-site treatment of RCRA characteristic or listed waste, additional RCRA (federal and state) and possibly Clean Air Act requirements will need to be identified. New federal or state laws or regulations promulgated prior to issuing the ROD could also add or change the ARARs for the site.

With the information enclosed with this letter, the LWG can proceed with the Feasibility Study with most if not all of the key ARARs that may impact, implementability, protectiveness, and cost of the remedial alternatives.

Sincerely,

Chip Humphrey
Eric Blischke
Remedial Project Managers

cc: Greg Ulirsch, ATSDR
Rob Neely, NOAA
Ted Buerger, US Fish and Wildlife Service
Preston Sleeger, Department of Interior
Jim Anderson, DEQ
Kurt Burkholder, Oregon DOJ
David Farrer, Oregon Environmental Health Assessment Program
Rick Keppler, Oregon Department of Fish and Wildlife
Michael Karnosh, Confederated Tribes of Grand Ronde
Tom Downey, Confederated Tribes of Siletz
Audie Huber, Confederated Tribes of Umatilla
Brian Cunninghame, Confederated Tribes of Warm Springs
Erin Madden, Nez Perce Tribe
Rose Longoria, Confederated Tribes of Yakama Nation.

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
Federal ARARs			
Clean Water Act, Section 404 and Section 404(b)(1) Guidelines	33 USC 1344 40 CFR Part 230	Regulates discharge of dredged and fill material into navigable waters of the United States.	Action-specific. Applicable to dredging, covering, capping, and designation and construction of in-water disposal sites and in-water filling activities in the Willamette River.
Clean Water Act,	33 USC 1313, 1314 Most recent 304(a) list, as updated up to issuance of the ROD	Under Section 304(a), minimum criteria are developed for water quality programs established by states. Two kinds of water quality criteria are developed: one for protection of human health, and one for protection of aquatic life.	Chemical-specific and Action-specific. Relevant and appropriate for cleanup standards for surface water and contaminated groundwater discharging to surface water if more stringent than promulgated state criteria. Relevant and Appropriate to short-term impacts to surface water from implementation of the remedial action that result in a discharge to navigable water, such as dredging and capping if more stringent than promulgated state criteria.
Clean Water Act, Section 401	33 USC 1341 40 CFR Section 121.2(a)(3), (4) and (5)	Any federally authorized activity which may result in any discharge into navigable waters requires reasonable assurance that the action will comply with applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of the Clean Water Act.	Action-specific. Relevant and Appropriate to implementation of the remedial action that results in a discharge to the river if more stringent than state implementation regulations.
Clean Water Act, Section 402	33 USC 1342	Regulates discharges of pollutants from point sources to waters of the U.S., and requires compliance with the standards, limitations and regulations promulgated per Sections 301, 304, 306, 307, 308 of the CWA.	Relevant and Appropriate to remedial activities that result in a discharge of pollutants from point sources to the river if more stringent than state promulgated point source requirements.

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
Safe Drinking Water Act	42 USC 300f, 40 CFR Part 141, Subpart O, App. A. 40 CFR Part 143	Establishes national drinking water standards to protect human health from contaminants in drinking water	Chemical-specific Relevant and appropriate as a performance standard for groundwater and surface water which are potential drinking water sources.
Resource Conservation and Recovery Act	40 CFR 260, 261	Establishes identification standards and definitions for solid and hazardous waste, including when dredged material is exempt from the definition of a hazardous waste.	Action-specific. Applicable to characterizing wastes generated from the action and designated for off-site or upland disposal; potentially relevant and appropriate for use in identifying acceptance criteria for confined in-water disposal.
RCRA – Solid Waste	40 CFR 257 Subpart A		RCRA Solid Waste requirements may be relevant and appropriate to remedial actions that result in upland or in-water disposal of dredged material. Requirements for the management of solid waste landfills may be relevant and appropriate to upland disposal.
Hazardous Materials Transportation Act	49 USC § et seq. 40 CFR Parts 171-177		Hazardous Materials Transportation Act requirements are applicable to remedial actions that involve the transport of hazardous materials (i.e., dredged material)
Fish and Wildlife Coordination Act Requirements	16 USC 662, 663 50 CFR 6.302(g)	Requires federal agencies to consider effects on fish and wildlife from projects that may alter a body of water and mitigate or compensate for project-related losses, which includes discharges of pollutants to water bodies.	Action-specific. Potentially applicable to determining impacts and appropriate mitigation, if necessary, for effects on fish and wildlife from filling activities or discharges from point sources.

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
Magnuson-Stevens Fishery Conservation and Management Act	50 CFR Part.600.920	Evaluation of impacts to Essential Fish Habitat (EFH) is necessary for activities that may adversely affect EFH.	Location-specific. Potentially applicable if the removal action may adversely affect EFH.
Federal Emergency Management Act	44 CFR 60.3(d)(2) and (3)		FEMA flood rise requirements are considered relevant and appropriate requirements for remedial actions.
River and Harbors Act	33 USC 401 et seq. 33 CFR parts 320 to 323	Section 10 prohibits the unauthorized obstruction or alteration of any navigable water. Structures or work in, above, or under navigable waters are regulated under Section 10.	Action-specific. Applicable requirements for how remedial actions are taken or constructed in the navigation channel.
Clean Air Act	42 USC §7401 et seq.		Action-specific. Applicable to remedial activities that generate air emissions.
Toxic Substances Control Act	15 USC §2601 et seq.		Chemical-specific. TSCA requirements are applicable to contaminated material or surface water with PCB contamination
Marine Mammal Protection Act	16 USC §1361 et seq. 50 CFR 216		Action-specific. Applicable to remedial actions that have the potential to affect marine mammals.
Migratory Bird Treaty Act	16 USC §703 50 CFR §10.12	Makes it unlawful to take any migratory bird. "Take" is defined as pursuing, hunting, shooting, poisoning, wounding, killing, capturing, trapping and collecting.	Action-specific. Applicable to remedial actions that have the potential to effect a taking of migratory birds.

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
National Historic Preservation Act	16 USC 470 et seq. 36 CFR Part 800	Requires the identification of historic properties potentially affected by the agency undertaking, and assessment of the effects on the historic property and seek ways to avoid, minimize or mitigate such effects. Historic property is any district, site, building, structure, or object included in or eligible for the National Register of Historic Places, including artifacts, records, and material remains related to such a property.	Action-specific. Potentially applicable if historic properties are potentially affected by remedial activities.
Archeological and Historic Preservation Act	16 USC 469a-1	Provides for the preservation of historical and archeological data that may be irreparably lost as a result of a federally-approved project and mandates only preservation of the data	Action-specific. Potentially applicable if historical and archeological data may be irreparably lost by implementation of the remedial activities.
Native American Graves Protection and Reparation Act	25 USC 3001-3013 43 CFR 10	Requires Federal agencies and museums which have possession of or control over Native American cultural items (including human remains, associated and unassociated funerary items, sacred objects and objects of cultural patrimony) to compile an inventory of such items. Prescribes when such Federal agencies and museums must return Native American cultural items. "Museums" are defined as any institution or State or local government agency that receives Federal funds and has possession of, or control over, Native American cultural items.	Location-specific; action-specific. If Native American cultural items are present on property belonging to the Oregon Division of State Lands (DSL) that is a part of the removal action area, this requirement is potentially applicable. If Native American cultural items are collected by an entity which is either a federal agency or museum, then the requirements of the law are potentially applicable.

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
Endangered Species Act	16 USC 1531 et seq. 50 CFR 17	Actions authorized, funded, or carried out by federal agencies may not jeopardize the continued existence of endangered or threatened species or adversely modify or destroy their critical habitats. Agencies are to avoid jeopardy or take appropriate mitigation measures to avoid jeopardy.	Action-specific. Applicable to remedial actions, that may adversely impact endangered or threatened species or critical habitat that are present at the site.
Executive Order for Wetlands Protection	Executive Order 11990 (1977) 40 CFR 6.302 (a) 40 CFR Part 6, App. A	Requires measures to avoid adversely impacting wetlands whenever possible, minimize wetland destruction, and preserve the value of wetlands.	Location-specific. Relevant and appropriate in assessing impacts to wetlands, if any, from the response action and for developing appropriate compensatory mitigation for the project.
Executive Order for Floodplain Management	Exec. Order 11988 (1977) 40 CFR Part 6, App. A 40 CFR 6.302 (b)	Requirements for Flood Plain Management Regulations Areas Requires measures to reduce the risk of flood loss, minimize impact of floods, and restore and preserve the natural and beneficial values of floodplains.	Location-specific. Relevant and appropriate for assessing impacts, if any, to the floodplain and flood storage from the response action and developing compensatory mitigation that is beneficial to floodplain values.
National Flood Insurance Act and Flood Disaster Protection Act	42 USC 4001 et seq. 44 CFR National Flood Insurance Program Subpart A		

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
State ARARs			
Oregon Environmental Cleanup Law ORS 465.315.	Oregon Hazardous Substance Remedial Action Rules OAR 340-122-0040(2)(a) and (c), 0115(3),(32) and (51).	Sets standards for degree of cleanup required, including for oil and other petroleum products/wastes. Establishes acceptable risk levels for human health at $1x10^{-6}$ for individual carcinogens, $1x10^{-5}$ for multiple carcinogens, and Hazard Index of 1 for non-carcinogens; and protection of ecological receptors at the individual level for threatened or endangered species and the population level for all others. OAR 340-122-0040 and 0115(3).	Chemical-specific: a risk-based numerical value that, when applied to site-specific conditions, will establish concentrations of hazardous substances that may remain or be managed on-site in a manner avoiding unacceptable risk.
	OAR 340-122-0040(4) and (b), 340-122-0115(32)	For hot spots of contamination in water, requires treatment, if feasible, when treatment would be reasonably likely to restore or protect beneficial uses within a reasonable time.	Chemical-specific and action-specific: when contaminant concentrations fall within the definition of "hot spot" set forth in subpart 0115(32), treatment (including excavation and off-site disposal) of contaminated media to levels below such risk levels or beneficial-use impacts needs to be evaluated in the feasibility study
		For hot spots contamination of sediments, requires treatment or excavation and off-site disposal of hazardous substances if treatment is reasonably likely to restore or protect such beneficial uses within a reasonable time, .	
Hazardous Waste and Hazardous Materials II	ORS 466.005(7) OAR 340-102-0011 - Hazardous Waste Determination	Defines "Hazardous Waste" and the rule contains the criteria by which anyone generating residue must determine if that residue is a hazardous waste	Chemical- and Action-specific: specifies substantive requirements if remedial action will involve on-site treatment, disposal, or storage of RCRA-listed or characteristic hazardous waste. (Note: off-site treatment, storage, or disposal subject to all administrative and substantive state requirements.)

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
	Identification and Listing of Hazardous Waste OAR 340-101-0033	Identifies additional residuals that are subject to regulation as hazardous waste under state law	Action-specific: specifies requirements if remedial action will involve on-site treatment, disposal, or storage of additional listed wastes.
Solid Waste: General Provisions	Specific regulatory references to be provided by ODEQ when alternatives are identified for FS analysis	Substantive Requirements for the location, design, construction, operation, and closure of solid waste management facilities.	Action-specific: applicable if upland disposal facility contemplated on-site for solid, non-hazardous, waste disposal, handling, treatment, or transfer. (Note: off-site transfer, treatment, handling, or disposal subject to all administrative and substantive state requirements.)
	Solid Waste: Land Disposal Sites Other than Municipal Solid Waste Landfills, specific regulatory references to be supplied by ODEQ	Requirements for the management of solid wastes at land disposal sites other than municipal solid waste landfills.	Action-specific: applicable to the on-site management and disposal of contaminated sediment, soil, and/or groundwater.
Water Pollution Control Act ORS 468B.048	Water Quality Standards OAR 340-041-0340, Table 20 and Table 33A	DEQ is authorized to administer and enforce CWA program in Oregon. DEQ rules designate beneficial uses for water bodies and narrative and numeric water quality criteria necessary to protect those uses. OAR 340-041-0340 designates and defines the beneficial uses that shall be protected in the Willamette Basin. For the purposes of state law, Table 20 are the applicable criteria, unless there is a corresponding criterion under Table 33A, in which case Table 33A is applicable. (Note: if Oregon promulgates new criteria prior to ROD, such new criteria will be ARAR).	Chemical- and action-specific: applicable to any discharges to surface water from point sources, groundwater, overland flow of stormwater, and activities that may result in discharges to waters of the state, such as, dredge and fill, de-watering sediments, and other remedial activities. Relevant and appropriate as performance standards for surface water quality and/or for long-term monitoring of protectiveness of caps and disposal sites and where contaminants are left in place

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
Water Pollution Control Act ORS 468B.048	Regulations Pertaining to NPDES Discharges Specific regulatory references to be supplied by ODEQ	Effluent limitations and management practices for point-source discharges into waters of the state (otherwise subject to NPDES permit but for on-site permit exemption).	Chemical- and Action-specific: applies state water quality standards and effluent limitations to point-source discharges to the Willamette River.
	Certification of Compliance with Water Quality Requirements and Standards ORS 468b.035	Provides that federally-approved activities that may result in a discharge to waters of the State requires evaluation whether an activity may proceed and meet water quality standards with conditions, which if met, will ensure that water quality standards are met.	Action-specific: Applicable to implementation of the remedial action (e.g., dredging, capping, and construction of confined disposal facility) that may result in a discharge to waters of the State.
	Rules Governing the Issuance and Enforcement of Removal-Fill Authorizations within Waters of Oregon Including Wetlands OAR 141-085 0680, 141-085-0695, 141-085-0710, 141-085-0765	Substantive requirements for dredge and fill activities in waters of the state, including in designated Essential Indigenous Anadromous Salmonid Habitat.	Action-specific: Applicable to remedial action dredge and fill activities, capping, and riverbank remediation
ODFW Fish Management Plans for the Willamette River	OAR 635, div 500	Provides basis for in-water work windows in the Willamette River.	Action-specific. Potentially applicable to timing of implementation of the remedial action due to presence of protected species at the site.
Oregon Air Pollution Control ORS 468A et. seq.	General Emissions Standards OAR 340-226	DEQ is authorized to administer and enforce Clean Air program in Oregon. Rules provide general emission standards for fugitive emissions of air contaminants and require highest and best practicable treatment or control of such emissions.	Action-specific: applicable to remedial actions taking place in on-site uplands. Could apply to earth-moving equipment, dust from vehicle traffic, and mobile-source exhaust, among other things.

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
Oregon Air Pollution Control ORS 468A et. seq.	Fugitive Emission Requirements OAR 340-208	Prohibits any handling, transporting, or storage of materials, or use of a road, or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. These rules for "special control areas" or other areas where fugitive emissions may cause nuisance and control measures are practicable.	Action-specific: applicable to remedial actions taking place in on-site uplands. Could apply to earth-moving equipment, dust from vehicle traffic, and mobile-source exhaust, among other things.
Indian Graves and Protected Objects ORS 97.740-760		Prohibits willful removal of cairn, burial, human remains, funerary object, sacred object or object of cultural patrimony. Provides for reinterment of human remains or funerary objects under the supervision of the appropriate Indian tribe. Proposed excavation by a professional archeologist of a native Indian cairn or burial requires written notification to the State Historic Preservation Officer and prior written consent of the appropriate Indian tribe.	
		Prohibits persons from excavating, injuring, destroying or damaging archeological sites or objects on public or private lands unless authorized	
Archeological Objects and Sites ORS 358.905-955 ORS 390.235		Imposes conditions for excavation or removal of archeological or historical materials.	Location-specific; action-specific. Potentially relevant and appropriate if archeological material encountered.
	Survival Guidelines OAR 635-100-0135	Survival Guidelines are rules for state agency actions affecting species listed under Oregon's Threatened or Endangered Wildlife Species law.	Action-and location specific: Substantive requirements of Survival Guidelines relevant and appropriate to remedial activities affecting state-listed species.

Table 1 - ARARs for Remedial Action at the Portland Harbor Superfund Site.

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness
Guidance for Assessing Bioaccumulative Chemicals of Concern in Sediment DEQ, 2007		Describes a process to evaluate chemicals found in sediment for their potential contribution to risk as a result of bioaccumulation. Provides alternative methods for developing sediment screening levels and bioaccumulation bioassay data.	To be Considered: in level of cleanup or standard of control that is protective.

WWC Submittal

Appendix 6 – Windward Reports on Permitting and Process

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Windward environmental LLC

200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206.217.0089 • www.windwardenv.com

MEMORANDUM

To:	David Harvey, Gunderson LLC
From:	Ron Gouguet, Windward Environmental
Subject:	Lamprey, sturgeon, and salmon habitat requirements
Date:	March 16, 2010

Summary

Windward LLC has evaluated the desirable habitat attributes in the Willamete North Reach for salmonids and has compared them to those beneficial for lamprey and sturgeon. The conclusion stands that salmon are an appropriate keystone species that act as a surrogate for the lamprey and sturgeon, and other species as well. If the habitat in the North Reach is protective of salmonids, it will also be protective for lamprey and sturgeon when life history stages are considered. Planning on a landscape level to restore or enhance diverse types of habitat is critical for the health of all species that utilize the Lower Willamette River.

Discussion

Gunderson LLC requested a comparative summary of habitat requirements related to targeted fish species known to occur in the North Reach-Lower Willamette River - lamprey, sturgeon, and salmonids. These species comprise the cornerstones of the fish community in the Willamette River ecosystem and support important commercial, cultural and recreational fisheries. Lamprey are culturally revered by the native people of the Lower Willamette River and have co-evolved with salmon and other native fish. As such the habitats of these fish are highly managed by multiple federal and state agencies.

Windward sought to determine if existing federal and state salmon and sturgeon habitat impacts management (permitting and mitigation) of the area below ordinary high water would adequately protect the uses of the area by Pacific lamprey ammocoetes or macropthalmia. Particularly, we looked for unique habitat requirements for lamprey as alleged by City of Portland during public testimony on

February 17, 2010, e.g., 18 inches of sand, that mandate its addition to the extensive habitat protection and management schemes already in place of below ordinary high water habitat in the North Reach.

In the North Reach, these species exist only in appropriate microhabitats in the current landscape mosaic. There appears to be a nearly 100% overlap in habitat requirements of these species when those life history stages that occur in the North Reach are considered. No spawning habitats for any of these three species would be expected to occur in the North Reach. Ecological services provided by the North Reach habitats for sturgeon include feeding, rearing and migratory transit to potential upstream breeding habitats closer to Willamette Falls. For salmonids, adults transit the area during upstream migrations and juveniles rear for weeks to months as they move downstream.

Common habitat requirements at various life stages among lamprey, salmonids, and sturgeon

- Off-channel habitat
- Silty to sandy substrate
- Stream flow
- Prey base (often invertebrates)
- Water temperature

Habitat requirements for salmonids (i.e., Chinook, coho, sockeye and bull trout), white sturgeon and lamprey overlap when their complex lifecycles are considered. Using salmonids habitat requirements for restoration planning can act as a reasonable surrogate for other fish habitat requirements and provide corollary ecological benefits for lamprey and sturgeon.

Pacific lamprey life history

Pacific lamprey is the most common jawless fish in the northwest. It is an anadromous fish that begins its life in freshwater streams, matures in fine-grained substrates and quiet freshwater habitat before migrating to marine environments to mature. It spawns in shallow, headwater streams. Similar to salmonids, lamprey prefer spawning habitat in relatively high velocity runs or riffle habitats in small streams where they construct nests in coarse gravel and deposit eggs that adhere to the substrate. Lamprey larvae, or ammocoetes hatch in approximately 10 days (Pacific lamprey) (Lê et al. 2004). After embryos hatch, they drift downstream to quiescent areas with fine substrate to grow and live for three to seven years feeding on diatoms and algae (Streif and USFWS, 2008). Little is known about ammocoete movement, except as they mature, they move downstream. Change from ammocoete phase to macropthalmia life phase initiates in the summer and finishes in the winter (Streif and USFWS, 2008). The macropthalmia migrate to the ocean between late fall and spring where they mature into adults (Streif and USFWS, 2008).

At the end of a one to three year period in marine environments, adult Pacific lamprey return to freshwater and migrate upstream, usually April through June, completing

migration by September. Pacific lamprey then overwinter in fresh water and spawn in spring of the following year (Bayer et al. 2001; Beamish 1980; Close et al. 2002). Adults die following spawning.

Several studies have revealed that seasonality, time of day, temperature, and water flow may influence the movement of ammocoetes and macropthalmia. The downstream movement of ammocoetes appears to be passive (Luzier et al. 2006), occurring primarily at night and may be associated with changes in water temperature[1] (Potter 1980; Kostow 2002; Claire 2004); and high flows (Luzier et al. 2006). Older ammocoetes tend to accumulate in higher order streams and flood plains (Kostow 2002). After 4 to 6 years in the sediment as ammocoetes, Pacific lamprey metamorphose from ammocoetes (larval stage) to macropthalmia (juvenile life stage) (Stone et al. 2001). Macropthalmia migrate downstream continuing to develop into adults (Stone et al. 2001). In Oregon, peak migrations occur in May and June. During their spawning migration, Pacific lamprey do not actively feed, instead they use stored carbohydrates, lipids, and proteins for energy (Read 1968). From the time of freshwater entry until spawning, the adults body size shrinks approximately 20% (Beamish 1980).

AMMOCOETE HABITAT REQUIREMENTS

Pacific lamprey ammocoete habitat data are available primarily from streams; i.e., smaller than the Willamette River. Based on studies in the Middle Fork John Day River in Oregon, Cedar Creek in Washington, Deschutes River in Oregon, and the Red River (Clearwater River basin) in Idaho, lamprey ammocoetes in 5th order streams or smaller appear to prefer depositional areas with water depth just under a meter, low current velocities (0-10 cm/sec) and fine-grained sediments that permit burrowing by the ammocoetes (Torgersen and Close 2004; Stone and Barndt 2005; Claire 2004; Graham and Brun 2005). The temperature range for optimal survival from fertilization to early larval stages (i.e., burrowing stage) for Pacific and western brook lampreys was reported to be approximately 10 to 18° C (Meeuwig et al. 2005). Stone and Barndt (2005) reported that conductivity was weakly positively correlated with lamprey ammocoete abundance in Cedar Creek, Washington and ammocoete movement occurred during peak flows. Ammocoetes were observed to accumulate downstream at the lower ends of spawning tributaries or mainstem areas (Luzier et al. 2006).

Sea lamprey habitat requirements are well studied because they are an exotic pest species in the Great Lakes. Sea lamprey ammocoetes in the Great Lakes are known to use deep quiescent habitats with sandy and silty sediments, relatively high organic matter, and low slope of the lake bottom (Fodale et al. 2003). Ammocoete abundance in Batchwana Bay, Lake Superior was 2 to 5 ammocoetes per square meter, which is

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[1] Peak migrations of landlocked sea lamprey were observed in the Big Garlic River (Lake Superior Basin) as temperatures rose from 0 to 9 °C starting in early April and ending in mid-May, with numbers declining dramatically as the temperature rose above 10 °C (Potter 1980).

similar to the abundances reported for Cedar Creek and the Middle Fork John Day River; 1.3 and 4.5 ammocoetes per square meter, respectively.

Habitat within the North Reach portion of the LWR includes areas of low current velocity, fine-grained sediments and low bottom slope. Determining the optimal ranges of temperature, dissolved oxygen, and conductivity for ammocoetes is difficult because they likely vary for each stream or river, however, the ranges of dissolved oxygen and temperature associated with lamprey ammocoete presence in other are within the ranges measured in the Lower Willamette River (USGS 2006).

Windward conducted sampling in this area in 2006 as part of the ecological risk assessment for the LWR NPL site and in Oregon coastal rivers. This field effort found few Pacific lamprey larvae in in the North Reach, particularly in the section from River Mile (RM) 3 to RM 10 (Figure 1). The highest catch in the lower river was in the lower shoal areas below the Multnomah Channel and in shelter areas around Ross Island. Generally, catch was better in areas with fine sands and silt, particularly where there were gentle currents. They also found that while most of the study area had suitable substrate, as they were limited to deepwater electrofishing, it was difficult to tell if the near bottom flow conditions were appropriate. During ammocoete collection from Oregon coastal rivers for toxicity testing the greatest success was found in shallower wadable waters and in fine sand/silt backwater water areas with riffles (Do, pers. comm. 2010). It is likely that ammocoetes move thru the North Reach episodically during higher flow periods and do not rebury until appropriate microhabitat patches are located. Constriction of flow (jetty effects) and limited shoreline structure likely limit locations where current velocity and deposition would be appropriate.

