

## Parsons, Susan

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**From:** Jeff Cole <tjeffcole@gmail.com>  
**Sent:** Wednesday, May 27, 2015 11:23 AM  
**To:** Adam, Hillary  
**Cc:** Council Clerk – Testimony  
**Subject:** RE: LU 14-249689

I urge the Portland City Council to delay any disconnection actions on the Mt. Tabor and Washington Park reservoirs. A better option is to make an urgent appeal to Oregon Senators Wyden and Merkley to obtain a necessary variance from the EPA to avoid what is a costly, unnecessary, and “unfunded federal water quality mandate.”

The potential savings to ratepayers by avoiding disconnection is huge. The historic qualities of the Mt. Tabor system are priceless. Please make an urgent appeal to our federal representatives.

Regards,

Thomas Jefferson Cole  
4343 SE Madison St.  
Portland, OR 97215

**Parsons, Susan**

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 11:40 AM  
**To:** Council Clerk – Testimony; Hales, Mayor  
**Subject:** Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection  
**Attachments:** Reservoirs Council2015.pdf; Reservoir Panel ordinance 36237.webarchive; IRPAcceptRes.pdf

**Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection**

To: Portland City Council

Re: **Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection**

*Clerk Note  
letter dated 4/19/15*

Attached are documents submitted for the record related to the May 28, 2015 Mt. Tabor Reservoirs Disconnection LU hearing.

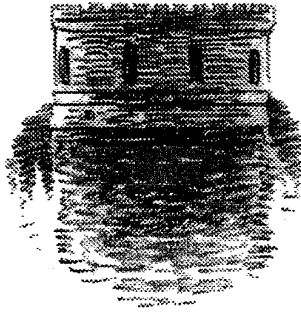
Attached find

1. April 9, 2015 letter to City Council which outlines options the community supports as opposed to the Water Bureau plan to disconnect the Tabor reservoirs and demolish the Washington Park reservoirs options not supported by the broad-based community who has written to Council in support of retaining the open reservoirs as a functional part of the distribution system
2. Reservoir Panel ordinance/Resolution 36237, web archive The Water Bureau defied both the spirit and intent of *2004 Independent Reservoir Panel Resolution* that required the Bureau to bring stakeholders together using the City's adopted Principles of Public Involvement (submitted under separate cover) on any action involving the open reservoirs. The Water Bureau made back room unsupported decisions to defy community interest putting together fast-track plans to disconnect the Tabor reservoirs and demolish the Washington Park reservoirs, projects that benefit the global engineering firms associated with the revolving-door consultant Joe Glicker who had been sent via contract by the Water Bureau to help craft the *onerous* EPA Long-Term2 Enhanced Surface Water Regulation. The defiance plan creates new and unique public health risks, cancer-causing Nitrification and Radon venting into homes from the Columbia South Shore Wellfield water, creates massive debt when in 2004 the Water Bureau reported to Council that they were a *pay as you go* organization.
3. Reservoir Panel ordinance/ Resolution 36237  
Friends of the Reservoirs has been acknowledged since 2002 by over 30 community organizations as water system stakeholders, advocates for ratepayers and for protecting our open reservoir system. Additionally Mayor Katz, Mayor Potter and Commissioners Sten, Saltzman, Leonard, and Novick have acknowledged as Friends of the Reservoirs as stakeholders. In 2004 Friends of the Reservoirs were awarded the City's Spirit of Portland award for our work in support of protecting ratepayer pocketbooks and our grand open reservoir water system. Yet the Water Bureau has not included Friends of the Reservoirs or any water system stakeholder when they made their backroom decision to negatively impact the open reservoirs, to negatively impact the Water Bureau's most significant water system assets and the city's most significant historical resources.

The suggestion that was made by the city attorney at the Washington Park demolition hearing that awarding contracts to corporations (engineering firms and construction corporations) constitutes the public process

referenced in the *Independent Reservoir Panel* Resolution makes a mockery of City Council Resolutions (promises or commitments) and makes a mockery of the city's adopted Principles of Public Involvement.

Floy Jones



# FRIENDS *of the* RESERVOIRS

*Citizens joining to protect Portland's historic reservoirs and water system*

3534 S.E. Main Street, Portland, OR 97214      [www.friendsofreservoirs.org](http://www.friendsofreservoirs.org)

[www.lists.pdx.edu/mttabor](http://www.lists.pdx.edu/mttabor)

April 19, 2015

Sent by e-mail 4/19/2015

Mayor Hales and Commissioners

1221 S.W. 4<sup>th</sup> Ave.

Portland, OR 972014-1926

Dear Mayor Hales and Commissioners Fish, Fritz, Novick and Saltzman,

While the Portland Water Bureau has written many bad chapters over the last several decades related to their pursuit of highly controversial, costly and unnecessary reservoir and treatment plant engineering projects, there remains an opportunity for City Council to write a much better end chapter – **an opportunity to support community interests over corporate interests**. City Council can immediately put on hold the current Mt. Tabor reservoir disconnection project and the Washington Park reservoir demolition project.

As you know, in light of Senator Chuck Schumer's success with forcing the EPA to include LT2 review and revision as part of EPA's compliance with Obama's Executive Order 13563 (requiring agencies to review, revise and repeal onerous regulations), EPA has committed to complete their LT2 review and revision by the end of 2016. We offer a multi-pronged approach such that the community can see the result of EPA's LT2 review and revision before any unnecessary "cutting and plugging" of pipes takes place



at Mt. Tabor and before City Council takes any Land Use steps to support demolition of the historic and fully functional open reservoirs at Washington Park.

The first prong of this new approach would be to work with the Oregon Health Authority (OHA) to approve a "temporary" disconnection of all of the Mt. Tabor reservoirs, thus meeting the Water Bureau's self-imposed December 2015 Tabor compliance deadline, and avoiding the unsupported and degrading "cutting and plugging" of pipes throughout Mt. Tabor park. The OHA has already approved (5 years ago) a "temporary" disconnection of a Tabor reservoir, allowing the Water Bureau to keep Tabor's Reservoir 6 offline since September 2010 . A similar "temporary" disconnection of all of the reservoirs at Mt. Tabor would not only avoid all of the "cutting and plugging" of pipes throughout the park but would also provide opportunity for Oregon's Congressional delegation to join forces with Senator Schumer and others to reinstate the "risk mitigation" reservoir compliance option included in the draft EPA LT2 rule but inexplicably removed from the "onerous" final rule. Senator Merkley has advised community stakeholders many times that he would join forces with Senator Schumer and others, if Portland City Council secured a deferral or other such alternative.

Concurrently, Portland would collaborate with the Oregon Health Authority to secure a deferral of the Water Bureau's self-imposed time line of compliance with LT2 reservoir requirements. As confirmed by the Oregonian, our new Governor has asked the Oregon Health Authority to review the community request for a deferral, but as we know, there will be no further supportive action without the active support of the Portland City Council.

A Friends of the Reservoirs public records request of OHA's documents and communications related to Commissioner Novick's 2013 reservoir deferral request revealed that:

1. David Leland confirmed in an internal email that there is no limit to the number of times a request for deferral can be made.

2. The Portland Water Bureau failed to provide necessary supportive documents to back up Commissioner Novick's deferral request.
3. The Portland Water Bureau used a surrogate to send the message to OHA that they wanted to proceed with build projects. Dave Leland stated, "... now we know what the Water Bureau wants." (This messenger is the same person Mayor Katz publicly chastised at the 2004 Reservoir Panel Council meeting when that person admitted to anonymously contacting the Urban League member at the end of the 3 months of panel work.)
4. There was no proactive collaboration between the City of Portland and OHA, as was the case between the Rochester water department and their health authority when Rochester successfully secured a 10-year deferral of their low-cost compliance plan for their 1876 open reservoirs, which are also set in city parks. Portland failed to engage in any follow-up advocacy or lobbying to secure a deferral such as Rochester's. A relevant aside to this point is that even if the EPA fails to revise the onerous unsupported requirements, Rochester plans on retaining their historic open reservoirs as functional open reservoirs spending but \$22 million to add UV bulbs, which makes clear that lower costs options exist if the utility works in service of community interests.

We request that the Portland City Council direct the Portland Water Bureau to prepare a deferral request that will succeed. The City must then advocate for success and collaborate with OHA, engaging the support of our Governor such that the decision is not made by low level OHA bureaucrats. OHA internal communications revealed that then Director Goldberg was supportive of finding alternatives to enforcing the fast-track compliance schedule, but Dave Leland, who led the decision-making process was not. With a deferral the Congressional delegation can then join forces with others to ensure that the revised EPA LT2 rule reinstates the "risk mitigation" option and that *Cryptosporidium* sampling distinguishes the majority harmless species from the few harmful species.