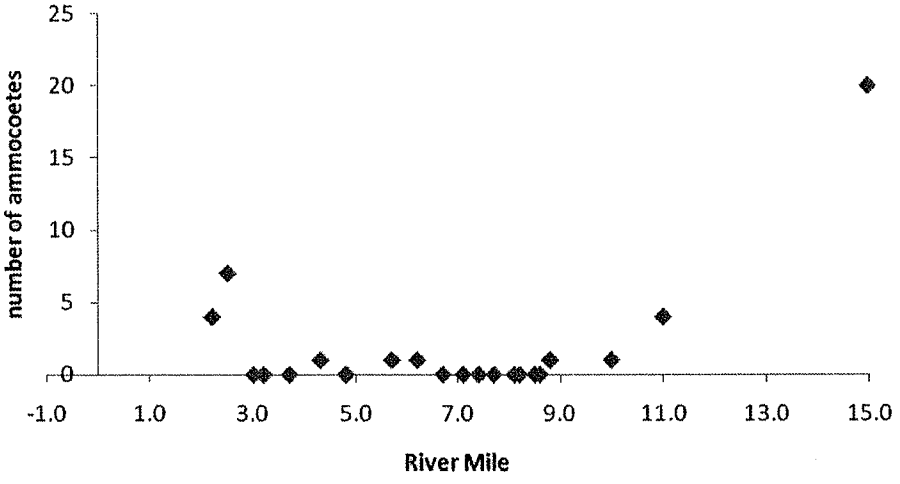

Figure 1. Pacific Lamprey ammocoete catch results, LWR 2006.

WHITE STURGEON

The white sturgeon is a slow-growing anadromous fish that is predominantly a bottom-dweller with a preference for deeper, faster water. The National Biological Survey (NBS) described white sturgeon spawning and rearing habitat based on five years of habitat observations in the lower Columbia River (Parsley and Beckman 1994; Parsley et al. 1993). Four major habitat requirement ranges were identified: water temperature, water depth, substrate grain size, and water velocity; however, temperature is only discriminatory with respect to spawning. Gravel and boulder substrates and high velocities (>1.8 m/s) are required for spawning habitat. These conditions do not occur in the LWR, indicating that sturgeons are unlikely to spawn there.

According to NBS, the primary driver of habitat suitability in the LWR is depth. Sturgeons were found over a wide range of substrate grain size and water velocity but were never found in areas less than 3-m deep (Parsley et al. 1993). Streams, rivers and estuarine and marine habitat are all used during white sturgeon's lifecycle. While adult sturgeon prefer deeper and faster waters, juveniles utilize slower moving side channels and sloughs (http://www.env.gov.bc.ca/wld/fishhabitats/sturgeon/index.html). Spawning preference is in rivers with swift currents and large cobble where fertilized eggs attach to bottom substrate in order to mature (http://www.psmfc.org/habitat/edu_wsturg_fact.html). These conditions do not occur in the North Reach. Parsley (2006, pers comm.) indicated that young white sturgeon move into shallows in the evening, possibly for feeding.

SALMONIDS

Salmonids have a complex lifecycle that utilizes distinct and diverse habitat types. Their lifecycle includes spawning and maturation in freshwater streams as embryos and juveniles, after the freshwater phase, they emerge as salmon fry and then as smolts. In this phase, they migrate to estuarine waters to acclimate to saltwater. After a period of acclimatization in estuarine waters, the fish move into the ocean for the next phase of their life. The Willamette River serves as a migratory corridor for both adult and juvenile life stages of salmon. Essential fish habitat requirements, per NMFS, include substrate, water quality, water quantity, water temperature, water velocity, shelter, food (juvenile only), riparian vegetation, space and safe passage. In a recent study (Friesen 2005), the majority of juvenile salmonids captured in the Lower Willamette River were Chinook salmon, with smaller numbers of coho salmon and steelhead captured. In this study, generally higher rates of catch were associated with sand substrates, shallow water, and bank vegetation. Based on this work, off-channel habitat is used by migrating yearling salmonids, likely for forage and refuge. Friesen et al. (2003) observed that juvenile chinook salmon preferentially forage in the nearshore areas of the LWR for feeding during their outmigration. Therefore, study recommendations included protection of existing off-channel habitat, restoration of beach function, minimize rocky habitat (both natural and riprap). A focused

workgroup convened by the PHNRT (PHNRT, 2009) stated that off-channel areas and intertidal areas (shoals and beaches) with gravel and finer substrates were the most valuable habitat components for Chinook salmon in the lower river.

CONCLUSION

Lamprey, salmonids, and white sturgeon utilize off-channel habitat and shoal water areas with low current velocities at some stage of their lifecycle. Salmonids and sturgeon appear to prefer sandier habitat. Lamprey prefer more quiescent areas would were finer sediment and organic materials tend to accumulate. All species would benefit from enhancement of existing off-channel and shoal habitats, improvement of the riparian edge, and planning restoration to include spectrum of habitat and hydrologic regimes (i.e., deeper, fast-flowing water to shallow slow moving shoals and backwaters) to accommodate habitat needs of these fish their different life phases.

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WINDWARD COMPANY PROFILE

Windward Environmental LLC is a Seattle-based consulting firm that specializes in environmental science and engineering and serves clients in the regulated community. We develop and apply innovative tools and techniques to solve problems and meet our clients' needs for field studies, laboratory analyses, data interpretation, and support in negotiation and litigation with regulatory agencies.

Windward has a staff of 40 professionals, including senior personnel who are highly respected in their fields of expertise, both regionally and nationally. Windward's six partners have an average of 21 years' experience. Areas of expertise include ecological risk assessment, human health risk assessment, natural resource damage assessment, fisheries, permitting support and compliance, habitat assessment and restoration design, contaminated sediment assessment and remediation, guideline and protocol development, biochemistry, sediment geochemistry, chemical fate and transport, biological assessment, wildlife ecology, risk modeling, and chemical fingerprinting.

Windward was founded on the premise that environmental consultants can best serve clients' interests by providing high-quality, defensible data for use in decision-making. Because our technical approach is based on sound scientific principles, we can identify and investigate environmental problems transparently and without bias. As a consequence, our work is given serious consideration by all parties – even in contested situations. In addition, Windward has a reputation for providing clients with superior service – regardless of the size or complexity of the project.

Ron Gouguet, Associate
Mr. Gouguet is an ecological risk assessor and restoration expert with over 15 years' experience in natural resource damage assessment (NRDA). Prior to joining Windward, he served as a coastal resource coordinator (CRC) for the National Oceanic and Atmospheric Administration (NOAA), where he worked to protect NOAA trust resources at a variety of hazardous waste sites. As a multi - disciplinary expert, Mr. Gouguet has led integrated remediation and restoration planning efforts within the US Environmental Protection Agency's (EPA's) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (i.e., Superfund) program and for Resource Conservation and Recovery Act (RCRA) and state - lead sites in Texas, Louisiana, Delaware, and Oregon. During his career, he has been involved in cleanup and restoration efforts at approximately 85 hazardous waste sites and responded to over 10 chemical or oil spills. Mr. Gouguet's specialty is consensus building and the integration of response and restoration processes; and he is a proponent of collaborative CERCLA actions that flexibly integrate remedial investigation (RI), risk assessment (RA), NRDA, restoration planning, and project construction among NOAA's response agency, co - trustees, the public, and individual potentially responsible parties (PRPs).

Windward environmental LLC

200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206.217.0089 • www.windwardenv.com

MEMORANDUM

To: David Harvey, Gunderson LLC

From: Kathleen Hurley, Jenny Buening, Mike Johns, Windward Environmental

Subject: Current Permitting Framework below Ordinary High Water Provides Comprehensive Ecosystem Protection

Date: November 12, 2009

Executive Summary

- Currently, approximately nine state and federal agencies review projects below the ordinary high water mark.
- The existing permit process is robust, extensive, and iterative.
- While agencies often use "keystone" species, usually endangered or threatened species, as targets for their review, they also provide technical advice throughout the process on project design to benefit all species and habitat.
- Salmonids are an example of a relevant keystone species in the Lower Willamette River (LWR) because of their critical importance in the food web and special status.
- Projects below the Ordinary High Water mark do not require another layer of review to enhance natural resources in the LWR.
- A key to enhancing natural resources in the LWR is to pool resources in projects that are viable in the long-term and provide a meaningful and durable habitat enhancement.

Background

This memo summarizes the existing permitting structure for work in wetlands or below the OHW in Oregon. Permitting for work in wetlands and below the Ordinary High Water (OHW) mark in Oregon is a complex and thorough process involving several regulatory agencies. Approximately nine federal and state agencies have jurisdiction in the aquatic permitting process and provide significant oversight related to the protection of ecosystems, species, and habitat. These agencies are specifically

responsible for protection of natural resources and for evaluating the potential impact of a proposed action on endangered species and their essential habitat. Furthermore, these agencies provide technical advice on how to design and implement projects so they are most beneficial to all species using the wetland, aquatic, and riparian environments. It is unlikely that another layer of permitting review will provide substantial benefit to natural resource protection than the current framework. The existing permitting structure is comprehensive and provides more than adequate consideration and protection of habitat and special status species as well as non-endangered species.

In the evaluation, we discuss the efficacy of using keystone species to manage habitat resources. Keystone species are ones that play a critical role in ecosystems, such that if an ecosystem can be restored for the species, it will have a beneficial impact on the other species that depend upon it. In the case of the Lower Willamette River, salmon would be an example of a keystone species. Finally, permitting work in wetlands or below OHW is a thorough, yet lengthy, process in which consideration for most species and/or habitat is included. The diverse responsibilities of the agencies assure a multidisciplinary review for potential impacts to natural resources. In summary, the existing permitting structure is comprehensive and provides more than adequate consideration and protection of habitat and special status species as well as non-endangered species.

Existing permitting framework

This document provides a generalized overview of the agencies that would likely be involved in permitting a project below the ordinary high water mark or in wetlands in the State of Oregon. The framework specifically focuses on permitting of restoration actions in wetlands and below ordinary high water. There are several agencies involved in permitting work in wetlands and/or waterways both on the federal and state levels. These agencies are responsible with protection of natural resources related to water quality, habitat, historic and cultural resources, and endangered species. A summary of information on the various agencies, permits, and general permit conditions that would be expected to be involved with a typical habitat restoration project proposed in a location below the ordinary high water mark or in wetland areas is provided in a summary table at the end of this document.

Approximately nine agencies with broad jurisdictional authority would be involved in permitting a project in wetlands or below the OHW. On the federal level, the U.S. Army Corps of Engineers (Corps), National Marine Fisheries Service (NMFS) which is part of the National Oceanographic and Atmospheric Administration, the U.S. Fish and Wildlife Service (USFWS), and, in some cases, the Environmental Protection Agency (EPA) review and approve proposed projects. Their role in the permitting process is summarized below and in further detail in a comprehensive table (Table 1).

- **Corps:** The Corps' main role is in evaluation of impacts to wetlands and waterways below OHW, determine compliance with Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act, and to direct appropriate mitigation for impacts to natural resources.
- **NMFS:** This agency's mission is the stewardship of living marine and estuarine resources through conservation, management, and promoting the health of the target species' environment. These target species are typically threatened or endangered species and their essential habitat. NMFS will provide technical direction on projects to enhance habitat and improve the health of the target species' environment.
- **USFWS:** This agency will evaluate the potential impacts of a project within the context of their mission to conserve, protect, and enhance fish, wildlife and their habitats.
- **EPA:** In cases where a project occurs on Tribal land or lands with exclusive federal jurisdiction, the EPA evaluates compliance with the Clean Water Act.

In addition to the above federal agencies, several state agencies require permits and/or concurrence in order for a wetland or project below OHW to be approved. These five agencies are responsible for regulating, protecting, enhancing, and evaluating activities in Oregon's wetlands and waterways.

- **Department of State Lands:** Jurisdiction of this agency is in wetlands, waterways to bank full stage, mean high water, or high tide line, or to the line of non-aquatic vegetation, whichever is higher. For biological resources, DSL is responsible for regulating activities in areas designated as "essential anadromous salmon habitat." DSL and the Corps work in conjunction to regulate activities in wetlands and waterways.
- **Oregon Department of Fish and Wildlife (ODFW):** ODFW provides input on any direct physical alteration of stream habitat. Their wildlife habitat project objectives are "to protect, maintain, and enhance wildlife habitat to meet Oregon's Wildlife Policy." During project evaluation, ODFW provides technical advice on how to create projects that generate the greatest benefit to fish and other wildlife associated with aquatic and riparian environments.
- **Oregon Department of Environmental Quality (ODEQ):** ODEQ is responsible for enforcement of water quality standards and the protection, restoration, and enhancement of Oregon's public water resources for a range of uses.
- **Oregon Parks and Recreation Department (OPRD):** OPRD provides compliance with the National Historic Preservation Act in conjunction with the Corps. They are responsible for consultation with the State Historic Preservation Office regarding project impacts to cultural and/or historic resources.

- **Water Resources Division**: If the project requires a temporary or permanent diversion of water for use, then the Water Resources Division must provide approval.

As part of fulfilling their natural resource stewardship responsibilities, federal agencies often use impacts to threatened or endangered species as a way to evaluate the potential positive and negative impacts of a project to habitat resources (when a threatened or endangered species is present in the system). In this way, the threatened or endangered species is used as a surrogate for indicating the quality of a given habitat area for other species. This model of assessment and natural resource planning assumes that restoration of habitat for the threatened or endangered species will have a corollary affect of improving habitat for other wildlife species that would be expected to be present in and use similar habitat types. Furthermore, a surrogate species, such as an endangered species of salmon, is used to provide a clear target for habitat restoration planning and monitoring without resulting in adverse effects to other wildlife species.

The approach of using a representative species to manage habitat resources is broadly used and is based on a number of methods (use of an umbrella species, use of a flagship species, use of an indicator species, or use of a keystone species). In all of these methods, one wildlife species, such as a beaver, a sea star, a fish, or another species, is critically important to the habitat in which they live. In the Pacific Northwest, this approach is often based on the Keystone Principle developed by Robert Paine, a University of Washington researcher, which proposed when an ecosystem that loses its "keystone" species the ecosystem will no longer be able to function optimally because so many other species rely on the presence of the keystone for their own life cycles. In the Lower Willamette and in the Pacific Northwest in general, salmonids are often selected as the keystone species because their importance in the food web; in 2001, a Washington Department of Wildlife study identified 138 species that depend on salmon at some life stage, nine of those 138 depend on salmonids for survival (Cederholm et al 2000). The local abundance and distribution of salmonids in the Pacific Northwest drives community dynamics of ecosystems (Cederholm et al 2000).

The federal and state permitting process is structured to provide a robust and extensive review to determine if a proposed project will accomplish its stated goal. The diverse responsibilities of the agencies assure a multidisciplinary review for potential impacts to natural resources. Throughout the multidisciplinary and iterative process, agencies will improve and enhance project design, planting plans, finish elevations, and other project elements in order to create valuable and viable habitat that will be beneficial to the ecosystem as a whole. In the case of compensatory mitigation, which will likely occur on the LWR, these agencies are responsible for "making the public whole" again for damage or injury to natural resources and thus the goal is to restore the injured habitat. These projects are approved through a rigorous process that requires approval

from the agencies mentioned above as well as the Trustee Council and the Department of Justice.

As part of the extensive technical review in the existing permitting framework, habitat restoration projects in wetlands or below OHW are subject to achievement of long-term benchmarks and monitoring and maintenance. In general, habitat restoration projects are designed to provide a diversity of vegetation and habitat structure, and functioning ecosystem processes (as much as they can be achieved at small project sites in highly developed areas) in addition to the creation of habitat elements for one or two specific species. Evidence of success or failure of the vegetation, habitat, and ecosystem processes is documented through measurements of a diverse body of physical and ecological metrics over time, in many cases up to 10 years. These metrics can focus on habitat development for both the targeted and non-targeted species.

The impacts to species and their essential habitat is evaluated in detail through the federal and state permitting process while habitat metrics and other species are evaluated in monitoring programs, therefore, value added by another layer of review from the City of Portland relative to habitat restoration will not be substantial related to protection of natural resources. If the City of Portland does not believe the existing permitting and review framework is sufficient for evaluation of impacts to habitat and species, any new review required by the City should serve to streamline the process, rather than encumber it, by leveraging the extensive review already performed by other agencies. Finally, it is unclear how the city can assert jurisdiction and/or decision-making over waters already managed at the state and federal levels.

Table 1. Permitting jurisdiction of federal and state agencies for restoration projects below the ordinary high water mark or in wetland areas [a]

Agency	Permit	Jurisdiction	Agency Role/Permit Function
Federal Agencies			
US Army Corps of Engineers	Applicable Nationwide Permit	impacts to wetlands and waterways in Oregon below the Ordinary High Water mark, National Environmental Protection Act (NEPA)	To determine impacts of projects within Corps jurisdiction under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act and to direct appropriate mitigation for those impacts. The Corps can and does act as the federal nexus for restoration projects on the Lower Willamette River.
National Marine Fisheries Service (NMFS)- NOAA	Section 7- Endangered Species Act Consultation	any activity with a federal connection, i.e., permitted, funded, or authorized by a federal agency in whole or in part; ESA consultation for marine and estuarine species	Mission is stewardship of living marine and estuarine resources through conservation, management, and promoting the health of the targeted species' environment. Determination of impacts of project action on listed species or their habitat occurs through an informal consultation and submittal of a biological assessment. It is elevated to a formal consultation if the determination shows a likelihood of an adverse impact.
US Fish and Wildlife Service	Section 7- Endangered Species Act Consultation	implementation of ESA for plants, animals, and migratory birds	Mission is to work with others to conserve, protect, and enhance fish and wildlife and their habitats. Provide information on presence of listed species within a project area and support to avoid take or adverse effects.
Environmental Protection Agency	Water Quality Certification	only required if the project occurs on Tribal lands and/or lands with exclusive federal jurisdiction within the state of Oregon	Ensure compliance with the Clean Water Act.
State Agencies			
Oregon Department of State Lands	Removal-Fill; Proprietary Authorization	projects proposed in wetlands, waterways to the bankfull stage, mean high water or high tide line, or to the line of non-aquatic vegetation, whichever is higher; responsible for activities in areas designated as "essential indigenous anadromous salmon habitat"	Works in conjunction with the Corps in regulating fill and removal activities in wetlands and waterways. Piling placement and removal are also subject to approval by DSL.
Oregon Department of Fish and Wildlife	Determination of in-water work window; habitat mitigation recommendations; Scientific Take Permit	any direct physical alteration of stream habitat	Provide technical advice on how to design and implement projects so that they are the most beneficial to fish and other wildlife associated with aquatic and riparian environments.

Agency	Permit	Jurisdiction	Agency Role/Permit Function
Oregon Department of Environmental Quality	Water Quality Certification; Stormwater Permit	enforcement of water quality standards and protection of beneficial uses	Responsible agency for protection, restoration, and enhancement of Oregon's public water resources for a wide range of uses. In conjunction with Corps, evaluates potential impacts of projects on state waters. Impacts may be temporary, continuing, or cumulative. Stormwater permits are required for construction-related activities involving one acre or more of ground disturbance and the potential for discharge to surface waters.
Oregon Parks and Recreation Department	Section 106 - National Historic Preservation Act consultation	consultation with the State Historic Preservation Office regarding potential impacts to cultural and/or historic resources	Provides compliance with the National Historic Preservation Act in conjunction with the Corps.
Water Resources Division	Water Use Permit	manages diversion and use of state waters	Permits temporary diversion of water for project use.

[a] This table is intended to be a general representation of the permitting process and not representative of every possible permitting scenario or project.

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WINDWARD COMPANY PROFILE

Windward Environmental LLC is a Seattle-based consulting firm that specializes in environmental science and engineering and serves clients in the regulated community. We develop and apply innovative tools and techniques to solve problems and meet our clients' needs for field studies, laboratory analyses, data interpretation, and support in negotiation and litigation with regulatory agencies.

Windward has a staff of 40 professionals, including senior personnel who are highly respected in their fields of expertise, both regionally and nationally. Windward's six partners have an average of 21 years' experience. Areas of expertise include ecological risk assessment, human health risk assessment, natural resource damage assessment, fisheries, permitting support and compliance, habitat assessment and restoration design, contaminated sediment assessment and remediation, guideline and protocol development, biochemistry, sediment geochemistry, chemical fate and transport, biological assessment, wildlife ecology, risk modeling, and chemical fingerprinting.

Windward was founded on the premise that environmental consultants can best serve clients' interests by providing high-quality, defensible data for use in decision-making. Because our technical approach is based on sound scientific principles, we can identify and investigate environmental problems transparently and without bias. As a consequence, our work is given serious consideration by all parties – even in contested situations. In addition, Windward has a reputation for providing clients with superior service – regardless of the size or complexity of the project.

Wind Ward environmental LLC

200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206.217.0089 • www.windwardenv.com

MEMORANDUM

To:	David Harvey, Gunderson LLC
From:	Mike Johns, Jenny Buening, Ron Gouguet, Kathleen Hurley
Subject:	Evaluation of the City of Portland's mitigation banking proposal
Date:	October 12, 2009

The City of Portland (City) recently proposed amendments to two City codes in order to promote the "protection, conservation, restoration, enhancement, and maintenance of the economic, natural, scenic, and recreational qualities of lands along the north reach of the Willamette River." The north reach extends from the Broadway Bridge to the confluence of the Columbia River. The amendments were proposed in order for the City to comply with state law as well as Metro's Urban Growth Management Functional Plan for the north reach of the Lower Willamette River (LWR). Windward was asked to evaluate portions of the proposed code change related to the establishment of a City-led mitigation bank.

The proposed mitigation bank, called the Portland River Restoration Program-North Reach Mitigation Bank, would be intended to accommodate mitigation required by the City of Portland for impacts related to development activities in the north reach. In addition, the bank could be used by parties requiring mitigation through other programs, such as Natural Resource Damage Assessment (NRDA), state and federal requirements related to impacts to the waters of the United States, and other City regulations.

This following evaluation of the amended code is limited to the portions related to in-lieu fees (ILFs) and mitigation banking requirements. Certain portions of the amended code will require parties performing mitigation off-site to purchase credits from the City River Restoration Program's mitigation bank. The mitigation bank would be funded in part by payment of in-lieu fees and other development fees required by the City's amended code. The mitigation bank is under development and the feasibility of such a bank, as proposed, is uncertain. A draft prospectus for the establishment of the mitigation bank has been prepared by the City; an evaluation of the prospectus is also included here.

This memorandum also provides a series of attachments in order to give an overview of the federal (Attachment A) and state (Attachment B) regulations and standards related to mitigation banking, a summary of some of natural resource credit calculators that are currently being applied (Attachment C), and a listing of certified and in-process mitigation banks located in Oregon and Washington (Attachment D).

In order to clarify the requirements of the amended code and increase the feasibility of implementing a mitigation program under the code, we have made several recommendations related to various aspects of the proposed mitigation banking program. These recommendations are outlined in the subsections below. Several of the recommendations request additional information; this could be achieved by adding more detail to the code amendment language or to the draft prospectus, or by composing associated planning documents that the code could make reference to.

Evaluating Mitigation Requirements and Calculating Credit Ratios

According to Section 33.865.040 A of the code, "a mitigation site plan is required whenever the proposed development will result in unavoidable significant detrimental impact on the identified resources and functional values." The basis for the identification of impacts to the "identified resources and functional values" is not clear. It should not be assumed that all development projects will impact habitat; some projects may consist of redeveloping an already-developed site that has little to no habitat value.

The code should comprehensively identify the specific ecological resources and functional values it is designed to protect and/or enhance so that impacts to these resources can be discerned by project applicants. For example, the resources might include vegetation or landscape cover by area, jurisdictional wetlands and other waters of the state, natural resources lost due to historical activities (NRD mitigation), impacts to threatened or endangered species' habitat, and or other ecological impacts to resources protected under local, state, or federal law. Without first clearly establishing which resources will require mitigation, the impact to ecological resources cannot be quantified in such a way that a reciprocal mitigation requirement can be calculated.