With regard to the demolition of the Washington Park reservoirs, the current process has not fulfilled the Demolition Land Use requirement "...*that there is an opportunity for the community to fully consider alternatives to demolition.*" The community has never been afforded a meaningful opportunity to fully consider the multiple alternatives to demolition of the Washington Park reservoirs, a project that is scheduled to last for four years. Further, Council Resolution No. 36237 requires that stakeholders be brought together utilizing the *City's adopted Principles of Good Public Involvement in any actions related to the open reservoirs*. The Water Bureau has explicitly defied this Council ordinance. At the March 30, 2015 Historic Landmark Commission (HLC) meeting the PWB lead engineer on this project refused to respond to a member's question as to why the unneeded storage wasn't being built elsewhere. As explained by the Water Bureau to the HLC, the current project will result in four years of zero water storage at Washington Park. This HLC member expressed that clearly, there is no reason to demolish these significant historic assets.

LT2 compliance can be achieved in alternate ways. A new *Independent Reservoir Panel* should be convened, one that does not exclude stakeholders such as Friends of the Reservoirs, to fully consider the many alternatives to demolition. Fully preserving the well functioning and irreplaceable reservoirs at Washington Park preserves Portland's heritage, beautifies the city, enhances civic identity, and supports economic vitality by recognizing and maintaining the significant recent investments made at the reservoirs and by avoiding the waste of the \$80 million associated with demolition and construction.

We implore the City Council to support and take immediate action on our request to put these two massive projects on hold and pursue these recommendations so that there will be a better ending to this decades long struggle between our City administrators and the citizens and ratepayers of Portland. We suggest meeting to discuss further and please contact us with any questions.

Sincerely,

Floy Jones on behalf of  
Friends of the Reservoirs

## RESOLUTION NO. 36237

Accept final report and recommendations of the Mt. Tabor Open Reservoirs Independent Review Panel and authorize interim enhanced security measures for City open finished drinking water reservoirs (Resolution)

WHEREAS, the Mt. Tabor Open Reservoirs Independent Review Panel has completed its review of options for addressing the security needs, pending regulatory requirements and necessary infrastructure investments for the Mt. Tabor open finished drinking water reservoirs; and

WHEREAS, the panel unanimously rejected the options of burying water storage without making park improvements, constructing treatment facilities at the reservoir outlets, replacing the bulk of the existing water storage at Powell Butte, and doing nothing; and

WHEREAS, the panel unanimously rejected the option of doing nothing because it felt some action is required to ensure water safety; and

WHEREAS, the panel unanimously recognized that the pending federal Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) affecting the structure and operations of open finished drinking water reservoirs has not been finalized and that there is no assurance of when it will be; and

WHEREAS, a majority of 8 panel members recommended that the Water Bureau, working with Portland Parks and Recreation, the Portland Police Bureau and members of the public develop a risk mitigation plan **that addresses** the requirements of the forthcoming Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and is compatible with the character and uses of the park to be submitted for approval to appropriate state or federal regulating agency; and

WHEREAS, a minority of 5 panel members recommended that the City retire Reservoir 1 from use, place enclosed water storage beneath Reservoir 5 and Reservoir 6 North, restore the surface water features at Reservoir 5 as they currently exist, and restore the remaining surface water features consistent with the values and design guidelines established in the Mt. Tabor Master Plan and guiding principles; and

WHEREAS, the project to place temporary floating covers over the Washington Park open finished drinking water reservoirs has been placed on hold pending the completion of the Independent Review Panel process; and

WHEREAS, safe drinking water and a secure and reliable drinking water system are essential to the health, safety and economic vitality of Portland and the surrounding metropolitan region; and

WHEREAS, two-thirds of the City of Portland gets its drinking water directly from highly accessible open drinking water reservoirs located in public parks; and

WHEREAS, Portland's open drinking water reservoirs and surrounding structures hold significant aesthetic and historic value to park neighbors and visitors; and

WHEREAS, two separate security vulnerability assessments of the Portland water system indicate that Portland's open drinking water reservoirs are among the most vulnerable points in the water system to contamination both incidental and intentional.

NOW THEREFORE, BE IT RESOLVED, that the City Council accepts the report and recommendations of the Mt. Tabor Open Reservoirs Independent Review Panel; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to terminate all current contracts for services related to the burial of the Mt. Tabor open reservoirs; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to work with Portland Parks and Recreation, the Police Bureau and members of the public representing commercial and residential ratepayers, neighbors and stakeholders, to develop and submit to the appropriate state or federal regulator agency a risk mitigation proposal for the City's open finished drinking water reservoirs after the LT2ESWTR is promulgated in final form using a process consistent with the City's adopted Principles of Good Public Involvement; and

BE IT FURTHER RESOLVED, that should the risk mitigation plan submitted fail to gain the regulatory approval of the appropriate state or federal regulatory agency, the City Council, with full public participation and input, will evaluate and decide on appropriate alternative actions to meet the regulatory requirements for open finished drinking water reservoirs in the LT2ESWTR; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to develop and submit to Council, as part of its 2005-06 capital improvement plan, a schedule for addressing priority deferred maintenance needs at the City's open reservoirs until the City achieves compliance with the final LT2ESWTR through either risk mitigation or alternate means; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to cease installation of the temporary floating covers on the Washington Park open drinking water reservoirs until promulgation of the final LT2ESWTR and further direction from Council regarding how the City will comply with the regulatory requirements for the reservoirs at Washington Park; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau immediately to implement the phase 1 enhanced interim security measures and deferred maintenance for Portland's open finished drinking water reservoirs described in Exhibit "A" attached to this resolution; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to follow all planning and design guidelines related to the reservoir sites and surrounding parks--including those described in the Mt. Tabor Park Master Plan, the Public Advisory Committee Guiding Principles, and the requirements of the listing of the open reservoirs on the National Register of Historic Places-- utilizing meaningful public process consistent with the City's adopted Principles of Good Public Involvement, in future actions related to the open reservoirs; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to use the 0.5% in FY 2004-05 rate savings associated with the phase 1 enhanced interim security measures to reduce FY 2005-06 Water rates.

Adopted by the Council, July 28, 2004

Commissioner Dan Saltzman  
Edward Campbell  
July 22, 2004

**GARY BLACKMER**  
Auditor of the City of Portland  
By /S/ Susan Parsons

Deputy

BACKING SHEET INFORMATION

AGENDA NO. 876-2004

ORDINANCE/RESOLUTION/COUNCIL DOCUMENT NO. 36237

COMMISSIONERS VOTED AS FOLLOWS:		
	YEAS	NAYS
FRANCESCONI	X	
LEONARD	X	
SALTZMAN	X	
STEN	X	
KATZ	X	



## **Exhibit A**

### **Proposed Interim Enhanced Security and Infrastructure Investments for Open Reservoirs**

#### **Phase 1: FY 2004-05.**

Phase 1 operations and maintenance investments:

- 5 additional contract security staff for onsite patrol of reservoir sites
- 1 additional bureau security staff to provide lead coverage

Operations and maintenance costs: approximately \$392,000 to be funded from 0.7% of 1.2% in authorized FY 2004-05 rates for reservoir replacement.

Phase 1 security and deferred maintenance capital infrastructure investments:

#### **Mt. Tabor**

- Video camera and improvements for remote monitoring,
- Design work for security upgrades to alarms,
- Design work for remote controls on isolation valves,
- Upgrades to Reservoir 5 gatehouse to make available as an office facility for security staff and for onsite security monitoring,
- Sensors to help alert security when critical areas have been breached,
- Pressure reducing valve (PRV) allowing emergency flow into distribution system if Reservoir 6 needs to be bypassed,
- Vegetation control to establish clear line of sight around reservoirs perimeter,
- Signs at trails and on fences encouraging visitors to use paths away from reservoirs,
- Tennis court net to block errant tennis balls from entering Reservoir 6, and
- Emergency portable lighting

#### **Washington Park**

- Microwave perimeter detection system to help alert security when section of critical area has been breached,
- Gate improvements and vehicle access controls at entry points to track entry and exit activities,
- Completion of remote controls installation on isolation valves,
- Sensors to help alert security when critical areas have been breached,
- Additional cameras and communications and improvements for remote monitoring and on-site recording, and
- Improvements to secure buildings

Phase 1 includes sidewalk repairs at both reservoir sites to provide a safer walking surface.

Security and deferred maintenance capital infrastructure costs: approximately \$6.2 million to be funded from reprioritization of current five-year Water Bureau Capital Improvement Plan (no rate impact).

#### **Preliminary Phase 2 Beginning in FY 2005-06**

The Water Bureau proposes a second phase of enhanced security measures and infrastructure investments to be developed and discussed as part of the FY 2005-06 budget process for implementation starting next year. Phase 2 measures would include completion of the installation of remote control isolation valves at Mt. Tabor, additional water quality monitoring instrumentation at the open reservoirs, as well as an environmental technician and instrument technician for ongoing calibration, maintenance and monitoring of these instruments.