If the Natural Resources Inventory Update (City of Portland 2008) was the basis for identifying resources and functional values in the north reach, it would be beneficial for both applicants and the City to use supplemental materials for documenting baseline conditions as the inventory is a "snapshot in time" and, while thorough on a macro scale, does not consistently provide an accurate accounting of existing natural resources within the north reach on a micro scale. For example, there are areas covered by invasive plant species in the North Reach that are assigned a medium or high vegetation value in the inventory. Invasive species do not provide the same level of ecological services as riparian corridor composed of native plant species. Furthermore, site ecological conditions are subject to change over time due to expansion of invasive species or other activities. Therefore, we suggest that it is permissible and encouraged

that applicants provide supplemental material documenting baseline habitat within the proposed impact area.

In addition to identifying the specific resources that will be the focus of the mitigation plan, the amended code should provide a method or methods by which "unavoidable significant detrimental impacts" will be evaluated or quantified at the impact site. This could be achieved using an ecosystem credit calculator. The purpose of ecosystem credit calculators is to provide readily comparable measures of the habitat quality and /or function combined with the habitat quantity (acres). Additionally, the temporal component for the wetland impacts and/or restoration and mitigation needs to be considered and accounted for in the calculation, e.g., what is the 'ecological maturation' or recovery rate for the parcel in question. The Habitat Equivalency Analysis (HEA) is one type of calculator that combines ecological function, area and a time trajectory. Additional explanation of credit calculators is included in Appendix C.

The methods for identifying natural resource impacts should allow for calculation of all of the ecological resources and functional values, that are specifically identified by the City in their code, when several may be present together at one site (for example, an existing wetland with significant native vegetation cover that provides bird and amphibian habitat). Several resource calculators have been developed for different natural resources (Attachment C).

The purpose of ecosystem credit calculators is to provide readily comparable measures of the habitat quality/function in addition to the habitat quantity (acres). Additionally, the temporal component for the wetland impacts and/or restoration/mitigation needs to be considered and accounted for in the calculation, e.g., what is the 'ecological maturation' or recovery rate for the parcel in question.

There are a number of methods evolving in the new Ecosystem Services Marketplace to characterize the quality of ecological functions of habitats. These methods examine selected site attributes, either through field measurements, remote sensing/GIS, or proxy measures, as metrics for habitat function. The methodologies then take those attributes into account to create a score for one or more ecosystem services.

There are two basic approaches to scoring ecosystem service benefits. One is area-based where the total area of impact or conservation is adjusted by its ecosystem quality relative to a reference or benchmark area (e.g. wetland or habitat banking). The second quantifies the absolute increase or decrease of a specific ecosystem service (e.g. carbon or water quality) compared to baseline and post-action measurements. Both of these approaches might look at the site independently or adjust measurements based on the context of the surrounding landscape

The calculator used for determining mitigation requirements will depend on the ecological resources and values being targeted; however, the same calculation methods should be used for determining the impact of a project that requires mitigation and for determining the number of bank credits required to offset that impact. Consistent

calculation methods should be developed for use at all project sites that might use the City's mitigation bank and for calculating the credit ratios for the bank site itself.

In general, the steps involved in the ecological services accounting process include the following.

- Evaluate current habitat quality at the parcel in question.
- Evaluate future (proposed) habitat quality at the parcel in question.
- Compare these conditions to determine 'net condition change' between the two, e.g., computing the difference in the pre- vs. post- scores.
    - actions that result in lower habitat quality give negative or debit results – a service reduction
    - those that improve habitat provide positive scores or creditable changes – a service increase
- Measure the area over which the habitat quality change occurs.
- Account for the expected or measures temporal changes in quality and value of the habitat.
- Develop a weighted habitat quality and quantity measure.
- Employ aggregation procedures to summarize all credits and debits.

When using HEA as the aggregation procedure, the temporal values of habitat modifications are considered, e.g., consideration of the time required for maturation or recovery from insults. These measurements are converted a into "net present value" by applying economic discounting resulting in a service exchange rate such as discounted habitat service acre years (dSAY).Currently several ecological resource calculation methods are discussed in the amended code and in the mitigation bank prospectus. The code requires use of the Habitat Evaluation Procedure (HEP) and Habitat Equivalency Assessment (HEA) (in the code, this terminology should be changed to the correct name for the tool- Habitat Equivalency Analysis) and all data used to generate the scores, however the prospectus for the mitigation bank discusses use of HEP and Oregon Wetland Assessment Protocol (ORWAP) (all of these calculators are discussed in Appendix C). The code amendment and the mitigation bank prospectus should be consistent in their requirements for ecological value calculations.

- The ecological resource calculation methods proposed by the City of Portland are a subset of a range of ecosystem service valuation tools currently available. Methods to establish the baseline ecological condition of a parcel include, but are not limited to the methodologies mentioned here and these are further discussed in Appendix C. As mentioned previously, it is imperative to specifically identify the resources to be evaluated prior to application of any calculator.
- **Best professional judgment:** A trained scientist evaluates conditions on the site and estimates the potential impact, positive or negative, of the action. The method is highly subjective as it is dependent on the expertise of the evaluator and approach in characterizing present and future site conditions.

- **Wetland Evaluation Technique**: The Army Corps of Engineers developed this technique to facilitate wetland permit decisions. It evaluates wetland functions including groundwater recharge, groundwater discharge, floodflow alteration, sediment stabilization, sediment/toxicant retention, nutrient removal/transformation, aquatic diversity and abundance, wildlife diversity and abundance, recreation, and uniqueness/natural heritage, as well as species-specific fish and wildlife habitat assessments. It is effective for providing a broad assessment of wetland function and a rapid screening of different alternatives; however the end results of the decision process may be difficult to interpret.
- **Habitat Evaluation Procedures:** This procedure applies Habitat Suitability Indices based on *a priori* selected species by the interagency team. The outcome of HEP is highly variable because it is dependent on the guild of species selected to include in the analysis.
- **Hydrogeomorphic methods (HGM) for wetland classification**: The HGM approach to assessment of wetland and riparian functions is based on two main concepts. First, wetlands in a region that share the same landscape setting and hydrologic regime will support similar functions. Second, levels of function at one site can be compared on a scale to functions of multiple reference sites of the same type. HGM has evolved into a technique which can be used to measure a large suite of wetland functions in a quantifiable, consistent manner across a large geographic region.
- **Oregon Rapid Wetlands Assessment Protocol:** The protocol is an explicit process to provide relatively consistent and accurate numeric estimates of the relative ability of a wetland to support a wide variety of functions and values important to society. It uses standardized data forms, procedures, and data processing models. Its authors have incorporated current scientific knowledge of wetlands into the protocol. An advantage of this method is it is standardized to be used across agencies.
- **Salmon credit calculator:** This method calculates scores for six ecological functions related to optimal habitat for salmonid species. The calculator initially was developed for ODOT and further refined by Parametrix, Inc. and the Willamette Partnership.
- **Water quality:** The focus of this calculator is to evaluate thermal load (kcal/day) reductions as a result of riparian shade restoration projects. In particular, this method is appropriate for calculating impacts on more linear habitat types.
- **Habitat Equivalency Analysis (HEA):** HEA is a version of Resource Equivalency Analysis that aggregates affects on natural resources at the habitat level. HEA considers several parameters, including habitat type, size, a recovery curve over time, type of restoration, a discount rate, and time to recovery, among others.

Clearly, selecting a specific resource calculator will also prevent confusion over what a mitigation credit represents. For example, HEA generates discounted Service Acre-Years (dSAYs) which are commonly referred to as credits. This terminology could be

confusing if an evaluation of wetland credits and dSAYs is conducted at the same bank, and all are referred to simply as "credits". It is important that the ecological functions and values represented by a mitigation bank credit be clearly defined as one of the first steps in up-front ecological restoration (Stahl et al. 2008).

The City's draft prospectus for the North Reach Mitigation Bank currently presents wetland credit ratios but it does not propose any credit ratios for ecological values and function that are not associated with wetlands. Given the diversity of impact projects that the City has proposed could use the bank, it is anticipated that other types of credit ratios will also be needed.

The overall recommendation with respect to evaluating mitigation requirements and calculating credit ratios is to more clearly define the ecological functions and values being targeted by the revised code and the establishment of the mitigation bank, and to more clearly describe which methodologies will be used to calculate baseline conditions at project sites (both the impact sites and the prospective mitigation bank sites), impacts from development projects, the value of mitigation bank sites, and the value of individual credits generated by the bank sites.

Funding the Mitigation Bank through ILFs and Development Fees

The code amendment states that the City mitigation bank will be funded in part through development fees required by the amended code and through ILFs collected in association with the minimum landscape area standards. These fees are based on the overall monetary value of capital improvements in the case of development fees, and on the cost of plant material, installation labor, and land in the case of the minimum landscape area standards. It is important to recognize that these fees are calculated on a monetary basis rather than an ecological basis. How will the ecological value of both the impacts requiring these fees and the mitigation provided through use of the fees be calculated? The mitigation banking section of the code amendment should discuss how the use of these fees to establish the mitigation bank will be accounted for when determining the overall ecological value (in credits) of the mitigation bank. It is assumed that some of the mitigation potential of the bank will be set aside to achieve the vegetation standard requirements and offset the development impacts that helped to fund it, but the process by which these calculations will be made and debited from the overall ecological value of the bank is not clear.

The complexities introduced by using ILFs and development fees to establish a mitigation bank could be avoided by using the fees to develop separate habitat restoration sites that are intended solely to achieve vegetation and landscape area goals (i.e., habitat goals) established in the amended code. In this way, these fee systems would operate more like a traditional ILF program. Mitigation bank sites would then be established as separate mitigation projects that could be used as advance mitigation to offset impacts to specific natural resources. By using a single bank for the dual goal of utilizing development/landscape fees (which are based on monetary calculations) and for generating mitigation credits based on ecological values (which are to be used for a

variety of mitigation types), there exists a high likelihood of introducing a large amount of confusion to the mitigation process, and even for inadvertently "double-dipping" into the bank's pot of available credits.

According to federal guidance (see Appendix A) regarding the use of ILFs for wetland mitigation, "in-lieu-fee, fee mitigation, or other similar arrangements, wherein funds are paid to a natural resource management entity for implementation of either specific or general wetland or other aquatic resource development projects, are not considered to meet the definition of mitigation banking because they do not typically provide compensatory mitigation in advance of project impacts." Discounting the lost and gained ecological values along with consideration of the onset of ecological service improvement after completion of restoration action in a REA/HEA based assessment could assure that sufficient compensatory mitigation is funded thru the ILF to account for this lag. This guideline provides another example of how using fees paid under the code amendment to construct a mitigation bank could introduce significant complexities in the banking process.

Establishment and approval of mitigation banks requires long-term financial assurances which the City will not likely be able to provide solely based on the development-related mitigation funds. The mitigation bank, as proposed, states it will not solely rely upon development-related mitigation funds. In any case, the funds should be ample and predictable enough to cover acquisition, negotiation, permitting, and monitoring and maintenance costs over time. Bonding or other financial assurances to assure project maintenance should be required of any potential banker to assure that in the event of failure of the banker, the bank persists and ecological functions continue to perform as required by regulators and credit purchasers. Given the current economic climate and the vulnerability of local governments to economic fluctuations, the City of Portland should not be exempt from this mitigation banking requirement.

Development, as a whole, is subject to the fluctuations of the economic environment and thus, development-related fees are not a guaranteed source of funding for the mitigation bank over time. Grant money and other sources of funding that come through legislatively-approved budgets are also not reliable over the long-term. The City should provide more information regarding how the bank will be funded up-front for land acquisition and project construction, and in the long-term for monitoring and site protection and maintenance in perpetuity. The projected amount of funding to be generated from fee programs should be further quantified as this will influence the determination of the "leftover" ecological value of the bank that might be available for sale as credits.

The City as the Sole Bank Sponsor

The draft mitigation banking prospectus states the need driving the creation of the mitigation bank as being to provide opportunities for off-site mitigation of unavoidable development impacts along the north reach of the LWR. This statement fails to acknowledge that restoration related to NRDA claims under the Superfund

program will also create demand for restoration along the north reach. The mitigation bank proposed by the City is not likely to be sufficient in size or ecological value to supply the entire demand for mitigation within the north reach when mitigation required by the City's code amendment is combined with the need for mitigation under other state and federal laws (such as Section 404 of the Clean Water Act and NRDA mitigation requirements).

It would be a useful exercise to estimate the quantity and types of land area that would be required to satisfy the combined requirements of the various mitigation programs expected to be implemented in the LWR over the next 20-years (or similar timeframe). For example, the LWR was last maintained by the Corps in 1997 and there may be mitigation requirements related to the dredged materials management plan This assessment would allow the City to estimate their capacity to fill this need in terms of costs, demands on personnel, opportunities for land acquisition, and other factors. It might also guide the City in identifying the appropriate number, locations, and sizes of sites to pursue for the purpose of performing mitigation.

One way to increase the potential for additional land area and habitat types available for use in mitigation programs in the LWR would be to allow the use of mitigation banks sponsored by parties other than the City. As the intention of the City is to restore ecological functions and healthy habitats for salmonids and other species, limiting off-site mitigation opportunities to a single bank (or to multiple banks sponsored by the same party) also limits the opportunity to create, restore, or enhance habitat in other areas that might represent significant habitat potential. This might be particularly relevant in areas where a significant amount of waterfront property is privately owned. It seems that the goal of the City's plan could be better achieved by encouraging, facilitating, and guiding the creation and restoration of ecological functions and values in key areas throughout the north reach, regardless of land ownership or bank sponsor affiliation. This would prevent property owners and mitigation bankers from other sectors of the community from being excluded from conservation or mitigation banking activities in the area. Furthermore, allowing the private sector the opportunity to participate restoration banking could provide a movement of investment restoration in the LWR (Stahl et al. 2008).

Many mitigation banks sponsored by private individuals or organizations or by partnerships between private groups and public agencies have been successfully established in Oregon and Washington (see Attachment D for a list). These banks have provided mitigation for wetland impacts, natural resource damages, and conservation of habitat for threatened and endangered species. Of the certified and in-process mitigation banks in Oregon and Washington, the majority have been sponsored by private parties. This implies that private groups are capable at establishing functional mitigation banks, and that there is a community of experienced mitigation bankers in the area that would likely be interested in establishing banks in the north reach.

As written, the code amendment and draft prospectus place limits on potential habitat restoration within the north reach by requiring mitigation at a City-led bank. We recommend that any code language referencing the purchase of mitigation credits from the River Restoration Program's certified mitigation bank be broadened to include any certified mitigation bank located within the geographic service area of the LWR that provides credits with an appropriate nexus to the impacted habitat or resource.

Relationship between City Code Requirements and Existing Federal and State Mitigation Regulations

Additional information should be provided in the code amendment or in a separate planning document that further describes the relationship between the City's code requirements and other local, state, and federal regulations with respect to mitigation of natural resource impacts. For example, would wetland mitigation requirements be calculated separately from the minimum vegetation standard requirements if both applied to the same piece of property? Or, would mitigation conducted for wetland impacts also be considered to count toward the minimum landscape area requirements (or cover those requirements if the wetland mitigation project size totaled 15% of the property)? How would the requirements differ if the wetland mitigation was conducted outside of the General Industrial 2 (IG2) zone or the River Plan boundaries? Additional detail should also be provided regarding how the relationships between the City and other regulatory agencies on the Mitigation Banking Review Team (MBRT) would work throughout the process of certifying the mitigation bank, particularly considering that the City is currently proposed as the bank sponsor and as a member of the MBRT.

Assessment of the City's Portland River Restoration Program North Reach Mitigation Bank Draft Prospectus

The prospectus is a planning document that establishes the conceptual plan for a mitigation bank. According to the Wetland Mitigation Guidebook for Oregon (ODSL 2000), the prospectus should provide a description of the proposed wetland mitigation bank sufficient to allow the United States Army Corps of Engineers (Corps) and Oregon Department of State Lands (DSL)[1] to determine whether the bank is technically feasible, whether the bank will meet applicable federal and state regulatory requirements, and whether there is the need for a bank in the proposed service area. Attachment B to this memo outlines the standards and requirements of the prospectus as provided in the guidebook and as required by the Oregon Administrative Rules (OAR).

The North Reach Mitigation Bank draft prospectus includes several of the required elements of this planning document; however, it is missing much of the detail expected in a prospectus and seems to be more of a conceptual plan for the general mitigation banking program being proposed by the City in the code amendment, rather than a conceptual plan for a specific bank site. Overall, more detail regarding the proposed bank site, the types of ecological functions that currently exist on the site, and the types

[1] The Corps and DSL serve as the chairs of wetland mitigation bank MBRTs in Oregon.

of ecological functions that will be developed needs to be included. Specifically, the following elements should be added to the prospectus:

- the location, size, and ownership of the proposed bank site;
- soil types and an air photo of the proposed bank site;
- a description of land uses on properties located adjacent to the proposed bank sites and an evaluation of whether existing or potential future land uses on those properties would impact the functioning of the bank(s), and how the creation of a bank may impact adjacent properties (e.g., drainage patterns, water table, etc.);
- additional information on how the bank will be constructed and operated (many of the requests for additional information in preceding subsections could be incorporated into the prospectus to give a more detailed picture of how the bank will operate);
- additional information on how bank credits will be calculated, particularly for non-wetland based credits;
- additional information regarding long-term ownership arrangements and management strategies for the bank;
- although not required, the inclusion of a map showing the River Environmental, Environmental Conservation, Environmental Protection, River Industrial, River General, and Recreational overlay zones would be extremely helpful

The prospectus states that preference for bank site location will be given to sites within the River Plan boundaries in order to provide in-kind mitigation. This statement does not fully consider the meaning of in-kind mitigation, which is related to ecological resources and services, not necessarily to geographic area. This displays another example of why it is essential that the prospectus (and the code amendment) specify which ecological resources and services links will be used to represent "in-kind" mitigation between the impact site and the bank site. Site selection usually considers both the location of the bank site within the landscape and the types of functions it will provide; however they are considered on an individual and separate basis.

The prospectus uses confusing terminology when referring to the "bank area" as the entire geographic area in which bank sites might be located. The intent would be clearer if a different term for this area (maybe "target area for bank site selection") were used and leave the term "bank area" to refer to the specific bank site or sites.

The prospectus states that the goals and objectives of the proposed mitigation bank are to,

> "...enhance, protect, and manage high-functioning habitat features to provide mitigation for offsite impacts. Types of habitats that are expected to be impacted due to development include riparian, wetland, stream, and upland."

The prospectus should describe in more detail specific habitat types or functions for which the bank will provide mitigation. In addition, the prospectus should establish a basis for identifying the goals and objectives of the bank that will allow them to be

sufficiently described in the mitigation banking instrument (MBI). In the MBI, the goals of the bank will need to be identified with respect to ecological functions, and they should be outlined in such a way that they will be able to serve as the basis for measureable performance monitoring standards. As the prospectus is currently written, the goals and objectives for the bank are too vague.

The objectives of the mitigation bank are described in some detail in portions of the prospectus; however a comprehensive statement of the objectives is not clear, and the placement of these statements is confusing. For example, the following language is currently located in the "Consistency with Adjacent Land Uses" section,"

> "The City is looking to create a network of habitat nodes that provide high quality feeding, rearing, and refugia areas for regional salmonids that rear and migrate through Portland streams, and spawning and rearing grounds sufficient to restore self-sustaining populations within local watersheds."

This appears to be one of the specific ecological objectives of the mitigation bank. The other ecological objectives of the bank should be described in equal detail and stated in the "Goals and Objectives" section. A summary of these specific goals should also be included in the code amendment text.

The prospectus states that funding for the mitigation bank will be generated by mitigation requirements imposed on development projects which raise issues that require further clarification. As mentioned earlier, it is uncertain that the mitigation fees and costs in addition to other funding will be sufficient to establish a bank. The majority of the money needed to establish a mitigation bank is needed up-front (i.e., acquiring land, permitting, and construction) and it is unclear how will sufficient funds be available at the outset to acquire land and design, permit, and construct the mitigation bank in advance of the impacts being mitigated. The prospectus should provide additional information on the sources of funding for the bank. One reason for this recommendation is that federal guidelines generally do not consider ILFs and similar fee programs to be considered part of a mitigation banking program because the ecological impact requiring payment of those fees occur before construction of the mitigation site. Mitigation banking is a form of in-advance mitigation, meaning that the bank should be established before ecological impacts that will be offset by credits from the bank occur. The prospectus should also discuss how the ecological impacts being mitigated through the payment of the ILFs and development fees used to establish the bank are accounted for when calculating remaining ecological value that could then be sold as mitigation credits for other projects. This will ensure that bank credits are not being sold multiple times.

Regarding credit release, the prospectus proposes to have 30% of the total bank credits released upon execution of the bank agreement and recording of the conservation easement(City of Portland 2009). Advance release of credits (released before the mitigation project has been implemented and shown to be providing ecological functions through measurable performance standards) is only allowed by the MBRT in

certain situations when the anticipated success of the bank is high. Provided that the City mitigation bank will likely be constructed in a relatively urbanized area that has been significantly altered from its natural state, confidence in the bank's success may not be high enough to grant in-advance credit release. The City should consider alternatives for funding implementation of the mitigation bank in the case that credits cannot be released for sale until certain performance standards are attained.

References

City of Portland. 2008. Willamette River natural resources inventory: riparian corridors and wildlife habitat, Portland, Oregon. Proposed draft report, July 2008. City of Portland Bureau of Planning, Portland, OR.

City of Portland. 2009. Portland Harbor Restoration Program, North Reach Mitigation Bank: draft prospectus, Multnomah County, Oregon. Submitted to Oregon Department of State Lands and US Army Corps of Engineers. Bureau of Planning and Sustainability, The City of Portland, Portland, OR.

ODSL. 2000. Wetland mitigation banking guidebook for Oregon. Mitigation Banking Guidebook Committee, Oregon Department of State Lands, Salem, OR.

Stahl J, R G, Gouguet R, DeSantis A, Liu J, Amman M. 2008. Prospective environmental restoration/restoration up front: a concept for an incentive-based program to increase restoration planning and implementation in the United States. Integr Environ Assess Mgmt 4(1):6-14.

Attachment A Overview of Federal Regulations and Standards for Wetland Mitigation Banking

The following subsections summarize some of the federal standards applied to various elements of wetland mitigation banks. These standards were identified based on information provided in Federal Guidance for Mitigation Banks published November 28, 1995 (Federal Register Volume 60, Number 228 or http://www.epa.gov/owow/wetlands/guidance/mitbankn.html). Additional standards apply to these elements of wetland banks; the federal guidance should be reviewed for further information.

Standards for the banking instrument

The following information should be included, as appropriate, within the banking instrument:

- bank goals and objectives;
- ownership of bank lands;
- bank size and classes of wetlands and/or other aquatic resources proposed for inclusion in the bank, including a site plan and specifications;
- description of baseline conditions at the bank site;
- geographic service area;
- wetland classes or other aquatic resource impacts suitable for compensation;
- methods for determining credits and debits;
- accounting procedures;
- performance standards for determining credit availability and bank success;
- reporting protocols and monitoring plan;
- contingency and remedial actions and responsibilities;
- financial assurances;
- compensation ratios;
- provisions for long-term management and maintenance.

Standards Related to Financial Assurances

An important component of a mitigation bank's long-term success is related to establishment of long-term financial assurances that are sufficient and predictable enough to cover acquisition, negotiation, permitting, construction, and monitoring and maintenance costs, among others, over time. As stated in the Federal Guidance for Mitigation Banks:

> "The success of a mitigation bank with regard to its capacity to establish a healthy and fully functional aquatic system relates directly to both the ecological and financial stability of the bank. Since financial considerations are particularly critical in early stages of bank development, it is generally appropriate, in cases

where there is adequate financial assurance and where the likelihood of the success of the bank is high, to allow limited debiting of a percentage of the total credits projected for the bank at maturity. Such determinations should take into consideration the initial capital costs needed to establish the bank, and the likelihood of its success. However, it is the intent of this policy to ensure that those actions necessary for the long-term viability of a mitigation bank be accomplished prior to any debiting of the bank. In this regard, the following minimum requirements should be satisfied prior to debiting: (1) banking instrument and mitigation plans have been approved; (2) bank site has been secured; and (3) appropriate financial assurances have been established."