Based on an evaluation of the effectiveness of the additional security patrols included in Phase 1, Phase 2 could also include proposals to adjust the number of both contract and Water Bureau staff available to provide open reservoir security.

**FY 04-05 Estimated Capital Improvement Costs for Proposed Phase 1 Interim Security and Deferred Maintenance Measures at Open Reservoirs**

<b>Item</b>	<b>Function</b>	<b>Estimated Cost*</b>
<b>Security Improvements</b>		
Building Security & Camera Improvements at Washington Park	Improves communication, remote viewing and recording of visitation activities, secures buildings	\$ 360,000
Communications and video improvements at Tabor	Improves camera communications for monitoring	\$ 105,000
Begin design of Tabor Security Improvements	Start design work for conduits, alarms, power for security upgrades	\$ 150,000
Modify Reservoir 5 Gatehouse interior	Make site available for onsite security monitoring and provides facilities for staff	\$ 180,000
Install sensors on ornamental fences at reservoirs	Notifies security when and where reservoirs have been breached	\$ 175,000
Install signs at trails and on ornamental fences	Encourages visitors to take other paths away from reservoirs	\$ 54,000
Install perimeter detection system at section of Wash. Park outer fence	Notifies security when critical areas have been breached	\$ 47,000
Install 2 ornamental pipe gates @ Madison Trail at Wash Park	Blocks area where vehicles can drive into Washington Park reservoir	\$ 17,000
Upgrade security gates at Reservoir 3	Improves vehicle control--allows security to track entry and exit	\$ 106,000
Vegetation control	Removes nuisance plants and establishes clear line of sight	\$ 20,000
Provide emergency portable lighting	Provides security with lighting during night or inclement conditions. Improves security response	\$ 20,000
Tennis court net	Blocks errant tennis balls from the courts entering Reservoir 6	\$ 36,000
<b>Subtotal</b>		<b>\$ 1,270,000</b>
<b>Deferred Maintenance</b>		
Pressure reducing valve (PRV) at Tabor	Allows services to be switched to Tabor 411 in an emergency if Reservoir 6 needs to be bypassed	\$ 3,172,000
Install electric controls on valves at Wash. Park (including conduits, telemetry, and power)	Allows remote control of isolation valves-- faster emergency response	\$ 1,400,000
Sidewalk repairs at reservoir sites	Provides safer walking surface	\$ 225,000
Replace sliding gate at Reservoir 4	Replaces failing gate	\$ 104,000
<b>Subtotal</b>		<b>\$ 4,901,000</b>
<b>Total</b>		<b>\$ 6,171,000</b>

\* All phase 1 projects to be funded from within the current five-year Capital Improvement Plan with no additional rate impact.

**FY 05-06 Estimated Capital Improvement Costs for Preliminary Phase 2 Interim Security and Deferred Maintenance Measures at Open Reservoirs**

<b>Item</b>	<b>Function</b>	<b>Cost</b>
<b>Security Improvements</b>		
Building Security and Camera Improvements at Mt. Tabor	Improves remote viewing and recording of visitation activities, secures buildings	\$ 843,000
Provide spot lighting	Provides illumination of dark areas on and around reservoir to improve security response and increase safety for people walking around the reservoirs at night	\$ 54,000
Install new sliding gates at Tabor (1 @ Lincoln, 1 @ Res 5 - replace existing pipe gates); Costs include card keys and ornamental finish. Replace chain at Res 1 with Pipe gate.	Replaces existing manual entry gates with more secure automatic gates. Provides better vehicle control and allows security to track entry and exit activities. Speeds up response time. Replace weak chain with pipe gate.	\$ 225,000
Install WQ Monitors (Baseline)	Improves bureaus existing water quality monitoring and establishes baselines to track potential contaminants against.	\$ 891,000
<b>Subtotal</b>		<b>\$ 2,013,000</b>
<b>Deferred Maintenance</b>		
Install valves and electric controls on valves at Tabor (including conduits, telemetry, and power); Site preparation and restoration.	Allows remote control of isolation valves, speeding up emergency response time, increases Bureau's ability to remote bypass reservoirs and the Tabor site in an emergency	\$ 2,420,000
<b>Subtotal</b>		<b>\$ 2,420,000</b>
<b>Total</b>		<b>\$ 4,433,000</b>

Phase 2 projects will be finalized and brought to Council for consideration as part of the FY 2005-06 budget process.

## RESOLUTION NO.

Accept final report and recommendations of the Mt. Tabor Open Reservoirs Independent Review Panel and authorize interim enhanced security measures for City open finished drinking water reservoirs (Resolution)

WHEREAS, the Mt. Tabor Open Reservoirs Independent Review Panel has completed its review of options for addressing the security needs, pending regulatory requirements and necessary infrastructure investments for the Mt. Tabor open finished drinking water reservoirs; and

WHEREAS, the panel unanimously rejected the options of burying water storage without making park improvements, constructing treatment facilities at the reservoir outlets, replacing the bulk of the existing water storage at Powell Butte, and doing nothing; and

WHEREAS, the panel unanimously rejected the option of doing nothing because it felt some action is required to ensure water safety; and

WHEREAS, the panel unanimously recognized that the pending federal Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) affecting the structure and operations of open finished drinking water reservoirs has not been finalized and that there is no assurance of when it will be; and

WHEREAS, a majority of 8 panel members recommended that the Water Bureau, working with Portland Parks and Recreation, the Portland Police Bureau and members of the public develop a risk mitigation plan **that addresses** the requirements of the forthcoming Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and is compatible with the character and uses of the park to be submitted for approval to appropriate state or federal regulating agency; and

WHEREAS, a minority of 5 panel members recommended that the City retire Reservoir 1 from use, place enclosed water storage beneath Reservoir 5 and Reservoir 6 North, restore the surface water features at Reservoir 5 as they currently exist, and restore the remaining surface water features consistent with the values and design guidelines established in the Mt. Tabor Master Plan and guiding principles; and

WHEREAS, the project to place temporary floating covers over the Washington Park open finished drinking water reservoirs has been placed on hold pending the completion of the Independent Review Panel process; and

WHEREAS, safe drinking water and a secure and reliable drinking water system are essential to the health, safety and economic vitality of Portland and the surrounding metropolitan region; and

WHEREAS, two-thirds of the City of Portland gets its drinking water directly from highly accessible open drinking water reservoirs located in public parks; and

WHEREAS, Portland's open drinking water reservoirs and surrounding structures hold significant aesthetic and historic value to park neighbors and visitors; and

WHEREAS, two separate security vulnerability assessments of the Portland water system indicate that Portland's open drinking water reservoirs are among the most vulnerable points in the water system to contamination both incidental and intentional.

NOW THEREFORE, BE IT RESOLVED, that the City Council accepts the report and recommendations of the Mt. Tabor Open Reservoirs Independent Review Panel; and

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BE IT FURTHER RESOLVED, that should the risk mitigation plan submitted fail to gain the regulatory approval of the appropriate state or federal regulatory agency, the City Council, with full public participation and input, will evaluate and decide on appropriate alternative actions to meet the regulatory requirements for open finished drinking water reservoirs in the LT2ESWTR; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to develop and submit to Council, as part of its 2005-06 capital improvement plan, a schedule for addressing priority deferred maintenance needs at the City's open reservoirs until the City achieves compliance with the final LT2ESWTR through either risk mitigation or alternate means; and

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BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to follow all planning and design guidelines related to the reservoir sites and surrounding parks--including those described in the Mt. Tabor Park Master Plan, the Public Advisory Committee Guiding Principles, and the requirements of the listing of the open reservoirs on the National Register of Historic Places-- utilizing meaningful public process consistent with the City's adopted Principles of Good Public Involvement, in future actions related to the open reservoirs; and

BE IT FURTHER RESOLVED, that the City Council directs the Water Bureau to use the 0.5% in FY 2004-05 rate savings associated with the phase 1 enhanced interim security measures to reduce FY 2005-06 Water rates.

Adopted by the Council,

Commissioner Dan Saltzman  
Edward Campbell  
July 22, 2004

**GARY BLACKMER**  
Auditor of the City of Portland  
By

Deputy

## Parsons, Susan

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 12:26 PM  
**To:** Council Clerk – Testimony; Hales, Mayor  
**Subject:** Mt. Tabor Reservoirs Decomission hearing May 28, 2015  
**Attachments:** WTR contract 37524 deferred maintenance and interim security.pdf; City Auditor - City Recorder - Council Ordinance - 181555 Black & Veatch contract 36297 WP reservoirs amendment spreadsheet.pdf; Black & Veatch contract 36297 amendment.pdf; Washington Park Reservoirs 3 and 4 authorize contract ordinance.DOC; SlaydenreporttoCouncil2011.pdf

To: Portland City Council

Re: **Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project**

Submitted by Floy Jones on behalf of Friends of the Reservoirs

This information supplements other statements submitted for the record.