In regards to financial assurances, under federal guidelines the bank sponsor is responsible for the following:

- securing adequate funds for the operation and maintenance of the bank during its operational life;
- providing for long-term management of the wetlands and/or other aquatic resources, as necessary;
- identifying the entity responsible for the ownership and long-term management of the wetlands and/or other aquatic resources;
- acquisition and protection of water rights, as necessary (these rights should be documented in the banking instrument);
- total funding requirements that reflect realistic cost estimates for monitoring and long-term maintenance of the bank, as well as implementation of contingency and remedial actions should they be necessary;
- financial assurances in the form of performance bonds, irrevocable trusts, escrow accounts, casualty insurance, letters of credit, legislatively-enacted dedicated funds for government operate banks or other approved instruments. Such assurances may be phased-out or reduced once it has been demonstrated that the bank is functionally mature and/or self-sustaining (in accordance with performance standards).

Agency Roles and Bank Sponsor

The Corps, EPA, FWS, National Marine Fisheries Service (NMFS), and Natural Resource Conservation Service (NRCS), as well as representatives from state, tribal, and local regulatory and resource agencies, will compose the Mitigation Bank Review Team (MBRT). The Corps will be the chair (or co-chair) of the MBRT.

The bank sponsor is responsible for preparing the banking instrument in consultation with the MBRT. They are responsible for the operation and management of the bank according to the agreed upon terms in the banking instrument.

Criteria for use of a mitigation bank

The federal guidance for mitigation banking lists several criteria for the use of a mitigation bank. This list is not exhaustive and the federal guidance should be referenced for further details.

- All activities under Section 10/404 may be eligible to use a mitigation bank as compensation for unavoidable impacts to wetlands and/or other aquatic resources.
- Prior to receiving authorization to use a mitigation bank, permittees applying to conduct activities that would impact aquatic resources must demonstrate that they have avoided and minimized impacts to those resources as much as possible.
- Geographic limits should be defined in the banking instrument to specify where a bank can "reasonably expect to provide appropriate compensation for impacts to wetlands and/or other aquatic resources." These geographic limits would then define the service area of the bank; designation of the service area should be guided by the use of Hydrologic Unit Codes, ecoregion maps, or other appropriate regional classification maps developed for the purpose of specifying bank service areas.
- The number of credits available for withdrawal should be scaled to the level of aquatic functions achieved at the bank at the time of debiting (withdrawing credits from the bank).
- Prior to debiting, the banking instrument and mitigation plans should be approved and the bank site should be secured with appropriate financial assurances established.
- Credits and debits are the terms to designate units of trade in mitigation banking.

Notes from the Federal Guidance Regarding In-lieu Fee Programs

Notes regarding in-lieu fee programs are particularly relevant to the City of Portland's mitigation banking proposal as it states a portion of the funding for the bank will be generated from in-lieu fee programs. The following excerpt from the Federal Guidance for Mitigation Banks discusses the use of in-lieu fee mitigation arrangements:

> "For purposes of this guidance, in-lieu-fee, fee mitigation, or other similar arrangements, wherein funds are paid to a natural resource management entity for implementation of either specific or general wetland or other aquatic resource development projects, are not considered to meet the definition of mitigation banking because they do not typically provide compensatory mitigation in advance of project impacts. Moreover, such arrangements do not typically provide a clear timetable for the initiation of mitigation efforts. The Corps, in consultation with the other agencies, may find there are circumstances where such arrangements are appropriate so long as they meet the requirements that would otherwise apply to an offsite, prospective mitigation effort and provides

adequate assurances of success and timely implementation. In such cases, a formal agreement between the sponsor and the agencies, similar to a banking instrument, is necessary to define the conditions under which its use is considered appropriate."

Attachment B Overview of Oregon State Regulations and Standards for Wetland Mitigation Banking

Wetland mitigation banking rules were passed in Oregon in 1997. The State rules on wetland mitigation banking, in-lieu fee programs, and other types of advance mitigation are contained in the Oregon Administrative Rules (OAR), Chapter 141, Division 85 (141-085-0720 through 141-085-0760). The regulations and standards summarized in this attachment are based on information provided in the Wetland Mitigation Banking Guidebook for Oregon (ODSL 2000) and the OAR.

Also of note, the Oregon State legislature passed House Bill 2156 in 2009; this bill updates the language of some of the provisions related to wetland banks and allows for the establishment of mitigation banks for offsetting impacts to other (non-wetland) waters of the state. State rules for compensatory mitigation for impacts to non-wetland and non-tidal waters are contained in OAR 141-085-0765.

Overview of the Process for Certifying a Wetland Mitigation Bank in Oregon

The following bulleted items summarize the general process for certifying a wetland mitigation bank. Other steps are required for establishing and using wetland mitigation banks, as detailed in the guidebook (ODSL 2000) and the OAR.

- Bank sponsor provides a conceptual plan for the mitigation bank in the form of a prospectus.
- The Unites States Army Corps of Engineers (Corps) and the Oregon Department of State Lands (DSL) review the prospectus, and if it is determined to be sufficient, public notice of the intent to form a bank is issued, and the Mitigation Banking Review Team (MBRT) is formed to review the prospectus. The Corps and DSL serve as co-chairs of the MBRT; other members of the MBRT may include the United States Environmental Protection Agency, the United States Fish and Wildlife Service, the Oregon Department of Environmental Quality, the Oregon Department of Fish and Wildlife, the Oregon Department of Land Conservation and Development, city and/or county-level planning offices with jurisdiction over the bank site, and local soil and water conservation district staff.
- The Corps, DSL, and MBRT work with the bank sponsor to develop a mitigation banking instrument (MBI). The banking instrument is the document that describes the physical and legal characteristics of the bank and it outlines how the bank will be created. Development of the instrument will include revisions to the plan for the bank as required by the Corps, DSL, and the MBRT. This process generally lasts from six months to over a year (ODSL 2000).
- After the banking instrument has been thoroughly reviewed and revised based on Corps, DSL, and MBRT input, the MBI is signed by the Corp, DSL, and the

bank sponsor. The MBI is also circulated to the members of the MBRT who have the opportunity to sign it to signify their concurrence with the plan for the mitigation bank.

- There is another public notice period (30-day) after signing of the MBI. If no appeals are received, the bank sponsor may begin construction of the bank.

Wetland Mitigation Banking Standards

The following bulleted items summarize some of the standards applied to various elements of wetland mitigation banks. Additional standards apply to these elements of wetland banks; the guidebook and the OAR should be reviewed for information on additional standards.

Standards for the Mitigation Bank Site:

- the physical, chemical, and biological characteristics of the site are anticipated to be suitable to support the proposed wetland type(s): reliable hydrology/water source, seed bank, appropriate soil types;
- the site location and characteristics have the potential to provide important wetland functions;
- the site is located near or connected to other important habitat areas;
- the site location does not conflict with adjacent land uses, and adjacent land uses do not represent a significant, unmanageable threat to the health of the proposed wetland;
- the bank proposed is consistent with the goals/priorities of watershed plans, if they exist

Standards for the Service Area Proposed for a Bank:

- the service area is generally based on the watershed that the bank site is located within (determined from the Fourth Field Hydrologic Unit Code [HUC] watershed map);
- there should be sufficient market demand for credits in the service area (bank sponsor responsible for determining demand)

Standards for the Prospectus:

The prospectus for a mitigation bank is the initial conceptual plan. It should provide a description of the proposed wetland mitigation bank sufficient to allow the Corps and DSL to determine whether the bank is technically feasible, whether the bank will meet applicable federal and state regulatory requirements, and whether there is the need for a bank in the proposed service area. A prospectus should include:

- the location, size, and ownership of the proposed bank site
- soil types and an air photo of the proposed bank site

- designation of the proposed service area
- an analysis demonstrating the need for the bank
- general information on how the bank will be constructed and operated
- proposal for ownership arrangement and long-term management of bank

Standards for the MBI:

The MBI is a more detailed plan for the mitigation bank than the prospectus. It should contain the following information:

- the purpose of the proposed bank, including the wetland functions that will be created, restored, or enhanced;
- the market demand for the bank within the service area;
- the goals of the bank with respect to hydrology and ecological function, outlined in such a way that they can be the basis for performance monitoring standards;
- detailed description of the bank site including historical uses, adjacent land uses, and current ecological baseline condition (including wetland delineation if wetlands are already present on the bank site);
- mitigation plan for the bank site and an evaluation of the number of credits expected to be generated (state methods used to determine the number of credits);
- a description of the criteria that will be used to measure the success of the bank;
- contingency, monitoring, and management plans for maintaining the bank in perpetuity (including a description of the financial assurances for the bank) and for identifying and correcting any deficiencies in bank development;
- evidence that all federal and state regulations that apply to the wetland mitigation bank have been met (these can include Endangered Species Act regulations, regulations related to cultural resources, and land use regulations not specifically related to wetlands, among others)

Standards for Credit Generation:

- credit generation ratios depend on the type of mitigation conducted (restoration, creation, enhancement, or, in some rare cases, preservation);
- credit ratios stipulated in OAR 141-085-0690 (4) may be used to propose the number of credits that will be generated by the bank;
- a different accounting methods based on wetland function gains can be proposed;
- the MBRT will review, negotiate, and approve credit ratios for each bank;

- credits are certified for sale by the Corps and DSL in consultation with the MBRT after the bank sponsor provides evidence that mitigation activities have been conducted at the bank site and that mitigated areas are meeting performance standards;
- advance credit sales are permitted in some cases where confidence in the success of the bank is high

Standards for the Use of Bank Credits:

- use of credits from a bank for satisfying mitigation requirements for impacts to jurisdictional wetlands must be approved by the Corps and DSL;
- the Corps and DSL will determine how many credits are required to offset the wetland impact;
- number of credits required in order to provide mitigation for a wetland impact is not always based directly on the approved credit ratio (in some cases, the Corps and DSL may require the purchase of additional credits due to the specific nature or location of the wetland impact);
- the bank sponsor must document each credit sale individually in a transaction record and each sale must be reported to DSL;
- an annual reporting of credit sales and balances must be provided to the Corps, DSL, and the MBRT

Standards for Long-term Management, Maintenance, and Protection of the Bank Site:

- the bank sponsor is responsible for providing long-term funding adequate to monitor and maintain a bank throughout its operational life and to fund protection and stewardship of the bank site in perpetuity;
- financial assurances may be secured through escrow accounts, bonds, trust funds, endowments, or other long-term funding sources;
- provisions must be made for protection of the bank site in perpetuity by means of conservation easements, deed restrictions, records of covenants or conditions on the bank site, etc.

References

ODSL. 2000. Wetland mitigation banking guidebook for Oregon. Mitigation Banking Guidebook Committee, Oregon Department of State Lands, Salem, OR.

Attachment C Examples of Ecosystem Credit Calculators

Several methods have been employed to develop measures of habitat patch quality and performance, mostly stimulated by wetland mitigation regulations that began to come into place in the 1970s. The need to 'quantitatively' calculate the impacts to wetlands of various projects forced the development of tools. National and state goals for "no net loss" of wetlands pertain not only to wetland acreage but also to the ecosystem services (functions and values) that wetlands provide naturally. By providing these services, well-functioning wetlands can reduce the need for humans to construct alternative infrastructure necessary to provide those services, but often at much higher cost , e.g., nutrient uptake to improve water quality, storm surge reduction, carbon sequestration, breeding and nursery habitat provision.

Most agencies responsible for wetlands have focused only on measuring net losses of wetland acreage, with little regard for assessing losses that result from the degradation of the many remaining wetlands. However, the increasing availability of standardized, regionally-tailored procedures for estimating the functions and values of wetlands has again highlighted the urgency of also measuring and regulating losses of functions and values, over and beyond the simple loss of acreage.

Wetland *functions* become *services* when placed in the context of human *values*. To estimate services, variables that determine or at least correlate with each function or value must first be identified. These are commonly termed *indicators*. To convert indicator estimates to estimates of functions, values, and services, specific *aggregation procedures* must next be constructed and applied.

The purpose of ecosystem credit calculators is to provide readily comparable measures of the habitat quality/function in addition to the habitat quantity (acres). Additionally, the temporal component for the wetland impacts and/or restoration/mitigation needs to be considered and accounted for in the calculation, e.g., what is the 'ecological maturation' or recovery rate for the parcel in question.

There are a number of methods evolving in the new Ecosystem Services Marketplace to characterize the quality of ecological functions of habitats. These methods examine selected site attributes, either through field measurements, remote sensing/GIS, or proxy measures, as metrics for habitat function. The methodologies then take those attributes into account to create a score for one or more ecosystem services.

There are two basic approaches to scoring ecosystem service benefits. One is area-based where the total area of impact or conservation is adjusted by its ecosystem quality relative to a reference or benchmark area (e.g. wetland or habitat banking). The second quantifies the absolute increase or decrease of a specific ecosystem service (e.g. carbon or water quality) compared to baseline and post-action measurements. Both of these approaches might look at the site independently or adjust measurements based on the context of the surrounding landscape

WETLAND FUNCTION/VALUE ESTIMATION PROCEDURES

These procedures are needed to determine the quality of the habitat, i.e., how well does the parcel function when compared to an 'ideal' habitat. The ideal can be based on individual opinion or a reference site that exhibits functions appropriate to that habitat type. In other words, how good is the parcel?

Best Professional Judgment ("BPJ") is one method to assess habitat quality. Trained ecologists evaluate the changes and estimate what they believe will be the effect of the action, either as an improvement or impact. This method can be employed successfully, provided appropriately trained professionals can be found, but this method is prone to expert subjectivity.

For example, a less complex, consensus-based assessment method known simply as the Highway Methodology has been used to assess wetlands in connection with planning and permitting of highway projects in the New England region of the US (US Army Corps of Engineers 1993, 1995). This method also does not yield quantitative results; however, it documents the rationale for the assessment results in a manner that is completely transparent. It also includes components which assess whether a wetland is likely to provide selected wetland value.

Wetland Evaluation Technique (WET), which was developed by the US Army Corps of Engineers (Corps), considered broad groups of functions which included fish and wildlife habitat value, but also included flood control, groundwater recharge/discharge and value of the site for recreation and education.

This technique was developed by the Corps for use in making wetland permit decisions. WET is a broad-brush tool, which uses the presence or absence of a large set of wetland characteristics as correlative predictors of wetland functions. It is not designed to provide quantitative measurements of functional performance; rather, it is designed to predict the qualitative likelihood (high, medium or low) that a wetland performs given functions, to an unspecified degree.

These functions include groundwater recharge, groundwater discharge, floodflow alteration, sediment stabilization, sediment/toxicant retention, nutrient removal/transformation, aquatic diversity and abundance, wildlife diversity and abundance, recreation, and uniqueness/natural heritage, as well as species-specific fish and wildlife habitat assessments. For most of these functions, the protocol evaluates either the effectiveness, or the ability of the wetland to perform the function based on its structure, as well as the opportunity that the wetland has to perform the function. The relationships between characteristics and functions which WET uses are well-supported in the scientific literature and the rationale for WET is well documented. It provides an excellent procedure for rapid screening of different alternatives which would affect wetlands in a landscape, and looks at a broad array of wetland functions. It is not, however, suitable for assessing the actual extent of wetland impacts, or the type, location, or amount of mitigation that would be necessary to compensate for functions lost due to impacts. Furthermore, some of the predictors used in WET, particularly with

respect to fish and wildlife habitat, differ in different regions of the US, and so do not always accurately predict habitat use likelihoods. Finally, while the results summary is fairly simple, the decision trees used to reach those results are quite complex, which tends to make the rationale for the end results somewhat obscure.

The **Habitat Evaluation Procedures (HEP)** approach is used to document the quality and quantity of available habitat for selected wildlife species. HEP may be used in three planning activities: wildlife habitat assessments (including both baseline and future conditions), trade-off analyses, and compensation analyses.

HEP employs a BPJ evaluation of the impacted site. An interagency team selects a few evaluation species that could potentially use cover types within the study area and reviews applicable United States Fish and Wildlife Service habitat suitability models. The team visits the study area (or reviews plans for predicted future conditions) to estimate the habitat features listed in the models.

The habitat suitability indices (HSIs), habitat units (HUs), and average annual habitat units (AAHUs) are calculated. If there is a need to document value judgments in trade-off analysis, the relative value index (RVI) may be calculated.

Hydrogeomorphic (HGM) Methods for Wetland Assessment are based on peer-reviewed mechanistic models that are data-based, but that are difficult to apply and consider. The HGM approach to assessment of wetland and riparian functions is based on two main concepts. First, wetlands in a region that share the same landscape setting and hydrologic regime will support similar functions. Second, levels of function at one site can be compared on a scale to functions of multiple reference sites of the same type.

HGM has evolved into a technique which can be used to measure a large suite of wetland functions in a quantifiable, consistent manner across a large geographic region. HGM is a reference-based technique that develops a model for measuring wetland functions based on wetlands which are established as standards within that landscape. First, the wetlands are classified by hydrology and geomorphic setting into subclasses. The assessment protocol is then established by measuring functions across a set of wetlands of the same HGM subclass within a geographic region (called the reference domain) to determine the range of performance for those functions in wetlands within the landscape. These functional profiles are used to develop functional indices, which estimate the capacity of a wetland to perform a function relative to other wetlands of the same HGM type in the reference domain. These are based on reference standards, which are defined as the conditions under which the highest sustainable level of function is achieved across the suite of functions performed by wetlands of that subclass. Thus, HGM provides an objective means by which functional performance can be measured, objectively compared across geographic areas and evaluated. It uses reference wetlands to provide an objective basis for standards of comparison, something which is clearly missing from almost all other assessment techniques. A site-specific HGM model for the Willamette Valley (the Willamette Valley HGM Method) has been developed.

Oregon Rapid Wetlands Assessment Protocol (ORWAP) is an explicit process to provide relatively consistent and accurate numeric estimates of the relative ability of a wetland to support a wide variety of functions and values important to society. It uses standardized data forms, procedures, and data processing models. Its authors have incorporated current scientific knowledge of wetlands into the protocol.

ORWAP requires only a single visit to a wetland to provide an initial estimate of the levels of the wetland's functions and values, and it is designed to be used for multiple purposes by multiple agencies. The purposes may include:

- assessing individual wetlands or portions of wetlands for purposes of compensatory wetland mitigation (CWM) permitting (e.g., impact assessment, mitigation bank monitoring);
- evaluating success of voluntary restoration projects;
- assessing all wetlands within a community or watershed (e.g., for characterizing watershed health, prioritizing restoration or protection)

FUNCTION/VALUE ESTIMATION PROCEDURES FOR OTHER RESOURCES

Counting on the Environment's Salmon Credit Calculation Method

The Salmon Credit Calculation Method calculates scores for six ecological functions relevant to optimal habitat for the range of salmonid species. The output of the metric is a weighted linear foot that is based on the percentage of optimal functions performed by the stream and near-stream habitat.

The salmon metric began development as part of the Oregon Department of Transportation bridges project and was further refined by Parametrix, Inc. The Counting on the Environment project of the Willamette Partnership convened a salmonid focus group to review the metric, assign weights to the six functions, and develop trading rules specific to the salmonid currency.

Biotic Support Groups and Functions

- Cover/Refugia Anadromous Fish Biotic Support
- Foraging Anadromous Fish Biotic Support
- Nesting/Spawning Anadromous Fish Biotic Support
- Connectivity Anadromous Fish Biotic Support
- Cover/Refugia for Insect/Invertebrate Biotic Support
- Nesting for Insect/Invertebrate Biotic Support
- Habitat Formation
- Temperature Regulation
- Spatial Separation
- Variable Velocity
- Channel Diversity

Water quality: Temperature (based on heat reduction in kcal/day)

The Shade-a-Lator v. 6.2 Model was developed by Oregon's Department of Environmental Quality to calculate thermal load reductions, in kilocalories per day per ft (kcal/day/ft), from riparian shade restoration projects. Generally, these projects are linear, extending from several hundred feet to several thousand along a stream. The assessment's spatial unit is a stream reach with upstream-downstream boundaries that are defined by the user, and with lateral boundaries that extend outward and perpendicular to the stream to a distance also defined by the user, but typically not more than 150 ft (the usual size of recommended buffers). Within the lateral buffer, the Shade-a-lator samples one set of attributes in 100-ft bands and samples dominant vegetation types at 15-ft bands, in both cases moving from the stream out through the buffer.

AGGREGATION / ACCOUNTING TOOLS

Resource Equivalency Analysis (REA) is a tool developed and employed for natural resource damage assessments to account for the amount of "natural resource services" that the affected resources would have provided had it not been injured. It equates the quantity of lost services with those created by proposed compensatory restoration projects that would provide similar services. It is often used for lost biomass-based assessments when injured and restored resources and services are the same type, quality, and of comparable value. Typically calculations are done on an annual basis, but shorter or longer time intervals can be used. Discounting is used to "close the equation" in time such that a finite amount of services is calculated. Discounting is a simple concept that accounts for the idea that people value having something now more than they value the promise of something in the future. If discounting is not employed, losses and gains would be infinite.

Habitat Equivalency Analysis (HEA) is a version of REA focused on effects integrated at the habitat level, rather than focusing on a single or a few resources, to estimate lost habitat services based natural resource damage assessments. HEA has been applied for calculating the amount of mitigation required to offset losses due to dredging (Ray 2009) and to account for mitigation requirements for a dredge material management plan (Boers 2006). HEA considers habitat quality and other inputs (see parameters listed below) in the analysis and summarizes the net present value of habitat services.

HEA input parameters:

- Habitat type
- Date of injury
- Extent of injury
- Severity of injury
- Duration of injury
- Shape of the recovery curve for the injured habitat after removal of the insult
- Type of restoration project

- Time to maturity of the restored habitat
- Shape of form of the maturity curve for the restored habitat
- Relative productivity compared to the impacted habitat
- Persistence of created habitat
- Starting and completion dates
    - site remediation and restoration
    - habitat creation projects
- Real discount rate

SUMMARY OF METHODOLOGIES WITH POTENTIAL APPLICATION TO AN ECOSYSTEM ACCOUNTING SYSTEM

Habitat quality measurement tools are used to assess the "instantaneous" quality of the habitat service lost or gained either by comparison to a reference site or condition, or by application of a mechanistic rating model. These tools provide information on how much ecological service flows from a given habitat parcel at each time of observation. They do not evaluate the total service flows lost or expected to be gained due to habitat restoration.

Aggregation and accounting tools such as REA and HEA are used to sum the services from a parcel as measured by the habitat quality tools over the time that the parcel will provide those services.

The combination of the habitat quality measurement tools and aggregation tools are used to develop measures of total habitat service lost or gained due to habitat impacts or restoration actions.

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Attachment D Table of Certified and In-process Mitigation banks in Oregon and Washington

Bank Name	Location (nearest City, Watershed)	Approx. Size (acres)	Sponsor[a]	Services/Functions
Banks in Oregon				
Fernhill	Forest Grove, Tualatin Watershed	28	Unified Sewerage Agency of Washington County	wetland bank
Foster Creek	Damascus, Clackamas Watershed	72	private (Wetland Systems & Restoration LLC)	wetland bank
Cow Hollow	Roseburg, Umpqua Watershed	25	private (individual)	wetland bank
Rogue Valley Vernal Pool	Eagle Point, Rogue Watershed	130	private (Wildlands, Inc.)	wetland and conservation bank (vernal pool fairy shrimp and 2 threatened plan species)
Amazon Creek	Junction City and Eugene, Upper Willamette Watershed	78	private (individual)	wetland bank
West Eugene	Eugene, Upper Willamette Watershed	>200	private (individual) and City of Eugene	wetland bank
Long Tom	Junction City, Upper Willamette Watershed	135	private (EcoBank LLC)	wetland bank
Camas Swale	Creswell, Upper Willamette Watershed	na	private (individual)	wetland bank
Oregon Trail/Heritage	Junction City, Upper Willamette Watershed	na	private (individual)	wetland bank
Quamash	Creswell, Upper Willamette Watershed	Na	private (individual) and Lane County Waste Management	wetland bank
Muddy Creek	Monroe, Mid-Willamette Watershed	108	private (individual)	wetland bank
Oak Creek	Lebanon, Mid-Willamette Watershed	88	private (individual)	wetland bank
Frazier Creek	Corvallis, Mid-Willamette Watershed	26	private (individual)	wetland bank
Mid-Valley	Adair, Mid-Willamette Watershed	43	private (individual)	wetland bank
Evergreen	Philomath, Mid-Willamette Watershed	175	private (individual)	wetland bank
One Horse Slough	Lebanon, Mid-Willamette Watershed	130	private (individual)	wetland bank
Marion	Marion, Mid-Willamette Watershed	59	private (individual)	wetland bank
Weathers	Gervais, Mid-Willamette Watershed	9	private (individual)	wetland bank
Mud Slough	Rickreall, Mid-Willamette Watershed	186	private (individual)	wetland bank
Garret Creek	Molalla, Pudding Watershed	30	private (individual)	wetland bank

Bank Name	Location (nearest City, Watershed)	Approx. Size (acres)	Sponsor[a]	Services/Functions
Riverbend Landfill	McMinnville, na	na	private (individual)	wetland bank
Wilbur Island	Florence, coastal bank	150	private (individual)	wetland bank (includes estuarine habitat)
Rood Ranch	Coos Bay, coastal bank	na	private (individual)	wetland bank (details on habitat types na)
Johnson Farm	Astoria, coastal bank	na	private (Turnstone Environmental)	wetland bank (details on habitat types na)
Gales Creek Half Mile Lane	Forest Grove, na	na	private landowner, Oregon DSL, and Clean Water Services	wetland and conservation bank (salmonid habitat and water temperature regulation)
Caledonia Marsh	Klamath Falls, Upper Klamath Lake	326	private (Eagle Crest, Inc.)	wetland bank
Lost River	Klamath Falls, na	na	ODOT	wetland bank
Crooked River	Prineville, Deschutes Basin	na	ODOT and City of Prineville	wetland bank
Medford Vernal Pool	Medford, na	na	ODOT	wetland bank, possible conservation bank
Banks in Washington				
Nookachamps	Mount Vernon, WRIA 3	241	private (Nookachamps, LLC)	wetland bank
Skykomish	Monroe, WRIA 7	260	private (Skykomish Habitat LLC)	wetland bank
Snohomish Basin	Monroe, WRIA 7	225	private (Habitat Bank LLC)	wetland bank
North Fork Newaukum	Chehalis, Newaukum River	230	WSDOT	wetland bank
Skagit Environmental	Mount Vernon, WRIA 3	396	private (Clear Valley Environmental Farm, LLC)	wetland bank
Paine Field	Everett, na	63	Snohomish County	wetland bank
Lake Washington-Sammamish	Redmond, WRIA 8	117	private (Habitat Bank LLC)	wetland bank
Springbrook Creek	City of Renton, na	130	WSDOT and City of Renton	wetland bank
Columbia River[b]	Vancouver, Columbia River	>160	private (Clark County Mitigation Partners LLC)	wetland bank
Moses Lake	Moses Lake, Columbia Basin	11	WSDOT	wetland bank
Meadowcroft	na, WRIAs 54, 55, and 56	14	private (Wetlands Redux)	wetland bank
East Fork Lewis	na	na	na	wetland bank

Bank Name	Location (nearest City, Watershed)	Approx. Size (acres)	Sponsor[a]	Services/Functions
Ocean Shores	na	na	na	wetland bank
McHugh	na	na	na	wetland bank
Lummi	na	na	na	wetland bank
King County	na	na	na	wetland bank
Pierce County Roads	na	na	na	wetland bank
Long Beach	na	na	na	wetland bank
Meadowlands	na	na	na	wetland bank
Blue Heron Slough	Everett, Snohomish River Estuary	350	private (Wildlands LLC) and Port of Everett	habitat conservation bank (salmon , bull trout, and steelhead habitat)
Columbia River[b]	Ridgefield, Lower Columbia River	350	private (Wildlands LLC)	wetland and habitat conservation bank (salmon habitat)

Sources: ODSL (ODSL 2000a, b), Ecology (2009)), FHWA (2008), Wildlands (2009))

[a] Many private bank sponsors are listed by DSL as individual people; it is not known whether these people are associated with a company or other type of organization for the purposes of mitigation banking. In cases where private sponsors are companies, the names of those companies are provided as available.

[b] These represent two different banks with the same name.

DSL – Department of State Lands
FHWA – Federal Highway Administration
ODOT – Oregon State Department of Transportation
USDOT – United States Department of Transportation
WRIA – Water Resource Inventory Area
WSDOT – Washington State Department of Transportation

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Windward environmental LLC

200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206.217.0089 • www.windwardenv.com

MEMORANDUM

To:	David Harvey, Gunderson, LLC
From:	Ron Gouguet, Kathleen Hurley, Matt Luxon, Nancy Musgrove
Subject:	Uncertainties and limitations regarding the use of HSI/HEP for City of Portland mitigation decisions
Date:	December 4, 2009

Executive Summary

Windward evaluated the proposed crediting/debiting approach proposed by the City of Portland (City) for evaluating mitigation decisions for projects the North Reach of the lower Willamette River (LWR) under City development regulations and the River Plan. Elements of the review included the use of the HEA model, the use of HSI/HEP to create inputs to the model, and identification of alternative approaches; the summary of our findings and recommendations are provided, below.

- The City's current approach does not incorporate the mitigation crediting and debiting system developed by the Willamette Partnership, in which the City has participated. It is strongly recommended that the City incorporate and apply the Willamette Partnership credit and debit approach, along with Partnership's proposed process for evaluation and updating ecosystem service accounting.
- There is an underlying assumption that the potentially affected parcels or areas in this part of the LWR currently provide significant ecological function when, in reality, the baseline condition of the properties within the North Reach are likely highly altered with limited ecological function or service. Any approach to evaluating habitat quality must be based on current conditions and the communities that actually exist rather than the theoretical conditions or prescriptive HSI inputs.
- There are many other issues that are left open, are not resolved, or are not discussed in the City's proposed approach to mitigation decisions.

- The City's proposed HSI target species and metrics reflecting habitat impacts/benefits will be difficult to use to make meaningful decisions because they are highly prescriptive and do not allow for consideration of site-specific resource use or existing habitat quality.
- In the current environmental review process non-habitat services (e.g., change in water quality due to alteration in impermeable surface area or rates of erosion) are assessed relative to the proposed project; however, potential benefits or impacts associated with non-habitat services are not included in the City's ecosystem services accounting approach. These non-habitat services should be included in the City's proposed credit/debit approach.
- Use of HSI and HEP as an input to HEA is not a requirement and the application of HSI and HEP, as proposed by the City of Portland, is not recommended. Alternative methods for assigning habitat values or quantifying ecological services are available. Requiring the use of HEP, as proposed by the City, will significantly increase the permit application complexity and development time, without adding corresponding value.
- HEA is a possible to use as a summation tool to establish the value of ecological services, including habitat value (credit and debit), for determining mitigation requirements (credits/debits) for permitted development projects; however, the City's proposed approach for developing inputs, using HSI and HEP, for the summation in the HEA model will be difficult to implement.

Background

The City of Portland (City) recently proposed amendments to their code in order to comply, in part, with Metro's Urban Growth Management Functional Plan for the North Reach of Lower Willamette River (LWR). As part of the code changes, the City proposed a City-led mitigation bank and subsequently, a crediting and debiting methodology to determine the ecological impact and value of a proposed development and subsequent mitigation requirements. The proposed mitigation bank, called the Portland River Restoration Program-North Reach Mitigation Bank, would accommodate mitigation required by the City for impacts related to development activities in the North Reach. The City further intends that the bank would be used by other parties requiring mitigation through programs such as Natural Resource Damage Assessment (NRDA) under CERCLA, and state and federal requirements of the Clean Water Act related to impacts to wetlands. The mitigation bank is under development and the feasibility of such a bank, as proposed, is uncertain (see October 12, 2009 memo from Windward Environmental to David Harvey, Gunderson LLC, for a discussion of the mitigation bank proposal).

The proposed crediting and debiting method would be based on pre-selected Habitat Suitability Indices (HSI), mathematically integrated through application of Habitat

Evaluation Procedures (HEP) to provide an input to the Habitat Equivalency Analysis (HEA). The HEA would be used to establish a baseline ecological service or habitat value of a property prior to and after implementation of a development project to determine the amount of habitat mitigation required to compensate for unavoidable impacts from the development.

Currently, the stated goals of the City's proposed approach to calculate debits and credits for any development action are to:

1. Be based on best available science, user-friendly, and transparent methods.
2. Meet mitigation requirements of other regulatory agencies such as State Lands and U.S. Army Corps of Engineers (USACE).
3. Ensure no net loss of natural resource function from development in the North Reach.
4. Use a method that is compatible with the Portland Harbor NRDA settlements.

Windward was asked to evaluate the City's proposed approach to determining the requirement for and subsequent value of mitigation actions for proposed development in the North Reach of the LWR. This memo evaluates the application of HSI/HEP and HEA in this context and discusses alternatives to HSI/HEP and limitations of HEA for assessing the value of habitat for restoration along the LWR.

Habitat Suitability Indices/Habitat Evaluation Procedures

Habitat suitability indices (HSI) and the habitat evaluation procedures (HEP) were developed by the U.S. Fish and Wildlife Service (USFWS) to help identify the impact of Federal actions on habitat. As such, each HSI model focuses on the habitat requirements of a target species (e.g., beaver), species life stage (e.g., juvenile Chinook salmon), or assemblage (e.g., salmonids, sports fish, etc.) selected to represent a given habitat. Each habitat requirement (e.g., percent cover of deciduous shrub) is scaled to provide a suitability index value between 0 and 1.0 to represent conditions from unsuitable to optimal for that species, species life stage, or assemblage. A suitability index value is assigned to each requirement and then the individual indices are mathematically combined to create a single HSI score for a given species and area. HSI scores from the models are assumed to have a one-to-one relationship with population density such that a parcel with an index score of 1.0 would support the same number of organisms as 5 parcels of the same size with an HSI of 0.2. Using HEP, the area of habitat is multiplied by the HSI score to determine the total habitat units for each species. The total number of habitat units for each species can be used as a "service metric" in the HEA. The equations combining the individual index scores for a given species or across species for a given habitat can include weighting factors to address the relative importance of various habitat attributes or sensitivity of the species being managed.

The City appears to have selected the representative species and habitats that will be evaluated under their approach and has developed specific values that will be applied to each index. The riparian model will be based on western pond turtle, beaver, wood duck, neotropical birds[1], and native amphibians[2]. The riverine habitat model will be based on juvenile Chinook salmon; the stream habitat model will be based on coho and steelhead. The upland habitat model will be based on three bird species: downy woodpecker, black-capped chickadee and American kestrel. In a deviation from the HSI/HEP approach, wetland habitat will be valued according to the Oregon Rapid Wetland Assessment Protocol. It appears that there is an underlying assumption in the City's approach that all habitat classifications provide services to the selected targets, regardless of actual site use or existing limits to ecosystem functions.

In the City's proposed approach, the final HSI score for each species is calculated as a simple mathematical average, as is the HEP score for a given habitat type. No information is available about how the City intends to integrate the HEP scores, if multiple habitat types are present at a given property or parcel. This deviates from some of the models developed by the USFWS that use various weighting factors for different indices (the affect of this approach has not been evaluated by Windward). In addition, it is not clear how the City intends to address the spatial component of the habitat quality evaluation.

The City's current proposal raises a number of concerns and questions regarding implementation. Significant issues are identified below:

- HEP procedures allow value judgments about the relative importance of species and habitats. These value judgments are currently not incorporated into the City's proposed approach; rather species and habitats are treated as equally valuable and do not reflect natural resource management mandates or societal values.
- There is an underlying assumption that the potentially affected parcels or areas in this part of the LWR currently provide significant ecological function when, in reality, the baseline condition of the properties within the North Reach are likely highly altered with limited ecological function or service. Any approach to evaluating habitat quality must be based on current conditions and the communities that actually exist rather than on historical conditions or prescriptive HSI inputs.
- It is important that the HSI/HEP approach be site-specific and representative of the habitats present in a given parcel or site, rather than be based on a

[1] The HSI for neotropical birds is a composite of the requirements for yellow warbler and green heron.

[2] The HSI for native amphibians is collectively based on red-legged frog, Pacific tree frog and roughskin newt.

standardized set of targets and calculations as appears to be the intent of the City's proposal.

- HSI targets for upland and aquatic sites should be site-specific and be representative of those habitats, including any sensitive and protected species and life stages (e.g., great blue heron rookeries, bat maternal colonies, sandpiper habitat) that may occur at a particular upland or aquatic site. The surrogate species selected by the City do not include a number of species that may be more representative of communities that actually reside in the LWR habitats.
- The indices for each species should reflect all key attributes that may affect habitat suitability. A number of the indices included in the City's proposal have been simplified and omit habitat requirements that are included in the USFWS models.
- The City has not stated their procedure for adding species and/or new metrics to their HSI/HEP approach, if other species and/or metrics are found to be more representative of a habitat and potential impacts from development. The currency or ecosystem valuation approaches are expected to evolve and improve over time as the ecosystem services field (i.e., restoration, management, and accounting) matures; the City should also incorporate explicit procedures for updating their approach.
- An evaluation procedure to address the areal extent of impacts or functions is currently not included in the approach nor is there any detail on how the models would be applied to each site being evaluated; in order to be effective the proposed approach must consider this.

Given current zoning and land use, rarely would a pristine habitat be converted to industrial use in the LWR; rather most properties have been subject to past or current industrial/commercial use. It seems unlikely that existing "target species habitat" patches would be of sufficient size and connectivity to allow meaningful use by target species. In these cases, "baseline" ecological service levels are very low or nonexistent due to past or current industrial/commercial use. Given a baseline condition of poorly functioning habitat in these cases, it is unclear how the application HSI/HEP approach would be able to identify an impact from development as most suitability scores would be near zero prior to proposed project actions. Other ecosystem services such as storm water retention, urban sediment removal, changes in impermeable surface area or water quality from runoff that may be provided by developed industrial properties are not captured by the City's proposed approach.

The City's current proposal does not appear to acknowledge the regionally based ecosystem credit calculator being developed by the Willamette Partnership. The City has participated, along with many Federal and state agencies and other stakeholders in

the development of this regional approach, which includes detailed methods of evaluating restoration and mitigation projects in a number of different habitats.

In addition, it appears as though the City's approach is intended to be an independent (and possibly additional) process rather than integrated with the regional approach to mitigation banking. How the City's current proposal will be integrated with existing development permit requirements has not been described.

Alternatives to HSI/HEP Ecosystem Service Accounting

The HEA is not exclusively dependent on HEP for initial values. Other methods are preferred to establish baseline habitat quality for input into HEA and many are currently included in the regional debit/credit calculator proposed by the Willamette Partnership. Most of these methods were summarized in Attachment C of the October 12, 2009 memo from Windward Environmental to David Harvey, Gunderson LLC. Current site conditions should dictate the accounting model or models applied to calculate debit or credit for scaling restoration. HEA is capable of aggregating the output from multiple ecosystem service accounting methods. Examples of other methods include:

- **Best professional judgment**—Washington State Department of Natural Resources recently used the HEA model to evaluate a series of restoration options for a historical log dump. Restoration targets and stressors were identified based on the natural resource conservation plan that had been development for the site and input from resource managers. Baseline conditions were established based on a consensus among managers most familiar with the site.
- **Wetland Evaluation Technique (WET)**—This technique was developed by the USACE for use in making wetland permit decisions. WET is a broad-brush tool that uses the presence or absence of a large set of wetland characteristics as correlative predictors of wetland functions. It is not designed to provide quantitative measurements of functional performance; rather, it is designed to predict the qualitative likelihood (high, medium or low) that a wetland performs given functions, to an unspecified degree. Functions include groundwater recharge, groundwater discharge, flood flow alteration, sediment stabilization, sediment/toxicant retention, nutrient removal/transformation, aquatic diversity and abundance, wildlife diversity and abundance.
- **Hydrogeomorphic (HGM) Methods for Wetland Assessment**— HGM has evolved into a technique that can be used to measure a large suite of wetland functions in a quantifiable, consistent manner across a large geographic region. HGM is a reference-based technique that develops a model for measuring wetland functions based on wetlands that are established as standards within that landscape.

- **Counting on the Environment's Salmon Credit Calculation Method**—The Salmon Credit Calculation Method calculates scores for six ecological functions relevant to optimal habitat for the range of salmonid species. The output of the metric is a weighted linear foot that is based on the percentage of optimal functions performed by the stream and near-stream habitat.
- **The Shade-a-Lator Model**—This model was developed by Oregon's Department of Environmental Quality to calculate thermal load reductions, in kilocalories per day per ft (kcal/day/ft), from riparian shade restoration projects.
- **Carbon sequestration calculator** (e.g., http://ncasi.uml.edu/COLE/)—This model was developed by the National Council for Air and Stream Improvement, Inc. (NCASI) and the USDA Forest Service Research Work Unit 4104 and it evaluated the forest carbon characteristics of any area of the continental United States and is based on USDA Forest Service Inventory data as well as other ecological data.
- **Nutrient uptake calculators** (e.g., http://www.nutrientnet.org/)—Nutrient Net is an on-line market for improving water quality through nutrient trading led by the World Resources Institute.
- **Prairie credit calculation**—This model was developed to provide a new rapid assessment method for upland prairie. The metric produces a function score between 0 and 1 that is used to weight acreage to generate function acres as a unit of trade.

Habitat Equivalency Analysis

HEA is a commonly used tool that compares lost ecological services and compensatory service gains to determine the proper scale, or size, of a restoration project. This tool allows the value of the restoration benefit to be scaled to the value of the loss.

HEA is sensitive to the temporal and spatial scale of an impact or mitigation action. The model requires several critical pieces of information when it is used to scale restoration services necessary to mitigate impacts to existing ecological systems. Key parameters include, but are not limited to, the restoration targets to be protected or restored, the spatial scale of the impact and/or the restoration, the ecological value of the restoration targets, and duration.

While HEA is flexible and can be used to evaluate many mitigation scenarios, it may not be the most appropriate approach to employ for all mitigation decisions. For example, linear features such as shoreline habitats and riparian corridors or impacts associated with rates (e.g., runoff, erosion, etc.) may be better evaluated using other techniques. Other habitat units, aside from areal measures, can serve as the basis for equivalency analysis, e.g., stream or riparian habitat miles.

HEA is sufficiently flexible that it may serve as a summation tool in the ecosystem services accounting process as generally proposed by the City, however many questions remain unanswered regarding the City's vision to implement this process. HSI and HEP are sources of information that may be useful as 'service metrics' in a HEA based process, but they are cumbersome and not required for use of HEA. There are many other issues that are left open, are not resolved, or are not discussed in the City's proposal. We have attempted to identify some potential directions and additional tools that might help the City in this pursuit.

Wind Ward environmental LLC

200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206.217.0089 • www.windwardenv.com

MEMORANDUM

To: David Harvey, Gunderson, LLC

Subject: Summary of uncertainties and limitations regarding the use of HSI/HEP for City of Portland mitigation decisions

Date: March 22, 2010

Summary

An evaluation of the proposed application of Habitat Suitability Indices (HSI)/Habitat Evaluation Procedure (HEP) in the River Review application was evaluated. Similar to the previously submitted December 6, 2009 evaluation, there remain significant uncertainties in the approach. In addition, the application of HSI process is outdated and requires a significant amount of time and effort to complete while not resulting in a different outcome than using other methods to establish of baseline conditions, such as current literature, site conditions, and assessment methods for input into Habitat Equivalency Analysis (HEA). HSI and HEP are sources of information that may be useful to develop 'service metrics' in a HEA based process, but they are cumbersome and not required for use of HEA.

The Portland Harbor Natural Resource Trustees (PHNRT) convened an 'expert workgroup' in December 2009 to develop descriptions of habitat requirements and normalization for Chinook salmon habitats in Portland Harbor. This information will be used to inform the PHNRT about habitat quality for Chinook as a keystone species in the lower river.

Discussion

The City's current proposal, regarding the use of HSI/HEP for mitigation decisions, raises a number of concerns and questions regarding implementation. Several significant issues related to the implementation of the credit/debit approach proposed by the City of Portland applying HSI and HEP were identified and need to be resolved prior to implementation. The following is a summary of recommendations previously presented; they are intended to clarify and improve the proposed credit and debit evaluation process.

- HEA is an appropriate summation tool to establish the value of ecological services, including habitat value (credit and debit), for determining mitigation requirements (credits/debits) for permitted development projects. HEA is sufficiently flexible that it could serve as a summation tool in the ecosystem services accounting process as generally proposed by the City, if appropriate methods for assigning habitat values or quantifying ecological services are used.
- Use of HSI and HEP as an input to HEA is not a requirement and the application of HSI and HEP, as proposed by the City of Portland, is not recommended. Alternatives such as the habitat description and use information developed by the PHNRT are available.
- HSI and HEP were developed in 1980 by USFWS and in the intervening 30 years, improved habitat indices and valuation models have emerged. The City's current approach does not acknowledge or incorporate the mitigation crediting and debiting system developed by the Willamette Partnership, in which the City has participated. The Partnership's work is a regionally-specific and scientifically sound method for assessment of baseline habitat and development of habitat credit over time. It is strongly recommended that the City incorporate and apply the Willamette Partnership credit and debit approach, along with Partnership's proposed process for evaluation and updating ecosystem service accounting. Additional methods for establishing baseline habitat quality were summarized in Attachment C of the October 12, 2009 memo from Windward Environmental to David Harvey, Gunderson LLC.
- The use of HSI and HEP does not fulfill the City's goal of providing a user-friendly and transparent method for evaluation of mitigation projects. Requiring the use of HEP, as proposed by the City, will significantly increase the permit application complexity and development time, without adding corresponding value. Application of HSI and HEP require significant effort resulting in much higher transaction costs for projects within the North Reach. The Army Corps of Engineers estimated a range of time required to assess a 1-acre site from 40 hours for a simple HSI/HEP study to 336 hours if models must be developed for a 1-acre site (http://el.erdc.usace.army.mil/emrrp/emris/emrishelp6/habitat_evaluation_procedure_and_habitat_suitability_indices_tools.htm). These estimates do not account for client-agency meetings to agree upon model parameters. As a result, this could add $50,000 or more to a project's transaction costs, if one considers a 336-hour level of effort at a consulting rate of $135/hour.
- There is an underlying assumption that the potentially affected parcels or areas in this part of the LWR currently provide significant ecological function when, in reality, the baseline condition of the properties within the North Reach are likely highly altered with limited ecological function or service. Given a baseline

condition of poorly functioning habitat in these cases, it is unclear how the application HSI/HEP approach would be able to identify an impact from development as most suitability scores would be near zero prior to proposed project actions. Any approach to evaluating habitat quality must be based on current conditions and the communities that actually exist rather than on historical conditions or prescriptive HSI inputs.

- The City's proposed HSI target species and metrics reflecting habitat impacts/benefits will be difficult to use to make meaningful decisions because they are highly prescriptive and do not allow for consideration of site-specific resource use or existing habitat quality. The surrogate species selected by the City do not include a number of species that may be more representative of communities that actually reside in the LWR habitats. Furthermore, the USFWS guidance (http://www.fws.gov/policy/870fw1.html) states in order to "avoid any possibility of confusion with the consultation requirements of Section 7 of the Endangered Species Act, no federally-listed endangered or threatened species should be used as an evaluation species in a HEP study." The City's proposed HEP model includes listed species, i.e., Chinook salmon and steelhead, and should be amended to conform to the standards set forth by the USFWS.
- No information is available about how the City intends to integrate the HEP scores, if multiple habitat types are present at a given property or parcel. This deviates from some of the models developed by the USFWS that use various weighting factors for different indices. In addition, it is not clear how the City intends to address the spatial component of the habitat quality evaluation.
- HEA is a commonly used temporal and spatial tool that compares lost ecological services and compensatory service gains to determine the proper scale, or size, of a restoration project. This tool allows the value of the restoration benefit to be scaled to the value of the loss. HSI and HEP are sources of information that may be useful as 'service metrics' in a HEA based process, but they are cumbersome and not required for use of HEA.
- Non-habitat services related to development, whether beneficial or not, (e.g., change in water quality due to alteration in impermeable surface area or rates of erosion) should be included in the City's proposed credit/debit approach.
- The indices for each species should reflect all key attributes that may affect habitat suitability. A number of the indices included in the City's proposal have been simplified and omit habitat requirements that are included in the USFWS models.
- The City has not stated their procedure for adding species and/or new metrics to their HSI/HEP approach, if other species and/or metrics are found to be more representative of a habitat and potential impacts from development. The

currency or ecosystem valuation approaches are expected to evolve and improve over time as the ecosystem services field (i.e., restoration, management, and accounting) matures; the City should also incorporate explicit procedures for updating their approach.