Good governance says that you don't invest tens of millions of dollars in open reservoir upgrades and then immediately seek to demolish those same water system assets, which is exactly what the Portland Water Bureau has done. Ongoingly, the Water Bureau demonstrates a lack of respect when it comes to spending other people's money and when it comes to community interests verses corporate interests.

Attached find:

1) Slayden corporations \$23 million open reservoir upgrade contract (security and infrastructure maintenance work) Work began in 2007, 1 year after the EPA LongTerm2 Enhances Surface Water rule was finalized and the "risk mitigation" reservoir compliance option was inexplicably removed from the draft rule. This Slayden corporation contract that was closed out in 2011. Ratepayers will be financing the open reservoir upgrades over the next 20 years with debt service costs increasing over time. These expenses and the ever burgeoning Water Bureau budget makes life increasingly more difficult for the middle class ratepayer. Contrary to statements previously made by David Shaff, Slayden Corp. will not be refunding any of the \$23 million dollars.

Note that the majority of projects recommended to keep the reservoirs safely operating for another 50 years as outlined in the MWH Global Reservoir Study contract that was amended and extended 9 times ( MWH Global Reservoir Study contract 30491 ,Volume 4 Facilities Evaluation, Appendix C, Table C-1 and Tech Memo 5.7 Executive Summary facepage) were completed via this Slayden contract and several other contracts including a Washington Park 2005 Black and Veatch contract # 36297 (which references HDR subcontract), Natt McDougal, and MWH Global contracts.

2) Black and Veatch reservoir upgrade contract 36297 spreadsheet attached

3)Black and Veatch reservoir upgrade contract 36297 including 2 amendments that extended work until March 10 , 2010, \$3,070,957 attached

4)Natt McDougal 2003-2005 contract- Council ordinance authorizing contract to install grill work for Washington Park reservoir floating covers. Contract amended with additional work added. LT2-compliant floating cover grill work remains in place. Water Bureau attempted to sell \$400,000 Hypalon covers on Ebay after 2004 *Independent* Reservoir Panel found no reason to "treat or cover" or otherwise abandon the open reservoirs. Attached

5) May 2011 Slayden \$23 million open reservoir upgrade contract report to Council- Attached

The upgrade work at the Mt. Tabor reservoirs involved several years of construction and included but was not limited to new piping, isolation valves, installation of restroom facilities for onsite security personnel, new

infrared security cameras and other high tech security equipment, sensors installed around all of the reservoirs including Reservoir 6 (note that the sensor equipment never worked at Reservoir 6 yet there is no indication that the responsible consultant was ever required to refund the money). Immediately after installation of the costly security equipment the Water Bureau stopped using Reservoir 6 for drinking water as there was an excess of in town storage. The Water Bureau misled the public and possibly City Council for years with regard to Reservoir 6 being taken offline.

The upgrade work at Washington Park included new piping, isolation valves, concrete repair of reservoir floor, liner installed, new costly wrought iron security fencing, construction of a new "grand staircase", new pathways, improved security monitoring, sensors, motion-sensitive security cameras, etc. Natt McDougal also had a contract which last more than 2 years related to the installation of the grillwork for the Hypalon-like covers and other work, Project 2003-3367.



## REPORT TO COUNCIL

May 26, 2011

Accept report on contract with Slayden Construction Group, Inc. for construction of the Mt. Tabor and Washington Park Interim Security and Deferred Maintenance Project as complete, authorize final payment and release retainage (Report; Contract No. 37524)

On March 08, 2006, City Council approved the findings and authorized Portland Water Bureau (PWB) and Procurement Services an exemption to the competitive bidding process to allow for the selection of the construction contractor using an alternative procurement method, specifically the CM/GC method (Council Ordinance No. 179979).

On November 13, 2006 the City entered into a PTE Services (Contract No. 37077) with Slayden Construction Group, Inc. for the Pre-Construction Services for the interim security improvements and deferred maintenance work at Mt. Tabor and Washington Park Water Facilities. The PTE Contract was completed on July 30, 2008 and closed out. As part of the PTE services the City entered into negotiations for a Guaranteed Maximum Price (GMP) for Construction Services. A GMP was successfully negotiated and the City entered into a second contract for construction services.

On August 21, 2007 the City authorized a contract with Slayden Construction Group, Inc. for construction services (Contract No. 37524). The purpose of the project was to construct security, and deferred maintenance improvements, which enabled the PWB to better secure the open reservoirs with cameras and electronic security devices and permit the isolation of the reservoirs with remotely controllable valves and bypass piping and other maintenance items. As part of this work, PWB installed fence and gate improvements, vehicle access controls, remote controlled actuators on existing isolation valves, new isolation valves with remote controlled actuators, a pressure reducing valve (PRV), and Gatehouse No. 5 interior remodeling for on-site security staff. Security improvements included security alarm upgrades, additional cameras and communications equipment, improvements for remote monitoring, on-site recording, vegetation control around reservoir perimeters, signs encouraging visitors to use paths away from reservoirs, and improvements to secure buildings.

ORS 279C.355 requires an evaluation report upon completion of a project exempted from competitive bidding. The report must include information on the GMP if used; actual estimated project costs; numbers of change orders; an analysis of the success and failures of the design, engineering and construction; and an objective assessment of the use of the alternative contracting process as compared to the findings required by ORS 279C.355. The following is the report required by ORS 279C.355, which explains how the use of an alternative contracting method was in the City's best interest.

## GMP, Costs and Change Orders:

The original amount for the Preconstruction Services contract was \$315,173 and the final total paid amount under this contract to Slayden Construction Group, Inc. was \$367,693.07 (16.7 % over the original contract amount). There were two (2) amendments to the Preconstruction Services contract. Amendment No. 1 was a no cost increase, but extended the contract to April 30, 2008. Amendment 2 provided additional compensation with a not to exceed amount of \$56,314 for added work scope, which included advertising for sub-contract work, printing of construction documents, outreach efforts to the minority, women, and emerging small business (M/W/ESB) community, and preparing for upcoming construction activities.

The original GMP contract amount for Construction Services was \$23,238,377, which was established with a Report to Council to authorize the Construction Services contract. The final construction cost in 2011 is the same as the original GMP contract cost approved by Council in 2006. There have been five (5) no cost change orders issued for the construction contract. Change Order No. 1 provided a mechanism to allow for payment of the contractor's fee to be distributed in increments with no cost increases. Change Order No. 2 extended the contract completion date for delays encountered for the sole source security portion of the project and issues with the mechanical valve actuators delivered, and other maintenance items with no cost increases. Change Order No. 3 added the installation of a PRV vault/piping system on SE 60th Avenue from the Owner's allowance budget with no cost increases. And Change Orders No. 4 and 5 were also no cost changes to the contract extending the contract completion date for completion of the PRV vault/piping system on SE 60th Avenue. The final contract amount is \$23,238,377 (0% over/under the original GMP contract amount). The balance due on the contract is \$99.95 and the retainage to be released is \$5,973.68. The project is now complete and all work necessary to complete the project has been executed in accordance with the contract documents and to the satisfaction of the PWB.

### Objective assessment of the use of the alternative process:

The paragraphs below in italics are the Findings dated March 2006 (Ordinance No. 179979, Exhibits A and B) justifying project exemption, and PWB's assessment of the use of the alternative contracting process as compared to the findings:

#### *1. Objective: Competition -*

*The alternative contracting method will not limit competition or encourage favoritism in the selection process when compared to the standard "low bid" process. PWB will formally advertise and issue a Request for Qualifications (RFQ) followed by a Request for Proposals (RFP) for a contractor for this project in accordance with established RFP procedures that will attract competition for this contract from numerous contractors in the construction community. Potential contractors will submit Statements or Qualifications to perform the work. A Selection Committee consisting of staff from PWB, Bureau of Purchases and others from the community will evaluate the Statements of Qualifications and develop a short list of the most qualified contractors. Those selected will be asked to submit proposals. The Selection Committee will then select a contractor based on evaluation of the proposals and subsequent interviews, if necessary. The evaluation process will be based on predefined criteria of demonstrable technical qualifications and the proposed fixed fee. Subcontracted portions of the work will be*

*contracted by the contractor through a competitive bidding process. The selection process will be completed under the guidance and direction of the Bureau of Purchases staff.*

PWB Assessment:

Originally the Washington Park and Mt. Tabor Improvement Projects were individual projects with separate solicitations for construction. The outcome of this solicitation was that no contractors submitted proposals for the Washington Park Project; the PWB removed the Mt. Tabor RFP from the advertising process and received approval by Council ordinance to repackage and combine the two individual projects together to make the project more attractive to the contracting community. The combined projects were then advertised as a single project. The combined project was competitively advertised for RFP and three (3) proposals were received. The Contractor Slayden Construction Group, Inc. was selected through the RFP process. Proposals were evaluated using the following evaluation criteria: Organization, Structure, and Key Personnel; Construction Project Plan and Management Experience; Financial Viability; Risk, Safety Performance, and Approach to Safety; Project Approach; Approach to Partnership; Pre-Construction Cost & CM/GC Fee; Diversity in Employment and Subcontracting Requirements; and Community Relations Experience. A seven (7) person selection committee selected Slayden Construction Group, Inc. on August 25, 2006. The selection committee was comprised of seven (7) members (three (3) PWB representatives, one (1) City of Portland (non-PWB) representative, and three (3) non-City representatives). The selection committee was developed to ensure that there were diverse and qualified evaluators to serve on the panel. The committee included three (3) women and two (2) minority evaluators.

2. Objective: Operational, Budget And Financial Data -

*The Project will enhance existing security facilities, install new security and new isolation valves, and install and allow remote control of isolation valves improving the Bureau's response time in the event of an emergency. It is imperative the existing water facilities remain operational during construction.*

*In addition, confidentiality, security and protection of the bureau's critical facilities during the bidding and construction process are essential. A CM/GC contract will allow PWB to have more participation and control. This contracting approach carries both the lowest risk and lowest construction and operating cost compared to any other contracting method. This process also offers the greatest flexibility, reliability, and assurance of continued water facility operations.*

*PWB has particular concerns about releasing documents that include the detailed plans for electronic security elements such as alarms and cameras. This alternative contracting method will allow the use of more general plans that would not reveal these details in the RFP process. The selected CM/GC can access those documents subject to the confidentiality agreement following the Bureau's assurance of integrity of the project team.*

*Employing the contractor during the design phase will allow the contractor to assist in selecting appropriate construction methods and sequencing and in developing a realistic comprehensive construction schedule before the construction phase begins. This will*

*also allow PWB to maintain a higher level of security and restrict access to security documents including the plans and specifications of critical facilities. The alternative contracting method will also provide value engineering and constructability reviews well before the final construction documents are completed. This should ultimately result in fewer change orders and significant savings for the City over conventional contracting.*

PWB Assessment:

Participating on the project during the design period allowed Slayden Construction Group, Inc. to develop a good understanding of the PWB operating constraints for the two sites. This allowed the Contractor to work with PWB engineering, operations and security staff in developing plans to reduce risk to on-going operations while constructing new facilities. In the CM/GC process, the Contractor was able to outreach to a select group of subcontractors that were qualified for the work and required the subcontractors to adhere to the PWB security requirements. The contractor also provided the PWB assistance in working with the permitting agency to explain or adjust construction methods to meet the permit requirements. The cost savings for this project enabled the PWB to add related work at SE 60th Avenue without increase to the overall contract budget.

3. Objective: Public Benefits -

*PWB must continue to meet its commitment to the City of Portland to provide quality potable water to its 800,000 customers and maintain water storage and fire fighting capacity during construction. Mt. Tabor and Washington Park is a terminal storage site for the majority of potable water provided to the City. Therefore, it is necessary that construction of the project proceed with minimum interruptions, delays and claims.*

*The Mt. Tabor and Washington Park sites are listed on the National Historic Register and include environmentally sensitive areas. It is important that the construction contractor have a thorough understanding of the requirements to protect these resources, and that design, historic, and environmental permitting is coordinated. Alternative contracting will allow the contractor proactive involvement in design to develop construction approaches and methods to minimize impacts on the park, Parks Bureau operations and park users. Such involvement in the design phase would not be possible using the traditional "low bid" contracting method.*

*It is likely that there will be a lower chance of disruption to the public's water supply by using the alternative contracting approach. Electing to adopt reasonable measures such as alternative contracting to meet its commitments falls well within the Bureau's fundamental mission of maintaining the highest quality and reliable water service.*

*Finally, alternative contracting will allow construction of the proposed improvements at the lowest life-cycle cost. Alternative contracting will thus allow the public to receive the benefits of both timeliness and lowest cost.*

PWB Assessment:

This alternative contracting process allowed the Contractor more flexibility for the sequencing of construction, constructability reviews, construction staging and removal of potential operational constraints, since much of this was planned during the design phase. Their input and advice on design decisions, scheduling, and cost implications was invaluable. The complexities of the reservoir piping and facilities made this team

approach during design and construction essential. It was anticipated that work on the existing facilities would require shutdown of PWB facilities that could adversely impact water quality or quantity to be provided to PWB customers. However, this contracting opportunity allowed the Contractor to gain knowledge and understanding of the operations of the PWB facilities early on in the design process which enabled the Contractor to work closely with PWB's operations staff and designers to sequence or modify their construction methods that minimized the number or duration of the shutdowns with no impact to water quality or delivery. The flexibility of this contracting approach was extremely successful in ensuring continued water delivery from these key sites.

4. Objective: Value Engineering -

*The alternative contracting method will give the contractor an opportunity to partner with PWB design and construction staff in performing value engineering and constructability reviews. In contrast, contractor input into the project while it is being designed is not possible using the conventional "low bid" design-bid-build construction process. Early involvement will reduce overall project costs and more efficiently attain the project objectives. The contractor can review conditions while design is ongoing and thus has the opportunity for input. The contractor's construction experience and knowledge will also help identify and resolve issues prior to construction and will aid in early identification of effective measures to minimize disruption. This partnering will likely reduce the need for change orders, claims, and delays, resulting in significant cost savings and delivery of quality facilities on time. In contrast, the "low bid" process, which does not permit significant contractor input during the design phase, would not allow the contractor to see actual conditions while design is ongoing.*

PWB Assessment:

The Contractors' contribution to value engineering during the design and construction phase was an effective tool for this project. The periodic cost estimates were much more accurate than those normally received from consultants due to their familiarity of the project conditions and ability to perform preliminary investigative work. The Contractor worked with the PWB operations staff and designers to identify value engineering items (e.g. modifying routing of pipelines thereby reducing the pipe lengths, changing construction methods, utilizing alternative materials, negotiated costs with subcontractors to achieve the best cost for the work, etc.) that resulted in cost savings to the project. With input from the Contractor, cost effective and alternative construction methods, and utilization of knowledgeable subcontractors resulted in work being completed ahead of schedule resulting in cost savings to the project. At the end of the project, the contract resulted in \$1,423,736.36 in shared savings. The PWB was able to utilize the savings from this contract to add a second planned bypass connection at SE 60th Avenue that is needed to provide operational flexibility to the piping system at the Mt. Tabor. The added work was completed within the savings from the contract thereby resulted in no-cost changes to the overall contract amount, and was less overall cost than doing the work under a separate contract.

5. Objective: Specialized Expertise -

*Maintaining the water supply to the public while retrofitting security improvements and installing isolation valves on existing pipes is highly specialized work that requires a*

*great deal of extraordinary care. In addition, construction will occur within a constricted work zone and must take into account Park activities. Some of the methods to protect the water supply, the public, existing historic and environmental resources, and the Park, will not be fully addressed until the project is underway. For example, close coordination with Bureaus of Development Services and Parks, with COMNET, the City's camera and communications provider, and the City's card key provider will be required to ensure security improvements work properly.*

*It is imperative that the contractor has a high degree of construction and coordination experience in similar situations that is available during the design phase of this project. Expertise in construction methodology, sequencing, scheduling, and cost estimating is essential to make sure the City realizes an optimum design that remains practical and within budget. The alternative contracting method will provide the best opportunity to select not simply a qualified contractor, but the most knowledgeable contractor available with the necessary expertise for this project. In addition, the alternative contracting method provides the only realistic way to make sure that expertise is available during the project design phase. In contrast, the conventional "low bid" method does not permit the City to use the contractor's expertise to help design the project nor does it permit the City to exercise judgment about who may be the most qualified contractor to perform this work. Therefore, specialized expertise on this project requires use of the alternative contracting method to maximize the project's success.*

PWB Assessment:

The Slayden Construction Group, Inc. and their subcontractors had the expertise in pipeline, mechanical, electrical, and facilities work improvements requiring sequencing, scheduling and cost estimating, which ensured the City an optimum construction sequencing that remained practical and within budget and schedule.