200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206.217.0089 • www.windwardenv.com

MEMORANDUM

To: David Harvey, Gunderson LLC

From: Ron Gouguet, Windward Environmental

Subject: Comments on National Marine Fisheries Service letter dated April 1, 2009 Stating Support of the City's Proposed Habitat Restoration Plan

Date: March 22, 2010

SUMMARY

The review of the letter was performed from the perspective of a person with 15 years of experience working for the National Oceanic and Atmospheric Administration (NOAA) as a natural resource NRDA trustee representative responsible for coordination of all NOAA authorities at coastal waste sites. The letter understates the entirety of NMFS authority in it habitat protection role. NMFS performs these duties under the authority of the Endangered Species Act (ESA), the Federal Power Act, the Fish and Wildlife Coordination Act, and the Magnuson-Stevens Fishery Conservation Management Act (MSA), among others. The NMFS Oregon State Habitat Office provides consultation on the Endangered Species Act (ESA) and on Essential Fish Habitat (EFH) for non-endangered species of commercially important species. There are other inaccuracies in the memo that are outlined further below. The conclusion, though, is that NMFS has much broader powers and much more detailed input on a broader set of issues and habitats than is alluded to in the April 1, 2009 letter.

DISCUSSION

The State Director, Oregon State Habitat Office, submitted a letter, addressed to Mayor Sam Adams et al., City of Portland, stating support for the City's proposed habitat restoration plan. Windward has provided a review of the April 1, 2009 letter summarized below.

¶ Paragraph 2, page 1 - The statement "These habitat changes along with **releases of toxic chemicals** (emphasis added) have contributed to the decline of salmon and steelhead species..." is not completely factual. While we agree that large scale physical

changes from a braided channel system to a navigation and flood control dominated system probably reduced the capacity of this area to support salmon, a multimillion dollar remedial investigation and ecological risk assessment did not identify risks to salmonids from hazardous substance exposure in the lower Willamette River.

¶Paragraph 1, page 2 - This summary of Endanger Species Act (ESA) critical habitat authority appears accurate, but does not represent the entirety of authorities under which NMFS fulfills its habitat protection role, for instance the Pacific Fishery Management Council (PFMC) has identified Essential Fish Habitat (EFH) for 3 species of Pacific salmon. This designation requires consultation with NMFS when habitat for any life stage may be impacted. Through the consultation process, NOAA Fisheries teams provide conservation recommendations to avoid, mitigate, or offset potential adverse effects to designated EFH resulting from any action undertaken, authorized, or funded by Federal agencies.
http://www.nwr.noaa.gov/Regional-Office/Habitat-Conservation/Oregon-State-Branch/

¶ Paragraph 2, page 2, 2nd sentence - According to the National Contingency Plan, NOAA is identified as a natural resource trustee for natural resources "... that are found in, under, or using waters navigable by deep draft vessels, tidally influenced waters, or waters of the contiguous zone, the exclusive economic zone, and the outer continental shelf." NMFS has a role in NOAA's Trustee program, but as part of the DARRP (Damage Assessment, Remediation and Restoration Program) with the National Ocean Service and NOAA's Office of General Council.

¶ Paragraph 2, page 2, 3rd sentence - Only authorities related to ESA listed salmon runs are noted. According to the Oregon State Branch web site:

> *"OSHO performs these duties under the authority of the Endangered Species Act (ESA), the Federal Power Act, the Fish and Wildlife Coordination Act, and the Magnuson-Stevens Fishery Conservation Management Act (MSA), among others. OSHO conducts ESA section 7 consultations and MSA essential fish habitat consultations with Federal agencies (e.g., U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Federal Highway Administration, U.S. Coast Guard, etc.). Another primary task is assisting non-Federal entities as they develop ESA section 10 habitat conservation plans (HCPs). OSHO also provides guidance and support to non-Federal entities such as cities, watershed councils and Oregon governmental agencies as they develop ESA compliance plans under ESA Section 4(d) limits."*

¶ Paragraph 2, page 2, 4th sentence - It is purely speculative and premature to try to estimate how much Portland Harbor injury to natural resources due to hazardous substance exposure may exist and thus how much compensation might be required at this time.

¶Paragraph 2, page 2, 7th sentence – The statement is wrong. If the trustees successfully complete a NRDA for the Lower Willamette River Site and sums are secured as part of the settlement, "Natural resource damages are required to be used to "restore, replace, or acquire the equivalent" of injured resources. Such restoration, replacement or acquisition of equivalent resources can also compensate the public for lost services provided by those resources". The damages recovered cannot be sued for remedial purposes.

¶Paragraph 3, page 2, 2nd sentence – A review of NMFS authorities finds that their involvement in the consultation process under essential fish habitat (EFH) is governed by the expansive phrase "any action undertaken, authorized, or funded by Federal agencies". Any action requiring USACE permits triggers NMFS participation, even if the permit is issued to a private party.

¶ Paragraph 3, page 2, 5th sentence – In light of the previous comment, being limited to federal actions is a very broad jurisdiction. It is unclear why this letter ignores EFH consultation on the three species of Pacific salmon for which fishery management plans (and designated essential fish habitat) exists.

¶ Paragraph 3, page 4, – It is inappropriate for a federal agency such as NMFS to support a fee-based program being considered by the City of Portland. A policy determination such as this seems beyond the authority of the State Director of the Oregon Habitat Office.

WWC Submittal

Appendix 7 – WWC Member Testimony from December 17, 2009 Open Meeting

183694

Alan Sprott
Opening Remarks
River Plan Forum
December 16, 2009

Good evening, Mayor Adams and Commissioner Fritz.

I appreciate the opportunity to speak with you about Portland's working harbor and the River Plan, and to join Chet Orloff in helping tell the story of our working waterfront, and its importance to Portland.

I also want to thank city staff, particularly Ann Beier and Patti Howard, for taking time to tour the working waterfront and engage with us in a meaningful discussion about how best to proceed with the challenges of achieving our common goals for the river.

I am here tonight representing the Working Waterfront Coalition. Our members include manufacturers, exporters and importers, energy storage and distribution companies, the railroads, barge builders and operators, aggregate firms, and a ship repair company.

We are here tonight to support the vision and goals of the River Plan. Our members firmly believe that we can improve the quality and environmental functions of the river in the North Reach, and maintain a prosperous working harbor providing opportunities for continued job growth and creation. The proposed River Plan offers many features to reach this goal.

We support the creation of enhancement sites, strategically located along the river, where resources can be focused to make meaningful improvements in the North Reach. We support paying a vegetation fee equivalent to 1 percent of a new project's cost to help fund improving these enhancement sites.

We also appreciate that the River Plan will eliminate land use reviews for some projects that are now subject to the outdated Greenway Review.

Yet, while we support the River Plan goals, we remain concerned that the implementing tools, most specifically, the River Review, will prevent all of us from achieving our collective goals of a prosperous and healthy working harbor.

I will not repeat the content of our November 30 letter to you, but let me highlight the most critical of our remaining issues. That is, the River Review process. It will add cost, complexity and uncertainty to precisely those kinds of projects that are possible only in the working harbor.

We are not looking for a pass from mitigating the impacts of our projects. Most projects subject to the proposed River Review will be reviewed and permitted by nine federal and state agencies staffed with experts in natural resources. The city will be at the table as it is now. But the expanded submittal requirements, the expanded review process, and the uncertainty presented by this proposed new process will discourage precisely the kind of investment the plan seeks to protect and promote, and that will be the primary funding mechanism for the natural resource enhancement program.

We respectfully request that together we revisit the River Review process, and seriously consider our offer to help invest in the resource enhancement sites through the proposed fee-in-lieu. In the end, every site subject to River Review will require mitigation that will predominantly occur at an enhancement site. Consequently, we should not impose unnecessary process and cost on development projects, and instead get the resources to enhancement sites where they will do the most good.

Portland's industrial waterfront is a tremendous asset to the region that is little known to most people. Over the past century, the North Reach has developed into a highly interconnected collection of marine, transportation, and manufacturing companies employing enough people to fill the Rose Garden Arena, twice. Most of the activity in the North Reach is traded sector, and the wealth that our businesses bring into the region contributes significantly to the high quality of life that we all enjoy.

Our capacity to grow and prosper depends in large part on our ability to rapidly seize opportunities and compete. As a region, we have to realize that we are all in this together, and that we are competing with literally hundreds of other communities around the world to capture business and economic development opportunities. As such, we can not and should not, unnecessarily handicap our businesses and economic development institutions like the Port of Portland from competing. Otherwise, all of us will suffer for it, and in the end the river enhancement projects we all seek to accomplish will not achieve any of our expectations.

Again, thank you for your time. The River Plan will profoundly impact the future of Portland's working harbor. We need to get it right, and I commit to work with you to find the right balance so that the vision and goals of a thriving river and prosperous working harbor can be achieved.

Good evening Mr. Mayor and Commissioner Fritz. Thank you for the opportunity to speak to you tonight.
My name is Glenn Dollar. I'm an Environmental, Health and Safety Manager for the Ash Grove Cement Company operations here in Portland.
Ash Grove Cement Company is the largest American owned cement company in the United States. The Company began operations in 1882 and is still owned by the same family.

We have two water dependant facilities located in the Portland Harbor.
One is located in Lower Albina; and the other is in the Rivergate Industrial Park.
The Albina facility sat vacant for a number of years until it was purchased by Ash Grove Cement Company in 2005 and with substantial financial investment restructured for importing cement. The Terminal now has a capacity of 25 ships per year each loaded with approximately 40,000 tons of cement from foreign ports.

The Rivergate plant receives raw materials by barge from an island in the Straights of Georgia which is part of the Province of British Columbia. Over the last 5 years we have averaged 40 barges per year with each barge transporting approximately 12,000 tons of limestone.

One interesting fact about our business that you may not know is that since 1998 the Rivergate Plant has been using landfill gas from the St. Johns landfill as a source of fuel for drying our raw materials. Through a unique public-private partnership with Metro we have been able to save energy and reduce the emission of greenhouse gases.

Many of the materials we import are the building blocks for our region. Our products are used in the manufacture of roofing shingles, there used in agriculture as a soil additive, and there used for building roads, bridges, and transit malls, or they could be used for an expansion at Portland State, or a new wing at a hospital.

Even with the current economy, Ash Grove continues to explore opportunities for the Rivergate facility. The River Plan will play a role in these discussions. Mr. Mayor and Commissioner Fritz we are here tonight to encourage you to adopt regulations within the River Plan that will not deter investments in our facilities located in the Portland Harbor.

We, like the majority of companies within the Portland Harbor, pride ourselves on being good companies to work for providing family wage jobs and benefits. We support investing in the enhancement of natural resources within the Portland Harbor; we support the cleanup of the river, and balanced goals within the River Plan. We believe a mitigation bank would realize greater environmental benefit and be more cost effective if administered by a third party with a successful mitigation track record. We also have concerns river review will further complicate the permitting process and add considerable delays and expense to any future development.

Again, Mr. Mayor, Commissioner Fritz, Thanks for the opportunity to comment this evening.

City Council "Listening Post" on the River Plan, December 16, 2009

Good evening. I'm Bob Short, Public Affair Manager with CalPortland, formerly known as Glacier Northwest. I'm also a member of the Working Waterfront Coalition, the Portland Freight Committee, and this year I'm the Board Chair of the Oregon Concrete and Aggregate Producers' Association.

To those of you familiar with my company, we changed our name a year ago, but we're the same company. We operate in seven western states and British Columbia. We are the largest supplier of aggregate, sand and gravel, ready-mix concrete and cement in the Pacific Northwest, and in Portland Metro, and provide approximately 400 mostly high-wage, full-benefit, blue-collar jobs to the economy.

CalPortland has been recognized by the EPA as one of the top 5 on-site alternate-energy users in the U.S. In 2008, CalPortland's Mojave Cement Plant completed a "behind-the-meter" wind project that to date represents the largest such renewable wind project serving a manufacturing facility in the world. CalPortland has received the Energy Star Award from the EPA for each of the past 5 years, and we are an Energy Star Partner. In Portland we have invested millions of dollars over the last 15 years to improve process and stormwater management systems. Not even rainwater leaves our sites untreated. I say this to emphasize that we take our environmental responsibilities seriously.

We're in the construction materials business: cement, rock, and concrete. This is a foundation industry (no pun intended): we provide the raw materials for the construction – and maintenance – of our infrastructure. What we do fills a public need. We are located in the Harbor because it is the local equivalent to Rome. All roads – and railroad tracks – lead to the North Reach. The Willamette River is not only Portland's front yard, it's the front door. It's not too far-fetched to say that the Harbor is why Portland is *here*, instead of in Oregon City, or St. Helens, or Astoria...or Seattle.

CalPortland is a multimodal company. Our Lower Albina cement facility is an international terminal. We import cement and distribute it to customers locally and throughout the Northwest via road and rail. We sit at the hub of the state's transportation system.

Sand, gravel, and concrete on the other hand, are all strictly local operations. Ready-mixed concrete has a shelf life of about an hour and a half. Aggregate, because it is both heavy and cheap, cannot economically be transported very far. In a report commissioned by the Governor's office, Professor William Jaeger of Oregon State University estimated that the incremental cost of trucking aggregate at 22 cents per ton-mile.

All of the sand, gravel and crushed rock consumed in Portland – about one dump truck per person per year – comes from somewhere else. A lot of it gets here by barge, saving a significant chunk of that 22 cents a ton-mile, not to mention reducing our carbon footprint. At

our concrete batch plant and aggregate yard at NW Front Avenue and Kittridge, we barge aggregates in from Columbia County,. One barge equals 100-150 dump trucks.

A couple of years ago, Mayor Adams pointed out that the City is more than $400 million behind on street maintenance. Without the ability to barge material into the harbor, that price tag would be a lot steeper. It takes pretty close to a ton of rock to make a ton of asphalt, and more than a ton and a half of sand and gravel to make a cubic yard of concrete. And by the way – it's estimated that building a mile of light rail requires approximately 15,000 tons of sand, gravel and crushed rock.

The point is that the demand for sand, gravel, concrete and cement exists independently of the ability of CalPortland and others to provide it. We are committted to providing those products and services in an environmentally responsible way. We are also in a highly competitive business with little margin for either error or waste. If, for whatever reason, operating in the Harbor becomes untenable, the demand will still be there, and the business will still get done – by us or others. The cost of that, both economic and environmental, is at this point unknown.

We support the original goals of River Renaissance. We do not believe what is before us tonight meets those goals, either for a prosperous working harbor or in a habitat restoration. We believe that the River Plan as it is will stifle development – not only growth but modernization. If industry is to pay for habitat restoration through fees for development, industry must be able to thrive.

We have heard a lot of "either/or" tonight in discussing the future of the river. We won't be done until we can get to "and."

Very truly yours,

Bob Short

Bob Short
Public Affairs Manager
CalPortland Company
1050 N. River Street
Portland, Oregon 97227
Phone: 503.335.2614
Fax: 503.331.3700
bshort@calportland.com

183694

Chet Orloff Comments
River Plan Public Forum
December 16, 2009

As an applied historian having followed river planning for most of my career, I ask the question:

"How can we apply the history of our great river to achieving agreement about equally great plans for its future?"

1. Certainly, historians agree that since people first settled along the banks of the Willamette several thousand years ago, it has been a working river. It's been used for trade, for food, for transportation. Along its banks people worked and lived. The concept of a "working river," in any number of terms and languages, has been invoked for millennia. But the far more-intriguing fact is that those early riverside people represented several different nations and languages, yet they still managed to share the rivers' resources.

2. But it's really been only for the past 200 or so years that life along the Willamette might be what we like to call here "intentional," in other words, planned and purposeful. And that intentionality has become a widely agreed-upon principal for planning our city. Intentionality has, historically, taken incredible foresight and time – both of which have been and must continue to be applied to whatever plans we make for the river's future

3. Since the end of the 19th century—as dock, bridge, and dam builders / farmers, shippers, and manufacturers / biologists, land-use planners, and builders of plants or parks—have been changing the Willamette, predictability has been an ever more critical element. Predictability—Certainty—whether for economic development or natural preservation, is the quality that has driven, and supported, the best plans. And, to build certainty into planning takes bedrock agreement around the entire planning table. Let's admit it; we're making progress and I'd recommend bringing the Oregon Solutions group into the process right now.

4. We have now seen six generations of Portlanders—from Eliot and Hawkins to you here tonight—who have made plans for our river. In varying degrees, all have succeeded, as well as failed. None of the successes, however—and by success I mean those plans that have lasted—have been achieved without seemingly countless meetings and endless amounts of time. It's the nature, and the history, of good planning in Oregon. By-and-large, the plans that have worked, and continue to work, have had near-universal buy-in.

As I read the proposed plan, the editorials and articles, the letters and testimony, my historian's take on the process—and I say this as someone who has participated in my own share of long planning processes—is that, for this one, we've still a ways, albeit a short ways, to go. It's not an apology, simply an historical observation. Thank you.

183694

KINDER MORGAN
LIQUIDS TERMINALS LLC

Pacific Northern Region - Northwest
5880 N.W. St. Helens Rd., Portland, OR 97210
503-220-1240 PHONE
503-220-1249 FAX

December 16, 2009

Sam Adams, Mayor
Commissioner of Finance and Administration
City Hall – Room 340
1221 SW 4th Avenue
Portland, OR 97204

Dear Mayor Adams,

Kinder Morgan Liquids Terminals LLC (KM) owns & operates two petroleum terminals along the North Reach of the Willamette River in Portland. These facilities are part of the energy cluster in Willbridge & Linnton that handles more than 95% of the total volume of liquid fuels used in Oregon. As you know, Oregon has no petroleum refineries (other than a small asphalt plant) and must therefore "import" virtually all of the liquid fuels consumed in the state.

KM also owns & operates two pipelines in Oregon: a 114-mile line used to transport gasoline & diesel-fuel from Portland to Eugene (with an additional terminal in Eugene); the other an 8.5-mile line used to deliver jet fuel from the Willbridge area through North Portland to Portland International Airport (PDX). The company also conducts several dry-bulk handling operations in Portland and the surrounding area.

The two petroleum terminals have been in operation for many years. Since acquiring the facilities in 2001, KM has invested more than $30 million for connectivity, asset-integrity and renewable-fuels' handling improvements (with no city, state or federal subsidies or credits). The Oregon Line (Portland to Eugene) is one of the few multi-product pipelines in the U.S. used to transport finished biodiesel (B2). This allows fuel suppliers to comply with state-wide biodiesel requirements in a relatively efficient & cost-effective manner. KM will undertake more investments & improvements to this **critical infrastructure** if & when it's economically justifiable to do so.

KM supports natural resource restoration along the Willamette River. The company is willing to pay more in up-front development costs to help make this happen. What KM is not willing to do is to pay unreasonable & unjustifiably-high additional development costs for this purpose. We also need a permitting-environment & approval process that's not more cumbersome & complex than that which exists today. We likewise believe that the city needs to eliminate, not increase, conflicting land-uses in heavy industrial areas along the working waterfront.

The River Plan for the North Reach, as proposed today, does **not** meet balanced criteria with respect to additional fees, a more-streamlined permitting process, or avoidance of land-use conflicts…all basic tenets of the River Plan as originally envisioned.

Unfortunately, as proposed today, River Plan's cost is far too burdensome; the River Review process is duplicative (especially for in-water development) & too uncertain; and operational-constraints & conflicting-uses are likely to be exacerbated (e.g., a proposed greenway trail immediately adjacent to our Linnton terminal; a proposed restoration site next to our dock and other docks in the main North Reach tanker basin). As proposed today, River Plan will **discourage** investment in industrial & energy infrastructure along the North Reach, and, ironically, will **undermine** the city's efforts to improve natural resource habitat in the area.

We've participated throughout the River Plan process to help achieve balance, and will continue to do so. However, despite the professed openness by city officials & staff to consider a more balanced approach to River Plan, it appears that natural resource enhancement is the only real driving-force behind River Plan…this for the industrial North Reach. We agree that Portland can be both green and prosperous. But you and other city commissioners must insist that a more pragmatic approach be taken to River Plan if it's to work. Otherwise, it will backfire on the city in terms of investment, job growth and sustainability.

We respectfully urge re-consideration and modification of key elements of River Plan before the city adopts any code amendments. In this regard, the Working Waterfront Coalition has offered many useful ideas, fact-based proposals & sensible compromises throughout the River Plan development process. Please re-consider these to arrive at a plan & policy that's realistic & workable.

Sincerely,

KINDER MORGAN LIQUIDS TERMINALS LLC

R. H. Mathers
Director Business Development – Northwest Terminals

Cc: Amanda Fritz
Nick Fish
Randy Leonard
Dan Saltzman

Testimony for City Forum on River Plan – December 16, 2009 (R. Mathers)

My name is Rob Mathers. I'm speaking on behalf of Kinder Morgan which is a member of the Working Waterfront Coalition.

Kinder Morgan owns & operates two petroleum terminals along the North Reach of the Willamette River in Portland. The company also owns & operates two pipelines in Oregon: a 114-mile line used to transport gasoline & diesel-fuel from Portland to Eugene (with an additional terminal in Eugene); the other an 8.5-mile line used to deliver jet-fuel from Willbridge to Portland International Airport. *(Volumes handled on these pipelines equate to ~300 truckloads per day of fuel that would otherwise travel on I-5 and I-84).*

The two petroleum terminals have been in operation for many decades. Since acquiring the facilities in 2001, the company has invested more than $30 million for connectivity, asset-integrity & renewable-fuels' improvements…with no city, state or federal subsidies or credits. Ongoing renewal of this critical infrastructure is a necessity; we'll continue to invest if it makes sense to do so.

We're in **favor** of natural resource restoration efforts along the Willamette River. We're willing to pay **more** in up-front development fees to help achieve this. However, we need for the city to do three things:

- You need to ensure that additional development costs are reasonable
- You need to make permitting less cumbersome & more certain;
- You need to eliminate potentially-conflicting uses.
- *(BTW, we're not asking the city to relinquish any jurisdiction)*

River Plan, as proposed today, does not meet these requirements. River Plan's cost is too burdensome; the River Review process is duplicative & uncertain; and conflicting-use is actually encouraged in some instances. A proposed greenway trail immediately adjacent to our Linnton facility is an imprudent idea. A proposed restoration-site within the North Reach tanker basin in Willbridge, immediately downstream of our marine dock and other petroleum docks, is another example of potentially-conflicting (or at least potentially-constraining) use. If adopted as currently proposed, River Plan will **discourage** investment in industrial & energy infrastructure, and will **undermine** the city's efforts to improve natural resource habitat in the area.

We respectfully urge re-consideration & modification of key elements of the River Plan so that the Plan is realistic & workable.

Thanks for your attention Mayor Adams and Commissioner Fritz.

183694

Jerry Grossnickle

CFO, Bernert Barge Lines, Inc.
Member, Portland Freight Committee
13510 NW Old Germantown Rd.
Portland, OR 97231
Phone 503-289-3046
E-mail: jerrygbw@aol.com

December 16, 2009

Mayor Sam Adams
Commissioner Amanda Fritz
North Reach Town Hall

Dear Mayor Adams and Commissioner Fritz:

Who is Bernert Barge Lines?
Bernert Barge Lines has been operating on the Willamette and Columbia river system for over 100 years. We are a family business with deep roots in Oregon and a profound appreciation of the Willamette River and the Portland harbor. We barge rock products to the sand and gravel companies in the North Reach, steel products for recycling at Schnitzer Steel, and we have barges built at Gunderson.

A few years ago Gunderson built our largest barge, an 8,000-ton self-offloading gravel barge. To put this in perspective, that's 400 20-ton dump trucks of rock.

Barge Efficiency
One modal measure of fuel efficiency is how far you can move a ton of cargo on a gallon of fuel. In terms of national averages, the US Maritime Administration says trucks move one ton 155 miles on one gallon, rail 419 miles, barge 576 miles.

Trade - Portland's Economic Engine
So what does this carrying capacity and fuel efficiency have to do with the River Plan? For one, it helps explain the tremendous value of the Portland harbor to our economy. Because moving products by water is so energy and cost efficient, and because our river system provides access to ocean-going vessels, Portland has become the important trading center that it is.