6. Objective: Market Conditions -

*The alternative contracting method reaches the same or greater market of construction contractors as the conventional bidding process would. The specialized skills and major components of work necessary for the Mt. Tabor and Washington Interim Security and Deferred Maintenance Project reaches the state and national market place. Competitive contracting to this market will be obtained during the solicitation for qualifications and proposals.*

*Other key elements of work for the project that are not completed by the selected contractor will be subcontracted out. A large portion of this work will be subcontracted out to the local market by the CM/GC, using traditional competitive bidding methods. This will ensure both competition and highly qualified subcontractors. The alternative contracting method has the added benefit of allowing the selected contractor to solicit bids for portions of work while other portions are under construction or still in design. This allows the contractor extra time to coordinate construction activities between its various resources to minimize construction risks and delays. The contractor will be able to prepare material and equipment submittals early and thus issue purchase orders to suppliers and vendors for timely delivery. This method will also provide a lengthened opportunity to identify and reach out to qualified minority, women, and emerging small businesses that may otherwise not have an opportunity to participate in the project.*

*Overall, the alternative contracting method provides the best assurance that the most qualified and cost effective subcontractors, suppliers, and vendors will be available to meet the demanding schedule at minimum cost.*

PWB Assessment:

The Slayden Construction Group, Inc. was able to be selective in the work to be subcontracted and determine the list of qualified contractors to perform the work. This effort allowed the utilization of M/W/ESB firms to help meet the City workforce training and hiring requirements while utilizing most qualified contractors for the work. The Slayden Construction Group, Inc. was also able to determine early on as to work to be self performed and work to be subcontracted to local M/W/ESB firms. The Contractor hired an M/W/ESB outreach coordinator to maximize M/W/ESB participation on the project. With input from the M/W/ESB outreach coordinator, the Contractor developed smaller bid packages providing additional contracting opportunities, mentored subcontractors, and held bid opportunity meetings with potential contractors. Because of those efforts, M/W/ESB participation was 35.7%.

7. Objective: Technical Complexity -

*Several elements of this project require specialized expertise, as described above. Therefore many of the same reasons that support use of an alternative contracting process that were described in that section are equally applicable because of the technical complexity of this project. In addition, the complexity of the elements of work requires the contractor to understand and be able to manage all aspects of work. The alternative contracting method permits selection of the most qualified contractor to perform this work, rather than requiring the City to accept a contractor based on the lowest bid, which may not have been submitted by the most qualified contractor. Nonetheless, selection of the most qualified contractor is likely to yield substantial cost savings because the contractor's additional expertise will likely identify problems or solutions during the design phase that a less qualified contractor would not. The project is technically complex because the contractor must provide coordination for essential issues such as maintaining the existing water supply, the system security and the ongoing protection of historic and environmental resources, all while minimizing impacts to the park and park users.*

*It is also technically complex because security devices must be installed appropriately and in a manner consistent with the listing of the site as a historic landmark. In addition to protecting the water, the environment and historic features during construction, the project requires establishment of a construction phasing plan; a park circulation plan, dewatering plan; erosion control plan; traffic control plan; health and safety plan; and a sheeting and shoring plan, all prior to starting on-site work. Some of these plans will require close coordination with the public and other City Bureaus. The conventional "low bid" process, based strictly on the initial price, will not necessarily produce the contractor best able to handle the technical complexity of this process and thus may well cause the City additional costs by the time the project is complete. This is less likely to happen if the most qualified contractor is selected through an alternative contracting method and participates in the design process.*

PWB Assessment:

A majority of the work is within the historic landmark and required additional conditions and necessary expertise and equipment imposed on contractor in accordance with the permit requirements. The Slayden Construction Group, Inc. utilized bids from subcontractors during the design to develop costs for construction. The project benefited from early and on-going constructability reviews, scheduling, and sequencing for purchase of long lead production items. This resulted in significant time and cost savings to the project versus the conventional Design-Bid-Build method. In addition, the Contractor established a document distribution process to ensure documents for the security elements are distributed only to selected subcontractors working on their specialty items.

8. Public Safety

*PWB must deliver water to its customers and have water available for emergencies twenty-four hours a day three hundred and sixty five days a year notwithstanding whatever construction activities are incurring on site. The construction activities cannot interfere with PWB's mission of providing high quality water that meets all regulatory standards. The CM/GC process enables the selected contractor to provide input during the design process, enables it to establish a safety plan and a more coordinated construction phasing plan. Therefore, this process is more likely than the low bid process to assist the Bureau in meeting the demands for water quality, reliability and system security. This will result in early implementation of health and safety measures to protect the public, City employees, construction workers and the water system throughout the project. In order for the proposed security improvements to be effective, they must be installed in a manner that ensures protection of the design information about the nature of alarms and related features and location of critical water facilities. In a low-bid process, detailed plans must be widely distributed and are available to anyone requesting copies of the bid documents without screening. Under the CM/GC process it is possible to distribute more general plans and then require confidentiality before detailed plans are shared. This makes it easier for the Bureau to protect security information, which is especially important in work in the area of electronic security, including alarms and passwords. Since the CM/GC process is designed to select a highly qualified contractor, it is likely that this process will maximize public safety and protection of critical information.*

PWB Assessment:

The limited document distribution helped the PWB to meet its goal to protect security information. The pipe installation on SE 59<sup>th</sup> had significant impacts to the accessibility of the residents to their homes. Due to the anticipated high level of neighborhood issues and concerns regarding this project, the contractor provided an on-site neighborhood liaison who was an active interface between the contractor and the neighbors. The communication between the Contractor's on-site neighborhood liaison and the local residents helped to limit neighborhood conflicts with the construction activities and kept residents safer by keeping them out of the construction work limits. The neighborhood benefited from having a specific go to person to communicate their concerns whether it was for their specific residence or issues concerning the neighborhood. With daily involvement from the on-site neighborhood liaison and the local neighborhood, the



contractor was able to keep focused on their work, and also take quick action to modify the access, site security or traffic control measures when applicable. This input from the Contractor and PWB's neighborhood involvement staff to accommodate the neighborhood helped keep the project on schedule while meeting the needs of the neighborhood. At the conclusion of the work on SE 59<sup>th</sup> Avenue, residents were very satisfied with the outcome of the project and expressed their appreciation for the amount of time spent to coordinate the construction to minimize impacts to their daily activities. This project was completed with no recorded accidents or incidences.

Conclusion:

The use of the CM/GC contracting process on this project was successful at every level. This methodology was fully appropriate for this project and should continue to be viewed as a viable contracting option and selected projects. The CM/GC contractor worked closely with PWB staff (public involvement, operations staff, designers, electricians, etc.) and was flexible in modifying or adjusting the construction schedule or methods to accommodate the needs of the PWB, other City of Portland agencies, or the general public. The CM/GC contractor worked with the PWB to resolve changes encountered on this project that were due to permitting requirements, design modifications to accommodate actual construction conditions with no overall cost increases where these type of changes in a typical design-bid-build project would have likely resulted in cost increase change orders or claims.

It is recommended that Council accept the evaluation report, and accept the contract with Slayden Construction Group, Inc. as complete, authorize final payment and release retainage.



David G. Shaff  
Administrator

**TO THE COUNCIL:**

The Commissioner of Public Safety concurs with the above Report to Council, and;

**RECOMMENDS:**

that the Council accept the evaluation report, and accept the contract with Slayden Construction Group, Inc. as complete, authorize final payment and release retainage.

Respectfully submitted,

Randy Leonard  
Commissioner of Public Safety

AMENDMENT NO 2  
CONTRACT NO. 36297

FOR

**Design of Mt. Tabor Interim Security and Deferred Maintenance Improvements**

Pursuant to Ordinance No. 179633 and 179979

This Contract was made and entered into on the 14th day of October 2006, by and between Black & Veatch Corporation, hereinafter called Contractor, and the City of Portland, a municipal corporation of the State of Oregon, by and through its duly authorized representatives, hereinafter called City.

1. This contract is hereby extended through March 1, 2010.
2. Additional compensation is necessary and shall not exceed \$650,000. Additional compensation is required for additional geotechnical monitoring and video documentation of private property adjacent to the construction zone to mitigate risk; design for the relocation and replacement of aging sewer and realignment of 48-inch water main to minimize neighborhood and tree impacts during construction; security equipment commissioning, and final record drawings for the Mt. Tabor and Washington Park Interim Security and Deferred Maintenance Project.

All other terms and conditions shall remain unchanged and in full force and effect.

Black & Veatch Corporation

By: \_\_\_\_\_  
Date

\_\_\_\_\_  
(Name and Title)

Address: 4800 Meadows Road  
Suite 200  
Lake Oswego, OR 97035  
Telephone: (503) 699-7556

Approved as to Form:

CITY OF PORTLAND

\_\_\_\_\_  
City Attorney Date

By: \_\_\_\_\_  
Auditor Date

By: \_\_\_\_\_  
Mayor/Elected Official Date

**Mt. Tabor and Washington Park  
Interim Security and Deferred Maintenance**

**Amendment #2 – Contract 36297**

**Additions to Preliminary Design Services Scope, Mt Tabor & Washington Park: Add the following Tasks:**

**Additional Documentation for the Land Use Review (LUR) Packages:** B&V/HDR were requested to provide additional exhibits, drawings and text for the LUR process for Mt. Tabor and Washington Park applications, beyond that anticipated in the original scope. These were required in order to provide better detail on the proposed improvements for Landmarks Commission review.

**Additions to Design Services Scope, Mt Tabor & Washington Park:  
Add the following Tasks:**

**Redesign of Water Transmission Mains 60th Ave. – Hawthorne – 59<sup>th</sup> – Lincoln to accommodate the BES sewer replacement project:** The original design was developed on the assumption that existing sewers would remain in place. BES has determined that the sewers in these streets will be replaced as part of the Mt. Tabor project. The proposed sewers are larger than existing, in some cases deeper, and generally realigned in the roadway. This change necessitates significant changes in the alignment of the water transmission mains of the existing design, which was already at 95% completion when these changes were made. This Task provides for the effort to redesign and change locations of these water pipelines to avoid conflicts with the sewers.

**Specifications for Metal-Seated Valves:** The original scope of services was developed on the assumption that all main valves would be AWWA C504 valves. Because of unexpected high velocities in several valves PWB has directed B&V to change these to metal-seated triple-offset valves. This Task provides for the effort to prepare specifications for these valves.

**Redesign at Gatehouse 5:** BDS initial reviews indicated that changes would be needed to meet City code. This Task is to redesign the entrance and handrails at Gatehouse 5 and to re-issue the affected drawings.

**Land Use Review (LUR) - Washington Park:** Landmarks Commission as part of the LUR permitting process has required additional research and documentation of alternative concrete repair procedures and alternative handrails and fencing material effecting features in the historic district. This review has resulted in the direction to redesign and to re-issue the affected drawings for the repair to the Grand Staircase, East Staircase and some other issues. The exact scope is undefined at this time, but a budgetary allowance is provided.

**Electrical Design Change – Generator System:** As a value engineering measure, to reduce project cost, the PWB has decided to delete the generator building at Reservoir 6 and instead to provide a manual transfer switch and connection for a portable generator. This scope is to provide design services for this change in electrical wiring and physical facilities.

**Additions to CM/GC Services Scope: Add the following Tasks:**

**Additional Partnering Workshop:** This provides for one partnering workshop beyond the original Scope, to be held early in the construction phase. The Scope provides for a qualified facilitator, plus attendance by key B&V/HDR team members.

**Additions to Construction Services Scope - Task 0500**

**Vibration Monitoring – Mt. Tabor:** This Task is to allow for continuous vibration monitoring during construction of the sewer and pipeline improvements in 59<sup>th</sup> Ave, Hawthorne and Lincoln St, on a time and materials basis, with a budget of \$70,000 for Earth Dynamics, plus B&V oversight and handling fees.

**Video Documentation – Mt. Tabor:** This Task is to allow for video documentation of the condition of selected residences in the vicinity of the sewer and pipeline improvements in 59<sup>th</sup> Ave, Hawthorne and Lincoln St, on a time and materials basis, with a budget of \$28,000 for Curtis & Jeidy, plus B&V oversight and handling fees.

**Labor Escalation:** The Original Construction Services budget is adjusted to allow for labor cost escalation, based on project completion approximately 2 years later than the original timeframe anticipated in the Request for Proposals.

**Project Record Drawings:** This Task is to provide drafting services and production of Project Record Drawings, for Mt. Tabor and Washington Park improvements, based on the CM/GC's as-built drawing markups submitted to the PWB. This Task will be on a time and materials basis with a budget allowance of \$50,000.

**Washington Park – Security Systems Commissioning:** Consultant shall provide 80 hours field services to assist the BWW and CM/GC in commissioning the security facilities. (Commissioning for Tabor is in the existing Scope).

**Washington Park - Reservoir Isolation Operational Guidelines:** The Consultant will work with BWW staff to develop Reservoir Isolation Operational Guidelines for Washington Park (Guidelines for Tabor are in the existing Scope). These guidelines will incorporate O&M manuals for the valve actuators, supplied by the CM/GC. The Operational Guidelines will cover the following general topics:

- Confirming decision to isolate one or more reservoirs;

- Items to check before remotely actuating valves;

- Valve opening and closing sequence for each of several operating scenarios (isolate one reservoir, two particular reservoirs, etc.);

- Instruments to monitor while valves are opening and closing – warning signs to be aware of;

- Corrective actions if pressure transients or other unexpected problems emerge;

- Follow-up monitoring and observations after new valve-line up is complete

#### **Additional Task 0600 – BES Sewer**

This Task is to provide design drafting and production of plan and profile sheets for the 59<sup>th</sup> Ave, Hawthorne, Lincoln St, and 60<sup>th</sup> Ave. sewer replacements. This work does not include sealing drawings or specifications; the responsibility for the technical design and calculations is with City of Portland BES.

#### **Construction Value Engineering**

This budget is for additional Tasks that may be authorized at PWB discretion. If requested, Consultant shall submit a scope and fee proposal for each Task requested and shall not proceed until receipt of PWB's written approval.

TRIPPLICATE

AUG 21 2007

RFP NUMBER 105058

CONTRACT NUMBER 37524

FOR

**Mt. Tabor and Washington Park Interim Security and Deferred Maintenance Project**

Department of Public Safety, Bureau of Water Works

Pursuant to Ordinance Number 179979

This Contract, made and entered into this 21<sup>st</sup> day of August, 2007, by and between Slayden Construction Group, Inc., hereinafter called Contractor, and the City of Portland, a municipal corporation of the State of Oregon, by and through its duly authorized representatives, hereinafter called City,

**WITNESSETH:**

The parties hereto mutually covenant and agree to and with each other as follows:

**ARTICLE I.** For and in consideration of a Guaranteed Maximum Price (GMP) of Twenty Three Million Two Hundred Thirty Eight Thousand Three Hundred Seventy Seven Dollars (\$23,238,377.00), to be paid by City, Contractor hereby agrees as follows:

- A. To provide all machinery, tools, apparatus, materials, equipment, labor and other means of construction necessary to perform and complete the work in the manner specified and in accordance with the requirements of the Engineer.
- B. That upon date indicated in the Notice to Proceed from the City, Contractor shall order all materials and equipment and commence work hereunder in accordance with the specifications and shall substantially complete the project within 24 months after the Notice to Proceed and shall complete the project in all respects within 4 months after the substantial completion date.
- C. That all construction, building, or installation shall be in accordance with:
  - 1. The applicable Conditions of the Contract Documents for developing a Guaranteed Maximum Price (GMP) for the project authorized by Ordinance No. 179979. These Conditions exist in five (5) volumes known as:
    - a. GMP Budget document dated June 7, 2007 (Volume 1)
    - b. PWB Design Specifications dated May 11, 2007 as revised July 30, 2007 (Volume 2)
    - c. PWB Drawings, Schedule A and B Plans, dated April, 2007 (Volume 3)
    - d. Mt Tabor Reservoir 1 Stairwell document dated September, 2006 (Volume 4)
    - e. BES Sewer Replacement document, plans dated May 2007 (Volume 5)

2. The Contractor's proposal and Guaranteed Maximum Price, dated June 7, 2007, acceptance of which was recommended and adopted by the Council on July 18, 2007.

Reimbursable Cost:	\$ 20,601,398.00
Contractor's Fee:	<u>\$ 2,636,979.00</u>
Total:	\$ 23,238,377.00

Said documents on file in the Office of the City Auditor in Council Calendar Number 884, and by reference made a part of the contract.

- D. That this contract or any interest herein shall not be transferred to any party/parties without the prior written consent of the City. In the event of transfer without prior written consent, the City may refuse to carry out this agreement with either the transferor or transferee and yet retain and reserve all rights of action for any breach of contract committed by Contractor.
- E. That no officer or employee of the City is or shall be entitled to any share, part or benefit(s) derived from this contract.
- F. To pay all royalties and license fees for all patented articles or processes and save City free from all loss or damage that may result from the wrongful or unauthorized use of said items.
- G. To make all necessary repairs and replacements to remedy all defects, breaks, or failures in work performed under the plans and specifications without cost to the City and in a manner satisfactory to the Water Bureau Chief Engineer.
- H. To provide Commercial General Liability Insurance in accordance with the specifications protecting the City and Contractor in sums not less than \$1,000,000 for bodily injury and \$1,000,000 for property damage per occurrence, OR a single limit policy in the minimum amount of \$1,000,000 covering all claims per occurrence.
- I. To furnish a fully executed Performance Bond and Payment Bond each in the sum of Twenty Three Million Two Hundred Thirty Eight Thousand Three Hundred Seventy Seven Dollars (\$23,238,377.00) by completion of the standard City form included with this contract.
- J. That the City may elect to cancel or terminate this contract if Contractor willfully fails or refuses to faithfully perform in accordance with the terms of this agreement.
- K. Since City Funds will be used for this project, Contractor shall abide by all regulations applicable hereto.
- L. To furnish a two-year Maintenance and Warranty Bond (see sample form provided) prior to receiving final payment.
- M. All rights of action for any breach of this contract by Contractor are reserved to the City.
- N. The Prevailing Wage Rates for this project shall be the rates published by Oregon Bureau of Labor and Industries (BOLI) on July 1, 2007, which are hereby incorporated into this contract by this reference.

ARTICLE II. In consideration of the premises, and in accordance with the provisions for acceptance and payment for work set forth in the Conditions of the Contract documents. City hereby agrees to pay contractor a sum computed by application of the unit prices and lump sums set forth herein.