Access to the River
But in order for products to move on the river, you have to be able to load to and from the land. Loading docks are absolutely essential. I did a quick survey of the dock facilities we use and found that over 80% of our cargo comes from or is delivered to private docks, several of them in the Portland area.

New River Business
We are currently talking with a company in the North Reach about beginning a new barge service taking about 7,000 tons or 4 container-barge loads a month on the river. This would replace about 235 truck-loads. Our boats are powered by diesel engines that are similar to truck engines, and our typical boat has the horsepower of about four trucks. So in essence, every month these four engines would in four voyages be doing the work of 235 truck trips. That's a tremendous savings in road wear, congestion, emissions, and the carbon footprint.

Effect of River Plan
So why am I telling you this? In order to move our customer's product by barge, they will need to expand their dock facility. Under the proposed River Plan the added costs and added review time may result in a no-build decision. The capital costs of this project are high, running into the millions of dollars. Consequently the fees, particularly the off-site mitigation fees, may be very high as well, too high for the project to pencil out.

Portland's Climate Action Plan
I would like to refer you to Portland's Climate Action Plan 2030 Objective 7:

> "Central to the efficiency of the freight system is the location of industrial areas and the integration with the regional transportation system. The Portland area is a major freight hub, with strong shipping, rail, barge and highway interconnections. Minimizing emissions from freight movement requires protecting these facilities and continuing to connect them to the transportation system."

A New Approach
This statement suggests an approach to the River Plan that I would like to recommend. Where we have docks and land uses that are dependent on river traffic, we ought to protect and encourage them as much as we can, for these intermodal connections are vital to our region's prosperity and can sometimes be key to transportation efficiency.

Encourage River Transportation
So for example, when a project comes along to increase dock capacity, especially if it will result in transportation efficiencies like modal shifts from truck to barge, Portland should encourage such a project with whatever assistance it can provide. We most definitely should not discourage such a project with high fees and unnecessary regulatory hoops.

Site-specific Environmental Projects
So what do we do about the environmental health of the harbor? There are many river frontage industrial properties that are not dependent on the river for their business operations. We should concentrate our remediation efforts on shoreline and waters adjacent to these lands. I like the Bob Salinger formulation of environmental pearls, places that migrating salmon and steelhead can use to rest and feed, strategically placed along the river.

Both Efficient Transportation and Pearls
We should strive to have the best possible connections to river transportation while at the same time restoring suitable riverfront sites and creating new habitat where possible to benefit native and endangered species. The riverfront doesn't have to be all one or all the other. We can have a highly efficient and competitive transportation system, and we can have ecosystems that work, all within the North Reach.

Funding from Fees and Taxes
Let's come up with a reasonable plan to do both. Let's not have a regulatory system and fee structure that discourage efficient water transportation, and let's target fees that, combined with tax support from the broader public, are specific to well-thought-out riverfront projects that can be shown to significantly benefit native and endangered species.

Thank you.

Good evening.

Dave Harvey, Gunderson LLC and The Greenbrier Companies.

Thank you Mayor Adams and Commissioner Fritz for this forum. Mayor Adams, thank you also for recently facilitating several meetings between interested parties to begin the process in reaching a workable solution.

Gunderson supports a balanced revision to the Greenway Code where the environment improves if workers and businesses succeed.
That is we support a River Plan that will promote a healthy working harbor, achieved through the principles of sustainability.

The principles are:

- Environmentally beneficial
- Socially desirable
- Economically viable

I think we all agree on this as the objective. I hope we do.

Sustainability is a three legged stool where to be successful in the long term; all three attributes must be optimized.

The current version of the proposed River Plan is more like a unicycle, focusing almost exclusively on the environment, with little chance to provide any long term environmental benefit.

Let's consider <u>socially desirable</u> for a moment.

- Socially desirable – in this case jobs, because jobs are at stake. At our site alone 1,000 family wage jobs. 1,000 family wage jobs on average. Think about it. 1,000 family wage jobs.
- The problem with the proposed River Plan is that it puts some portion of these jobs in jeopardy.
- Others may be willing to risk those jobs for the environment to TRY a new process, but we are not, because it is NOT necessary to do so.

We can all win; let's make sure we do.

As to economically viable – Our CEO has said:

- The Greenbrier Companies is committed to being a US based manufacturing company.
- We are committed to trying to be a Portland based company, even though there are cost disadvantages in being located here.
- There are disadvantages to overcome by being in Portland, including, geographic distance from some key markets and a very short window to perform work in the water.

Environmentally beneficial - Why should you believe Gunderson when we say that the environment is important to us?

- Because we walk the walk.
- This year, in the worst economic conditions that have ever faced our company, we spent $250,000 to protect and enhance the quality of the land along the river.
- We spent ANOTHER $130,000 on water quality improvement project.
- No one said we had to, we just did it.
- Why?
- Because we care and we want to improve our environmental performance.

For us to all win, we CANNOT simply spend more money at will on improving the environment.

In order to be sustainable, the environmental benefit must be tied to jobs and improved economic performance.

How do we achieve sustainable environmental improvement?

Through a River Plan that will work.

If we succeed, if our workers succeed, the environment succeeds.

There are a number of issues with the proposed River Plan, many of them very detailed.

They have been the subject of significant correspondence and proposals over the last 8 months, and very few of them have been acted upon.

- Conversion of industrial property
- A process that is complicated and duplicative.
- Proposed mitigation fees are not proportional to actual impact.

The best example of the process that is broken is the City's insistence in approving work that occurs below the Ordinary High Water Mark.

- This is duplicative of multiple state and federal agencies.
- We have demonstrated that, for a project whose impact is below OHW, if you do what is good for the salmon, you will do what is good for the environment.
- We are willing to spend money; we are not willing to waste money.

This is a failed leg on the three legged stool.

We either win together or we fail together.

How do we change the River Plan so that we all win?

- Streamline the process – eliminate duplication
- Avoid unnecessarily complex analyses – Like use of the Habitat Evaluation Procedures.
- Tie mitigation fees need to be proportional to the impact – not 10X what that impact is.
- We are offering to pay higher fees than we do now – 1% of project cost for enhancement and another fee in lieu based
- The timeline for the process cannot expand the current time frame.

If we do those things, we will see an improved environment and a healthy, WORKING harbor.

If we do those things,

- workers will win,
- businesses win, and
- the environment will win

Good evening, Mayor Adams and Commissioner Fritz. My name is Jamie Wilson. I am the Regional Director for the Metals Recycling Business of Schnitzer Steel Industries and a member of the Working Waterfront Coalition.

Mayor, you have been to our facility near Rivergate. Commissioner Fritz, I don't believe we have had the pleasure, but Patti Howard and Ann Beier have been to our site and we very much appreciate their interest in our sustainable business.

Each year, we process and recycle almost one million tons of end of life scrap metal. This processed scrap is then either sent to our steel mill in McMinnville or shipped to mills in the Far East for melting into new steel products. About 75% of our scrap is exported over seas, and we loaded 18 vessels at our site last year, and will load another 18 this fiscal year; each ship on average has 30,000 tons. Additionally we transfer via barge on the Columbia and Willamette rivers 40 barges / year with 2,000 tons average / barge.

Making steel from recycled scrap saves 74% of the energy used to make steel from iron ore. We help this community meet its recycling needs, and metal recycling is a sustainable industry.

Schnitzer did not own our Rivergate site until the 1970's, in fact the city once owned a good part of our property. This site has been used for a variety of industrial purpose for decades; as you know the site was a Kaiser shipbuilding yard that produced Liberty ships to help with the war effort.

Schnitzer has plans for our site. Two years ago, we installed a mega shredder as part of a $70 million multi-year investment strategy. We also just completed Phase I of our stormwater system that reduced our outfalls to the river from 22 to 9, and our future multi million dollar investments over the next two years will reduce that further to just two. Nobody told us to do this job, we're investing because we care about the environment and it's the responsible action to take for our business.

Going forward, we hope to be able to build a new regional office building, large scale rail upgrades, a purpose built recycling facility to replace the aging ship buidings, and other production and technological efficiencies. Our goal is to reduce our physical and carbon footprint. Not only do we want to increase our own metal recycling capacity, but we also want to free up some of our land for other water dependent users or business development.

But we are just about at capacity without additional dock facilities and we will need to continue our infrastructure upgrades to grow the business. We have shared with you one option for a new dock in the Willamette. Another idea under consideration is a bulk loader, barge unloading facility, and dolphin repair and/or replacement. However, if the permitting cost, time and complexity are as our consultants have advised us it will be under River Review, it is unlikely that our board will look favorably on these additional capital expenses because we won't be able to expand our business sufficiently to create an acceptable return on investment. Consequently, capital plans may get diverted to other markets in other cities on the west coast and we may move our material and operations elsewhere if we cannot be competitive.

Let me hasten to add that we support the goals of the River Plan to enhance the environment and sustain a prosperous harbor, and we will continue to work with you to improve the draft zoning code so that our business, and other river dependent businesses like ours, can expand, create new industrial jobs and ensure a prosperous working harbor for generations to come. Thanks for your time and consideration.

Submitted Comments
Portland City Council
River Plan Hearing
Wednesday, December 16, 2009

Mayor Adams, Commissioner Fritz:

My name is Jeff Swanson, and I am the Logistics Manager for Schnitzer Steel in Portland and vice chair of the Portland Freight Committee.

Industrial and freight mobility interests support the goals of the River Plan – a healthy river system for all stakeholders. The practical mechanism for balanced attainment of those goals is clearly at issue, and so it is wise to take more time as you have determined to do to examine policy impacts, ecological and economic.

As a regional hub and global magnet, Portland is a unique place. It is situated at the confluence of natural geography such as the Cascade and coastal mountain ranges, the Columbia and Willamette Rivers, and important built transportation infrastructure like US Interstates 5 and 84. It is served by two major trans-continental railroads, the Union Pacific and BNSF Railway. It is the trans-loading hub of a vast inland waterway network connecting the Inland Empire Region with the Pacific Rim. Vast quantities of goods pass through Portland, some of which are vitally important to feeding large portions of the world's population, and they are loaded from trains and barges to ocean-going vessels in the North Reach of Portland's working harbor.

Portland is truly a dynamic, complex, and vital multi-modal highway, rail, and marine transportation hub. Many of the connection points between modes that make this hub function occur on private industrial lands in the North Reach. It is critical

that these businesses continue to be able to invest in the infrastructure that allows for selection and use of the most cost-effective and sustainable modes of transportation available.

As we look for ways to reduce our carbon footprint, one of the most effective methods is to shift modes of transportation. For instance, Schnitzer could potentially shift a large volume of shipping from truck to barge, reducing highway congestion, carbon emissions, and transport costs were our dock facilities not already near capacity with other traffic. This project alone would take 235 truckloads per month off the highways. Doing this would require construction of additional dock facilities on site.

Jamie Wilson, my boss, mentioned the difficulties involved in securing capital for major construction and expansion projects. These projects are extremely sensitive to permitting time length and cost, as to whether or not funding can be obtained, issues which are likely to be exacerbated in a policy environment under the River Plan in its present form.

In a broader sense then, the River Plan could have some unintended effects, such as causing increased systemic reliance on truck transportation to move goods that could otherwise move by different modes such as marine. This could directly conflict with other important policy pursuits, like the City's Carbon Action Plan goals and objectives. We think it would be well advised to take more time and explore with stakeholders and staff the potential impacts of the policy to all aspects of the region, from employment, private business investment levels, and freight mobility to ecological metrics.

I appreciate your time, leadership, and thoughtful attention to this important discussion.

183694

a Genesee & Wyoming Company

December 9, 2009

Mayor Sam Adams
City of Portland
1221 SW 4th Avenue Room 340
Portland, Oregon 97204

Dear Mayor Adams:

I would like to take a moment to introduce myself as the President and General Manager of the Portland & Western Railroad ("PNWR") and offer my credentials to you as a third generation and career railroad employee who grew up in Tacoma. I understand you too are from a railroad family, so I am certain you already have a keen appreciation for the role rail transportation plays in the City of Portland, as well as throughout the Pacific Northwest and North America. I look forward to the opportunity to meet with you in person to swap stories about our railroad families and backgrounds.

Since we unfortunately have yet to meet face-to-face, I'd like to offer my thoughts regarding The River Plan as it makes its way toward adoption and implementation. As you are probably aware, PNWR operates as a short line railroad in northwest Oregon and the Willamette River Valley with over 500 track miles of routes in this region Our lines offer cost effective rail transportation of commercial products and operate in the City's Linnton community with the industrial interests along our route paralleling the North Reach. We are proud to be part of Oregon's economy and look forward to our continued partnership with the City, as well as a prosperous future.

The safety of every employee, every customer and every citizen along our lines is the highest priority for the company and represents the greatest challenge I face as President and General Manager of PNWR. For that reason I have visited with both Sallie Edmunds and Shannon Buono regarding the proposed walking trails along our line in the Linnton area to discuss the proposed trail alignment. I am extremely concerned about the potential hazards to public safety that develop when any person crosses a rail line at grade. The current proposed trail alignment in Linnton indicates several at-grade trail crossings of railroad tracks and PNWR is seriously opposed to any such configuration. I conveyed this same message to Shannon and Sallie when we met and want to make certain you are aware of this concern as well.

Portland & Western Railroad, Inc. 200 Hawthorne Ave. SE, Ste C-320 Salem, OR 97301 503-365-7717 FAX 503-365-7787

I have personally dealt with developments such as trail alignments many times during my career and believe solutions can be developed which reduce the risk of creating a public safety issue. I suggested to Sallie and Shannon that if PNWR could obtain a more detailed map of the area's proposed trails and at-grade crossings of PNWR tracks, I would work with my civil engineering team and ODOT-Rail Division to offer alternative configurations. That offer still stands and in the meantime, you should know that I've extended an offer to help the City achieve its goals regarding walking trails along the North Reach, if done along the same lines as Benton County is utilizing on its proposed Corvallis to Albany trail. I trust we will be able to partner in developing reasonable alternatives to the current proposal. While the walking trail concerns may well be unique to PNWR and our customers along this route, we all share in the burden of not putting public safety at risk by allowing this proposed trail to cross PNWR tracks at grade without investigating alternatives that avoids this potential conflict of traffic flows.

I also have some general business concerns about The River Plan that merit mention and hope you will take these issues into consideration as well.

I fully support the City's interest and ingenuity regarding the River Renaissance and the proposal to enhance the sustainability of the Willamette waterfront along the North Reach. I admire your efforts and I'm willing to work with you and the other businesses along the river to maintain the vitality of the waterfront in this important industrial base for the City.

However, the businesses along the North Reach are PNWR customers as well, and if they are not able to develop and grow their investments along the river, they will eventually become uncompetitive and go out of business. This is simply a fact of the business life cycle and is not peculiar to Portland. During my short tenure here at PNWR, we have already lost a significant volume business as a result of the permanent shutdown of several lumber mills. When PNWR customers cannot grow and sustain themselves to remain competitive, then the business at PNWR becomes distressed and that is situation we want to avoid.

The River Plan, as it appears to me from the latest version, will be more of a burden than an enhancement to our City's North Reach industrial cluster. The specific proposals regarding vegetation mitigation, river review and mitigation banking continue to be of great concern to all the members of the waterfront industrial community, and I believe the concerns have merit. Allow me to offer just one specific example on this.

The Working Waterfront Coalition had an independent analysis done of just the permitting aspect of the River Plan. Again, I am not a environmental engineer or an urban planner, but I am business executive who has specialized my entire career in railroad and financial management. According to that analysis, the additional plan reviews and permitting process the City will impose upon all existing and any new

industrial concerns would extend the permit processing and review period an additional year-and-a-half. That would take place on top of the current permitting process which

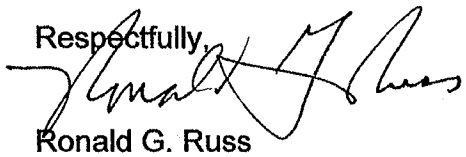
can take up to three-and-a-half years. From an investment perspective, no corporate development director or officer (public or private) would ever recommend to its financial executive team or Board of Directors on expanding or starting a business venture that has a five-year permitting process that still does not guarantee a definite start date. This proposal would stifle, if not completely cripple all growth and business expansion in Portland's waterfront industrial base.

Ironically, the more significant effect this issue could have upon The River Plan is with regard to its intention to fund a restoration plan. If businesses choose not to expand or locate due to the extraordinary regulatory and development requirements suggested by the City, it will be impossible to fund the mitigation plans the City's planning staff has developed. In other words, it is my sincere belief the very guidelines being developed to restore the North Reach are so onerous they will have an effect upon the community that will yield exactly the opposite results they are proposed to achieve.

It is my understanding the Working Waterfront Coalition, of which PNWR s a member, has provided the City a letter outlining the outstanding concerns regarding The River Plan, along with some suggested alternative solutions. Therefore, I will not dwell upon my point here. I do want to assure you that PNWR is willing and interested in working with the City to achieve the intended goals of The River Plan. It is an issue of balancing interests and issue of those interests collaborating on a mutually agreed upon solution. I believe these issues still need to be addressed.

I appreciate your consideration of my remarks and concerns and look forward to meeting with you in person soon. I felt compelled to forward my thoughts to you now due to the urgency of the issue and the scheduled forum and City Commission hearings on this matter. Should you have any questions about my remarks, feel free to contact me directly. Thank you for your attention.

Respectfully,



Ronald G. Russ
President & General Manager

Cc: Commissioner Randy Leonard
Commissioner Nick Fish
Commissioner Amanda Fritz
Commissioner Dan Saltzman
Ann Gardner
Bernie Bottomly

183694

MANUFACTURING 21 COALITION

Norm Eder
phone | 503.802.4101
fax | 503.294.9152
norme@cfmpdx.com

Testimony by Norman R. Eder
Executive Director
Manufacturing 21 Coalition
1100 SW 6th Avenue, Suite 1425
Portland, Oregon 97204

My name is Norm Eder. I serve as Executive Director of the Manufacturing 21 Coalition.

Our region is blessed by a diverse manufacturing economy that, even in the height of a recession, accounts for a large share of Portland's family wage jobs. The supply chains of our companies run deep into our economy, from providers of hard components to service providers such as doctors, lawyers and accountants across the metro region.

The river is the heart of our export/import manufacturing economy that spreads to all corners of our metro region. The industrial lands along the Willamette River and the jobs they support are regional economic assets. These demand care, respect and support from our entire community.

Access to the river is an irreplaceable asset for our entire region. This is why, years ago, a large section of the riverfront was reserved for industrial use. Our riverfront manufacturing economy is perhaps even more important today as we struggle to maintain, and even build, living wage jobs against the intense winds of international competition.

The members of Manufacturing 21 urge you to listen to industry voices very closely as you chart the future of our river.

Thank you for your time and commitment to a healthy and vibrant job-producing economy.

183694

Testimony of Bernie Bottomly
Portland Business Alliance
North Reach Town Hall
December 16, 2009

Mayor Adams, Commissioner Fritz, thank you for the opportunity to appear before you today on behalf of the Portland Business Alliance to provide comments on the River Plan North Reach Recommended Draft.

The Alliance supports the overall goals and objectives of the River Plan, to enhance the environmental attributes of the Portland Harbor while preserving and enhancing the historical and high value industrial uses in the North Reach. And we appreciate the city's efforts to reduce the burden and increase the certainty of certain types of permitting. The goal, we believe, is to strike an appropriate balance that provides for enhancement while encouraging growth and investment in harbor businesses. It is that development and investment which will allow us to achieve our enhancement objectives.

Our concern is that the draft recommendation does not strike that balance in a number of areas and that, unless modified, the plan will negatively impact a number of city and regional economic development and land use objectives. I'd like to touch on three of those briefly.

First, the region has adopted a strategy of constrained growth in its urban area. Our strategy is to focus more development on existing urbanized areas, such as the Portland Harbor. Under our land use strategy the region's future economic health depends on our ability to readily and affordably redevelop at higher densities and brownfield redevelopment becomes critically important. The provisions of the draft plan that make it significantly more expensive and bureaucratically burdensome to redevelop in the Harbor run counter to our adopted regional land use strategy – which the city has strongly endorsed.

A second and related issue is how the recommended draft would impact the city's efforts to redevelop harbor brownfields through the Harbor ReDI effort. Having sat on the technical advisory committee for this effort for more than a year I can tell you that the vast majority of sites being targeted for brownfield redevelopment are simply uneconomic due to the remediation costs and the uncertainty associated with the superfund cleanup. The recommended draft would make remediating these sites even more difficult by adding costs, reducing the economic viability of projects and increasing bureaucratic uncertainty. Again, we only achieve remediation and enhancement if businesses are able to make investment in the harbor work financially.

Finally, the city's very welcome and much needed economic development strategy calls for the creation of 10,000 jobs in five years. The North Harbor's industrial jobs are just the kind of employment growth we need: family wage jobs with benefits. Like you, Mr. Mayor, we are concerned with our declining capture ratio for new jobs in the region. The Portland Plan Analysis points out that the one employment land area where we have a deficit is in general industrial transportation. We believe the draft plan makes investment in the North Reach more

expensive and more difficult and hurts our ability to achieve the goals of the economic development strategy, regain our historical level of job capture and increase median family incomes.

The Working Waterfront Coalition has proposed changes which we believe strike the appropriate balance that will both accomplish significant enhancements to the river, require businesses to pay substantial fees and meet strict environmental requirements while at the same time making investment in the Harbor attractive from a financial and regulatory perspective.

Thank you for the opportunity to share our thoughts with you on this important subject.

Testimony of Ronald G. Russ
President and General Manager, Portland & Western Railroad
December 16, 2009
Mayor Adams' Forum on the River Plan

Good evening Mayor Adams and Commissioner Fritz. My name is Ronald Russ and I am the President and General Manager of Portland & Western Railroad. Portland & Western provides commercial freight services and manages over 500 miles of railroad lines here in northwestern Oregon and the Willamette River Valley. Those lines run from Astoria to Portland through the Linnton community and southward from the west suburbs to Eugene and hauls freight for industrial customers intra-regionally and both to and from BNSF and Union Pacific Railroads.

I am here this evening to share with you a couple of my views regarding the Portland River Plan and how it could potentially adversely affect the employees and customers of Portland & Western. But I want to be clear from the beginning, I am very much in support of the City's efforts and commitment to restore the habitat and quality of the areas along the harbor front, and particularly along the North Reach.

Having grown up in the Pacific Northwest in Tacoma, I understand the balance that needs to be maintained between industry and our natural resources. As a career railroad manager and executive, I have had the responsibility of analyzing and implementing restoration and rehabilitation of infrastructure programs throughout the nation. I have also had some recent activity on the Portland & Western supporting local communities regarding trails and restoration of abandoned facilities and right-of-way. Benton County has been very active in developing such a trail near the Portland & Western tracks between Corvallis and Albany. As a result, I am

a firm believer that environmental concerns can be adequately balanced with industrial and business community needs. That brings me to my testimony this evening.

I recently forwarded a letter to you, Mayor Adams, detailing some specific concerns and my suggestions about the trails being proposed to cross Portland and Western tracks and the Plan itself, so I won't necessarily repeat those this evening nor will I read that letter. You should have a copy and I have brought a copy for the record this evening just in case. But, allow me to provide some additional comments in a concise manner.

While I am the President and General Manager of Portland & Western, I've had the opportunity to serve in a variety of capacities in my career. I have filled the role of Chief Financial Officer for several listed railroad companies in the Midwest and, as such, was required to analyze the feasibility of various corporate investment proposals. One of the first items that comes to my mind when developing or expanding a business is determining how much capital to invest, the return on that investment and how long it will take for that return to be generated for the firm. You have undoubtedly seen the report from a Seattle engineering firm stating that potentially 18 more months could be added to the permitting process due to the requirements of the River Plan as it is now proposed. I understand that some folks have also told you that this suggestion of additional time getting through the permitting process is bogus and unfounded, so allow me to give you a CFO's perspective.

If I were to decide on a further or new investment in the North Reach., it is not clear at this point if permitting would require the current 36 to 40 months, which is quite long as it stands, or if it would be closer to 48 to 60 months. Since the permitting time period is unclear, a prudent funds manager would be hard pressed to be justified in approving any initial permitting

process and pre-engineering expenditure in the North Reach without some assurances at the end of the day there would be successful outcome to the permitting process. Also, the longer the permitting time period and the complexity of that process would weigh heavily on the reducing most investment returns. I would be looking to make a decision that avoids risk and limits my exposure to front-end costs that eat into potential returns.

I would have a responsibility to review all other options, to investigate a variety of scenarios and, in all honesty, I could not recommend to my board or prepare a presentation to a funder that we go with the location that could potentially cost us more time and investing dollars due to the complications associated with permitting over an uncertain time period. I would most likely recommend looking elsewhere for a locale with a better investment climate. And, we are fooling ourselves to think that these questions will not be asked in the boardrooms of all the businesses along the North Reach, if the currently proposed Plan is passed without further interaction between the stakeholders. I use this example to offer some reality and to suggest a pathway to a better plan.

I have not heard any business owner along the North Reach state absolute opposition to the restoration that the City wants to do along the river. I have not heard any business owner state the business will pick up and immediately move out of town if the Plan is implemented. However, I have personally heard that stakeholders and businesses want to cooperate and take part in the Plan. However, they need certainty of outcome and a balanced approach to take in the concerns of all stakeholders. They are also asking for more time. You have heard from the Working Waterfront Coalition regarding the concerns that have been identified and I support those concerns and the Coalition. I am here tonight to ask you to do the same thing.

The concerns have been clearly articulated and the River Plan can work for everyone if those issues are addressed. That may mean that we cannot get to agreement by January 28, 2010, but then maybe we can. I am certain that with your leadership and direction members of the City staff and the industry folks you are hearing from can work together, as long as you instruct them to do so and come up with a Plan that works so all parties can accept it. That is all I hope to achieve tonight and that is how I have managed to make these types of issues work for Portland & Western and other rail carriers throughout my career.

I appreciate you providing this opportunity to share my views and concerns and look forward to our continued good working relationship as we serve customers throughout northwest Portland and the rest of Oregon. I look forward to hearing more about how we will solve the trail concerns I have shared with you and the staff and I'm eager to resolve those as well. Thank you again Mayor and Commissioner Fritz and I'd be happy to answer any questions you might have.

Testimony on River Plan

Sebastian Degens

December 16, 2009

Good evening Mayor Adams, Commissioner Fritz. My name is Sebastian Degens, Planning & Development Manager for Marine & Industrial Development at the Port of Portland. Thank you for the opportunity to talk to you about the seaport, the working harbor, and the City's River Plan.

First, Mayor Adams, I'd like to compliment you and your staff on the Portland Plan meeting I attended last night. It was a fascinating and managed to cover the breadth of issues that I, as a longtime Portlander am concerned about. I was particularly pleased to see the focus you placed on Portland's manufacturing base, and, (I hope I am not reading too much into it here), the spotlight you placed on the Hapag-Lloyd container vessel at Terminal 6 as foundations to our prosperity and a sustainable city business model.

Because this brings me to the 2 points I want to make in my discussion tonight:

- The City of Portland, through its River Plan, is best served by establishing a climate for investment in the North Reach, so that industry, large and small, is encouraged to modernize, rehabilitate, expand, and, in some cases, choose to locate in our seaport.

- Secondly, without such a climate for investment, we are unlikely to ever successfully return the brownfield sites in the harbor, those challenged by contamination and unsustainable past practices, to a productive use.

It is my belief that the achievement of other important city goals will be more successful, and will occur hand in hand with these public and private developments. Facilitation, not regulation, is truly the most important strategy at your disposal.

Collectively, we have made the most significant gains and improvements in reducing the footprint of our activities specifically at those times when we have built a new facility or modernized an old one- The Toyota facility is a good example, or the storm water investments at multiple facilities. These are the paradigm-shifting moments when the old ways can be supplanted by the newer and we hope- more sustainable ways. These are the opportunities we would like to be able to seize in the seaport and the North Reach.

Few will disagree that we sorely need to create such opportunities at the many challenged brownfield sites in the North Reach, at least 25 in number based on the City's Economic Opportunity Analysis.

There has been significant investment in the harbor in the last years, to support growing manufacturing output, trade, and competitiveness of the harbor- over $440 million. But it is only a down payment on

what needs to be attracted to maintain economic health of the seaport and to support the City's associated needs-

- sites to grow, locate, or support the transportation needs of clean-tech
- opportunities for meaningful and well-paying work for the region's non-college labor force,
- close in jobs at facilities dependant on the alternative freight modes available in the North Reach-rail and water
- And without investment, even the environmental goals we support will not be met

Fortunately, you have a seaport and an industry that is bullish on growth- We expect to emerge out of the current recession stronger and more viable, more competitive and sustainable than before.

As an example, the Port has only one waterfront site remaining for redevelopment , a 28 acre parcel at Terminal 4. It is a site originally constructed by the City's Commission of Public Docks to take advantage of the opening of the Panama Canal. The site has been productive and successful for decades, protected from encroachments by public policy and good planning.

We are pursuing Stimulus monies to get the land Harbor Redi, and taking the opportunity to partner with the City to improve access, address storm water run-off issues, and remove obsolete in-water structures. The keys to our success will be flexibility, ability to move fast, and move forward with clear objectives.

These are exactly the same conditions our tenants and our other members of the Working Waterfront require to invest in the modernizations, capacity expansions, and facility upgrades on their developed sites. The north reach can deliver for the City, if the waterfront is working.

Thank you

Sebastian Degens, AICP

Marine & Industrial Development Planning & Development Manager

Port of Portland

121 NW Everett

Portland, Oregon 97202

183694

Brotherhood of Locomotive Engineers and Trainmen

A Division of the Rail Conference-International Brotherhood of Teamsters

OREGON STATE LEGISLATIVE BOARD
2509 NE 83rd Way • Vancouver, WA 98665
Phone: (360) 907-4187 • mlneale@pacifier.com

Mike Neale
L/R Division 416

December 16, 2009, via email

Mayor Sam Adams
City of Portland
1221 SW 4th Avenue
Portland, Oregon 97204

Subject: City of Portland River Plan, North Reach

Dear Mayor Adams:

I would like to take this opportunity to introduce myself as the Legislative Representative of BLET Division 416, representing 92 engineers and conductors on the Portland & Western Railroad. I have worked in the transportation industry for 29 years of which the last 22 years have been with railroads. Recently I have become aware of the plans for the North Reach and I applaud the city's efforts. However, my union position focuses on the safety and health of our members, and there are a couple of areas in the River Plan that concern me.

First, I noticed that in Linnton the proposed Greenway Trail crosses the P&W tracks at-grade several times. Since trains don't have steering wheels the engineers can't swerve to avoid people, so any at-grade crossing of the tracks is a great safety concern for both our members and for the general public. In fact, the Portland & Western has worked for several years with ODOT and the FRA to reduce the number of at-grade crossings to improve safety. I would urge you to take the time to work with the Portland & Western to come up with alternate trail alignments that would avoid such unnecessary crossings of the railroad.

Secondly, I am concerned about the negative financial impact the River Plan would impose on freight customers in Linnton. The plan as drafted looks very complicated and could end up delaying development as well as being very expensive. I'm a locomotive engineer, not a civil engineer or planner, but it seems to me that this plan will hurt our customers and could result in the loss of family wage jobs not only to our members but also to BLET and UTU divisions on the BNSF and UP railroads. I urge you to take additional time to work through the concerns of all businesses and come up with a truly balanced River Plan. I thank you for your consideration of my concerns.

Respectfully,
Mike Neale
Legislative Representative, BLET Div 416

cc: Ron Russ, Ann Gardner, Scott Palmer

12/16/09

The City has articulated what it believes to be business advantages to the River Plan. The following is WWC's response to these alleged benefits.

"**Providing certainty to industry by bolstering (sic) sanctuary policy and prohibiting conversion of industrial land to non-industrial uses**."	• This statement ignores the vegetation standard (15 % of Industrial land) and the River Review preference for on-site mitigation. Both requirements effectively convert industrial zoned land to non-industrial uses. • To the extent protections are provided, the City is simply implementing what it is already required to do under Metro's regulations. That is, Metro's regulations already require the City to prohibit quasi-judicial conversion of industrial land to non-industrial uses.
"**Strengthening the River Industrial Overlay Zone as a tool to reserve riverfront industrial land for river-dependent and river-related uses (such as beefing up nonconforming uses and land division provisions)**."	• The River Plan actually increases regulation specifically for river-dependent and river-related uses by adding River Review and making it more time-consuming, complex and expensive to invest and grow harbor related business. This does not strengthen the River Industrial Overlay Zone. • Any minor adjustments to nonconforming use and land division provisions are more than offset by the additional uncertainty, regulation and fees of the new River Review.
"**Improving regulations to increase predictability and flexibility for industrial development and expansion (such as standards for bulkheads, cargo conveyors, rail ROW)**."	• The standards for bulkheads, cargo conveyors and rail ROW were purposefully crafted by the City to have limited applicability. • While the standards may be more predictable, they are unreasonable and expensive. For example, the standards require business to do a 1.5:1 on-site mitigation or a 3:1 off-site mitigation with no in lieu payment opportunities. The mitigation project must also be implemented before the project (i.e. before a business can replace an existing bulkhead). Mitigation is not based on actual impacts to the resource but rather project area. This is not a viable option for most business and they will be forced to do the more time-consuming, uncertain, and complex River Review. • The standards allow no room for flexibility.

"**Eliminating greenway setback in the River Industrial zone.**"	• Eliminating the greenway setback could be an advantage for businesses who intend to develop within the setback, but only if they are not located within either the new River Environmental Overlay zone or the new Environmental Conservation or Protection Overlay Zone. • River-related and river-dependent uses are located within the new River Environmental Overlay zone, and the regulations have been significantly increased by River Review. Thus any positive stimulus gained by eliminating the greenway setback are offset by River Review for all river-related and river-dependent uses, and for all sites in the newly designated Environmental Conservation and Protection Overlay Zones.
"**Fueling Harbor Reinvestment Strategy through coordinated public and private investments in infrastructure and land development.**"	• The River Plan provides no investments or funding for infrastructure and land development for the Harbor Reinvestment Strategy. • Many of the projects listed in the plan have already been funded or intend to be funded through other means. • The River Plan simply provides a way to keep track of and coordinate the various efforts by federal, state, Port, local and private investments that are already under way or planned. • In other words, the River Plan is not necessary to achieve the Harbor Reinvestment Strategy.
"**Integrating (sic) of local, state and federal permit reviews.**"	• The River Plan code does not provide any requirement to integrate local, state and federal permit reviews for development projects, nor does it provide any guarantees to do so. • Rather, the integration is simply a promise by the City. • In fact, the enhanced permit review process is subject to availability, staff, and resources. Permit applicants must apply to be part of the enhanced process, and not all applications are accepted. Large projects are likely not able to be part of the enhanced permit process due to limited staff resources. • Further, if the City is to achieve its goal to avoid duplication and redundancy of state and federal process, it must know what the outcome of that state and federal process is. Simultaneous review is, by definition, duplicative and redundant. • Local review also adds local procedural requirements, including opportunity for appeals. This creates cost, uncertainty and delay well above that associated with the federal and state process.

"**Providing options for off-site mitigation**."	• River Plan does not provide assurances for off-site mitigation opportunities. In fact, on-site mitigation is required unless applicant can prove it is not feasible. • Off-site mitigation is not allowed under the current version of the code; rather, applicant may instead make payment to the City. The River Plan requires amendments to address this issue. • Further, adding the right of appeal to this mitigation determination creates uncertainty and offsets the benefits that would otherwise be gained.
"**Allowing in-lieu fee options to meet vegetation requirements**."	• Allowing an in-lieu fee option to meet an unreasonable requirement is likewise not reasonable. • Amendments have been proposed to address this issue and further comment is held until those amendments are finalized.

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MILLER NASH LLP
ATTORNEYS AT LAW

PORTLAND, OREGON
SEATTLE, WASHINGTON
VANCOUVER, WASHINGTON
CENTRAL OREGON
WWW.MILLERNASH.COM

3400 U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, Oregon 97204-3699
OFFICE 503.224.5858
FAX 503.224.0155

Phillip E. Grillo
phil.grillo@millernash.com
(503) 205-2311 direct line

December 16, 2009

Mayor Sam Adams and
Portland City Council
City of Portland
1221 S.W. Fourth Avenue
Portland, Oregon 97204

Subject: River Plan

Dear Mayor Adams and Commissioners:

I am writing as a member of the Working Waterfront Coalition ("WWC") to provide you with my perspective on the potential benefits of River Plan, and how the Plan should be amended to get River Plan back on track.

During the course of the conversation on River Plan, the WWC has continually tried to make River Plan better. As you know, the WWC and other businesses in the harbor have provided ongoing feedback to the City and other stakeholders on River Plan. The WWC has also provided specific suggestions, alternative code language, and an alternative fee proposal for the City to consider.

Despite some of the changes that have been incorporated into the plan, the current version of River Plan still discourages new investment in the Working Waterfront. In the North Reach, River Plan discourages investment in the harbor primarily because it replaces Greenway Review with a highly complex and extremely confusing set of new local land use regulations and fees. These regulations and fees create significant uncertainty, delay, and costs for businesses as they consider whether or not to invest in the property along the Willamette River in Portland. During the course of our conversation, the City has taken the position that River Plan is good for businesses in the North Reach. We respectfully disagree with that conclusion. To help clarify our perspective, I am providing a copy of the WWC's rebuttal to the perceived business advantages of River Plan. In our view, the perceived business advantages of River Plan are overstated and offset by significant disadvantages created elsewhere in the plan. Simply put, the perceived business advantages of River Plan are false-positives.

MILLER NASH LLP
ATTORNEYS AT LAW

PORTLAND, OREGON
SEATTLE, WASHINGTON
VANCOUVER, WASHINGTON
CENTRAL OREGON
WWW.MILLERNASH.COM

183694

Stepping back for a moment, it is important to understand what the chief potential benefit of River Plan really is, and how it can be achieved.

What is unique about River Plan is its potential to create a series of restoration sites ("pearls") along the working harbor, where environmental mitigation and restoration efforts can be concentrated. The potential benefits of these restoration sites are both ecological and economic. If implemented effectively, these sites can help protect other prime industrial lands, facilitate development and redevelopment in the working harbor, and can eventually become the focus of our restoration efforts in the North Reach. What is critical to remember, however, is that the success of these restoration sites and ultimately the success of River Plan itself, depends upon a thriving working waterfront. Without a thriving working waterfront, River Plan will not create real ecological and economic benefits along the river. Without a thriving working waterfront, River Plan will simply replace our current set of greenway regulations with a much more cumbersome and complex set of land use regulations that will deter investment along the river. In short, economic prosperity along the river is what will drive the success of River Plan and future investment in its restoration sites. We must find a way to implement River Plan that encourages reinvestment along the river. Discouraging investment in the harbor is not something we should be willing to risk.

In order to get River Plan back on track, I urge you to consider the solutions proposed by the WWC in its November 30, 2009 letter.

Very truly yours,

Phillip E. Grillo

WWC Rebuttal to the Perceived Business Advantages of River Plan
(December 16, 2009)

At various times and in various materials, the City has articulated what it believes to be the business advantages of River Plan. The WWC disagrees with the City's assertions that the current version of River Plan creates significant business advantages. In an attempt to summarize our response to the City's perceived business advantages of River Plan, the WWC is responding to the October 28, 2009, memo from the Bureau of Environmental Services ("BES") to Commissioner Saltzman. As explained below, the perceived business advantages of River Plan are, in reality, false positives.

In the above-mentioned memo, BES asserts that the Portland Business Alliance letter of October 20, 2009, "neglects to mention the following important aspects of the North Reach Plan. The WWC disagrees for the following reasons:

1. "**Providing certainty to industry by bolstering (sic) sanctuary policy and prohibiting conversion of industrial land to non-industrial uses**."

Response: Metro's regulations already require the City to prohibit quasi-judicial conversion of industrial land to non-industrial uses. With regard to industrial land conversions, the City was simply implementing what it was already required to do under Metro's regulations. In other words, this is a false positive, because the prohibition on industrial land conversions already existed under applicable law.

2. "**Strengthening the River Industrial Overlay Zone as a tool to reserve riverfront industrial land for river-dependent and river-related uses (such as beefing up nonconforming sues and land division provisions).**"

Response: The minor adjustments to nonconforming use and land division provisions in the River Industrial Overlay Zone, are more than offset by the additional local regulations and fees imposed on development within this overlay zone, particularly on river-related and river-dependent uses and development along the shoreline and in the water, that will now be subject to the new River Environmental Overlay Zone. The River Environmental Overlay Zone makes it much more difficult for most river-dependent and river-related businesses to use the shoreline and the river, and in doing so, frustrates economic prosperity along the working waterfront. In other words, this is a false positive , because the economic and regulatory burdens created by the River Environmental Overlay Zone far exceed the minor economic and regulatory relief provided by the revisions to the River Industrial Zone.

3. "**Improving regulations to increase predictability and flexibility for industrial development and expansion (such as standards for bulkheads, cargo conveyors, rail ROW).**"

Response: The special standards for bulkheads, cargo conveyors, and rail ROW in River Plan were purposely crafted by the City to have limited applicability. As such, these standards

provide a very limited benefit. Most river-related and river-dependent development along the shore and in the river will be subject to much more rigorous review under the River Environmental Overlay Zone and related regulations. As noted above, these regulations frustrate economic prosperity along the working waterfront, and the limited standards mentioned above do not offset the economic and regulatory burdens created by River Plan for most development in the working harbor. In other words, these standards are a false positive, because the minor increases in predictability and flexibility for development such as certain bulkheads, cargo conveyors, and rail ROW do not offset the much more significant economic and regulatory impacts created by the River Environmental Overlay Zone and River Review.

4. **"Eliminating greenway setback in the River Industrial zone."**

Response: It is true that greenway setbacks are eliminated in the River Industrial Zone. This is an advantage for businesses who may intend to develop within the setback, so long as the area within the existing greenway setback is not located within either the new River Environmental Overlay Zone or within newly designated Environmental Conservation or Environmental Protection Overlay Zone areas in the North Reach. It is important to understand, however, that all medium- and high-value natural resource areas along the river will be regulated by the new River Environmental Zone. In other words, eliminating the greenway setback is a false positive for the vast areas along the working waterfront that will be regulated by the new River Environmental Zone, because the economic and regulatory burdens associated with these new regulations significantly outweigh the burdens currently imposed by the existing greenway review. With that said, we acknowledge that in upland areas that are currently within the greenway setback, where no medium- or high-value natural resource areas exist, some local regulatory relief will occur. However, it seems to us that since we now know that these areas do not contain any significant natural resources, we also now know that these areas have been over-regulated for many years by local greenway review. In these areas, regulatory relief is long overdue.

5. **"Fueling Harbor Reinvestment Strategy through coordinated public and private investments in infrastructure and land development."**

Response: The potential investments listed in the Harbor Reinvestment Strategy do not represent a commitment by the City to fund all the projects on that list. Many of the projects will be funded with Port, private, and grant funds, not just resources the City controls. In fact, many of these projects will be or have already been funded by gas taxes, which are paid by harbor businesses and others who buy gas in the state. In short, the Harbor Reinvestment Strategy does not commit the City to fund projects along the river. Since many of the projects listed in the Harbor Reinvestment Strategy will be or are already funded by the Port, the private sector, grants, or gas taxes, River Plan by itself does little to actually commit the City to reinvest in the working harbor.

6. **"Integrating (sic) of local, state and federal permit reviews."**

Response: We continue to disagree with the City's assertion that River Review will be "integrated" with state and federal permit reviews. The fact is, River Review will occur through

a separate local review process. River Review is a local land use review process, and is subject to all of the normal land use procedural requirements, including notice and an opportunity for a hearing and the opportunity for any party to appeal the City's decision to LUBA and the courts. In the event that River Review triggers a hearing, there will be nothing "integrated" about that hearing. The City's hearings officer is not bound by the opinions of state and federal officials regarding to the criteria in River Review. River Review is a separate and independent land use permit decision-making process. Even in cases where a hearing doesn't occur (which will not be known until after City staff completes its review and issues its decision), local review will not occur in an integrated way, because the City's regulations are different and regulate different functions and values than state and federal regulations do. In cases where regulatory overlap occurs, the potential for conflict exists between the city, state, and federal regulatory agencies. In other words, "integration" is a false positive, because the River Review is inherently a separate local review process. River Review is subject to all of the usual land use procedural requirements. Those requirements and the potential for appeal add significant cost, uncertainty, and delay to a project, well above and beyond the cost, uncertainty, and delay associated with state and federal permit processes. There is simply no way to know what the costs, uncertainties, and delays will be in any particular case until the results of River Review are known and a final decision is reached.

7. **"Providing options for off-site mitigation."**

Response: Off-site mitigation options are important. River Plan, however, does not provide assurances that an applicant can mitigate off-site. Under River Plan, off-site mitigation is a possibility, not an option available by right. In that regard, it is a false positive, because off-site mitigation is merely a possibility, not an option available by right. Under River Review, any party, including members of the public, can appeal the City's decision to allow off-site mitigation to the hearings officer, then to LUBA and the courts. In other words, the possibility of off-site mitigation, by itself, is a false positive, because as long as off-site mitigation is a discretionary decision made by the City as part of a local land use permit decision, the possibility of off-site mitigation provides no certainty. Rather, it adds additional uncertainty, cost, and delay. Instead, off-site mitigation should be allowed by right, and should be coupled with the option of a fee-in-lieu for any mitigation required by River Plan.

8. **"Allowing in-lieu fee options to meet vegetation requirements."**

Response: We have made some progress in this area through ongoing discussions with the Mayor and BPS, but this issue is still not fully resolved. Nonetheless, under the existing greenway code, vegetation requirements are much less than what would be required under River Plan. Under River Plan, the vegetation requirement would be triggered by development anywhere in the site, rather than by development within the greenway or greenway setback, as is currently the case under greenway review. In other words, the fee-in-lieu option to meet the new vegetation requirement under River Plan is a false positive, because the new vegetation requirement is triggered by any development anywhere on the site, and the 15 percent standard is more extensive than it would be under existing greenway review.

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Submitted Comments
Portland City Council
River Plan Hearing
Wednesday, December 16, 2009

Mayor Adams, Commissioner Fritz:

My name is Jeff Swanson, and I am the Logistics Manager for Schnitzer Steel in Portland and vice chair of the Portland Freight Committee.

Industrial and freight mobility interests support the goals of the River Plan – a healthy river system for all stakeholders. The practical mechanism for balanced attainment of those goals is clearly at issue, and so it is wise to take more time as you have determined to do to examine policy impacts, ecological and economic.

As a regional hub and global magnet, Portland is a unique place. It is situated at the confluence of natural geography such as the Cascade and coastal mountain ranges, the Columbia and Willamette Rivers, and important built transportation infrastructure like US Interstates 5 and 84. It is served by two major trans-continental railroads, the Union Pacific and BNSF Railway. It is the trans-loading hub of a vast inland waterway network connecting the Inland Empire Region with the Pacific Rim. Vast quantities of goods pass through Portland, some of which are vitally important to feeding large portions of the world's population, and they are loaded from trains and barges to ocean-going vessels in the North Reach of Portland's working harbor.

Portland is truly a dynamic, complex, and vital multi-modal highway, rail, and marine transportation hub. Many of the connection points between modes that make this hub function occur on private industrial lands in the North Reach. It is critical

that these businesses continue to be able to invest in the infrastructure that allows for selection and use of the most cost-effective and sustainable modes of transportation available.

As we look for ways to reduce our carbon footprint, one of the most effective methods is to shift modes of transportation. For instance, Schnitzer could potentially shift a large volume of shipping from truck to barge, reducing highway congestion, carbon emissions, and transport costs were our dock facilities not already near capacity with other traffic. This project alone would take 235 truckloads per month off the highways. Doing this would require construction of additional dock facilities on site.

Jamie Wilson, my boss, mentioned the difficulties involved in securing capital for major construction and expansion projects. These projects are extremely sensitive to permitting time length and cost, as to whether or not funding can be obtained, issues which are likely to be exacerbated in a policy environment under the River Plan in its present form.

In a broader sense then, the River Plan could have some unintended effects, such as causing increased systemic reliance on truck transportation to move goods that could otherwise move by different modes such as marine. This could directly conflict with other important policy pursuits, like the City's Carbon Action Plan goals and objectives. We think it would be well advised to take more time and explore with stakeholders and staff the potential impacts of the policy to all aspects of the region, from employment, private business investment levels, and freight mobility to ecological metrics.

I appreciate your time, leadership, and thoughtful attention to this important discussion.