ARTICLE III. It is understood and agreed by the parties hereto that:

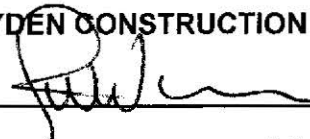
- A. Time is of the essence. Therefore, if Contractor fails to complete this project within the time specified or within any adjusted contract time, Contractor shall pay the City its actual damages for each and every day of delay as specified in the Contract.
- B. Any reference in this contract to the Conditions of the Contract Documents is intended as convenience to the parties in the administration of the contract. Therefore, in the absence of an express statement to the contrary herein, any restatement or partial restatement in this contract of any provision of the Conditions of the Contract Documents is not intended, nor shall such be construed to change, alter, modify, amend, or delete the requirements of the specifications.
- C. All statutory, charter and ordinance provisions applicable to public contracts in the City of Portland and the State of Oregon shall be followed with respect to the contract as evidence by but not limited to the provisions of Appendix "A" attached hereto and by this reference made a part of this contract.

IN WITNESS WHEREOF, Contractor and City have caused this contract to be executed in triplicate by their duly authorized representative(s), all on the day and year first above written.

(Affix Corporate Seal)

SLAYDEN CONSTRUCTION GROUP, INC.

BY



TODD W. WOODLEY, PRESIDENT  
(Print Name and Title)

Approved as to Form:

**APPROVED AS TO FORM**

City Attorney

  
CITY ATTORNEY *Fun SVP*

Address:

PO Box 247  
Stayton, OR 97383

Telephone No:

503-769-1969

Fax No:

503-769-4525

STATE OF OREGON  
CONTRACTORS BOARD NUMBER

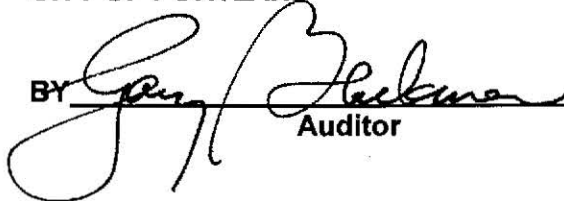
157045

CITY OF PORTLAND  
BUSINESS LICENSE NUMBER

675454

CITY OF PORTLAND

BY



Auditor

APPROVED BY COUNCIL

BY



Commissioner of Public Safety

CENTER CODE: 18089949 INITIALS: mp DATE TYPED: August 2, 2007 FUNDING: City



## APPENDIX A

Contractor shall observe all applicable state and local laws pertaining to public contracts including the City's Equal Benefits Ordinance and its administrative rules, all of which are incorporated by this reference. Failure to comply with the Ordinance permits the City to impose sanctions or require remedial actions as stated in Section 13.1 of the rules, ORS Chapters 279A, 279B and 279C require every public contract to contain certain provisions. Pursuant to those chapters, the following provisions shall be a part of this contract, as applicable.

Pursuant to ORS 279B.220, on every public contract, the contractor shall make payment promptly, as due, to all persons supplying to the contractor labor or material for the performance of the work provided for in the contract; shall pay all contributions or amounts due the Industrial Accident Fund from the contractor or subcontractor incurred in the performance of the contract; not permit any lien or claim to be filed or prosecuted against the state or a county, school district, municipality, municipal corporation or subdivision thereof, on account of any labor or material furnished, and; pay to the Department of Revenue all sums withheld from employees under ORS 316.167.

- Pursuant to ORS 279C.505, on public improvement contracts, the contractor shall make payments promptly, as due, to all persons supplying to such contractor labor or material for the prosecution of the work provided for in such contract. The contractor shall pay all contributions or amounts due the Industrial Accident Fund from such contractor or subcontractor incurred in the performance of the contract. The contractor shall not permit any lien or claim to be filed or prosecuted against the state, county, school district, municipality, municipal corporation or subdivision thereof, on account of any labor or material furnished. The contractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. Contractor shall demonstrate that an employee drug-testing program is in place.
- Pursuant to ORS 279C.510 (1), in every public contract for demolition the contractor shall salvage or recycle construction and demolition debris, if feasible and cost-effective. Pursuant to ORS 279B.225 and 279C.510 (3) in every public contract and every public improvement contract for lawn and landscape maintenance, the contractor shall compost or mulch yard waste material at an approved site, if feasible and cost-effective.
- Pursuant to ORS 279B.230(1), in every public contract, the contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical and hospital care services or other needed care and attention, incident to sickness or injury, to the employees of the contractor, of all sums that the contractor agrees to pay for the services and all moneys and sums that the contractor collected or deducted from the wages of employees under any law, contract or agreement for the purpose of providing or paying for the services.
- Pursuant to ORS 279B.230(2), in every public contract, all subject employers working under the contract are either employers that will comply with ORS 656.017 or employers that are exempt under ORS 656.126.
- Pursuant to ORS 279B.235(1), in every public contract the contractor shall pay employees for overtime work performed under the public contract in accordance with ORS 653.010 to 653.261 and the Fair Labor Standards Act of 1938 (29 U.S.C. 201 et. seq.)
- Pursuant to ORS 279C.515(1), on public improvement contracts, if the contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the contractor or a subcontractor by any person in connection with the public contract as such claim becomes due, the proper officer or officers representing the state, county, school district, municipality, municipal corporation or subdivision thereof, as the case may be, may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the contractor by reason of such contract. The payment of a claim in the manner authorized by ORS 279C.515 shall not relieve the contractor or the contractor's surety from obligation with respect to any unpaid claims.
- Pursuant to ORS 279C.515(2), on public improvement contracts, if the contractor or a first-tier subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with the public improvement contract within 30 days after receipt of payment from the contract agency or a contractor, the contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to the contractor or first-tier subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is 30 days after the date when payment was received from the contracting agency or from the contractor, but the rate of interest may not exceed 30 percent. The amount of interest may not be waived.
- Pursuant to ORS 279C.515(3), in every public improvement contract and every contract related to the public improvement contractor, if the contractor or subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with the public improvement contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.
- Pursuant to ORS 279C.520, no person shall be employed for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, and in such cases, except in cases of contracts for personal services as defined in ORS 279C.100, the employee shall be paid at least time and a half pay for all overtime in excess of eight hours a day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday; or for all overtime in excess of 10 hours a day or 40 hours in any one week when the work week is four

consecutive days, Monday through Friday; and for all work performed on Saturday and on any legal holiday specified in ORS 279C.540. The contractor shall give notice to employees who work on a public contract in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work. In the case of contracts for personal services as defined in ORS 279C.100, an employee shall be paid at least time and a half for all overtime worked in excess of 40 hours in any one week, except for individuals under these contracts who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. sections 201 to 209 from receiving overtime. Persons employed under contracts for services shall receive at least time and a half pay for work performed on the legal holidays specified in a collective bargaining agreement or in ORS 279C.540 (1)(b)(B) to (G) and for all time worked in excess of 10 hours a day or in excess of 40 hours in a week, whichever is greater. The contractor shall give notice to employees who work on a contract for services in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work.

- Pursuant to ORS 279C.530(1), in every public improvement contract, the contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such contractor, of all sums which the contractor agrees to pay for such services and all monies and sums which the contractor collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service. In every public contract, subject to ORS 279C, all employers working under the contract are subject employers that shall comply with ORS 656.017.
- Pursuant to ORS 279C.580 (a), the contractor shall include in each public improvement subcontract for property or services entered into by the contractor and a subcontractor, including a material supplier, for the purpose of performing a construction contract, a payment clause that obligates the contractor to pay the subcontractor for satisfactory performance under its subcontract within 10 days out of such amounts as are paid to the contractor by the public contracting agency under such contract, and an interest penalty clause that obligates the contractor to pay to the subcontractor an interest penalty on amounts due in the case of each payment not made in accordance with the payment clause included in the subcontract pursuant to ORS 279C.580(3), for the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made, and computed at the rate specified in ORS 279C.515 (2).
- Pursuant to ORS 279C.580 (3), the contractor shall include in each of its subcontracts for a public improvement, for the purpose of performance of such contract condition, a provision requiring the subcontractor to include a payment clause and an interest penalty clause conforming to the standards of ORS 279C.580 (B) (4) in each of its subcontracts and to require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.
- Pursuant to ORS 279C.830 (2), in a public works contract subject to ORS 279C.800 to 279C.870 the Contractor shall pay fee is required to be paid to the Commissioner of the Bureau of Labor and Industries as provided in ORS 279C.825(1). The fee shall be paid to the Commissioner pursuant to the administrative rule of the Commissioner.

ORDINANCE NO. 179979

\*Combine two Water Bureau projects, provide an exemption to the competitive bidding process and provide payment for construction of the Mt. Tabor and Washington Park Interim Security and Deferred Maintenance Projects (Ordinance)

**The City of Portland ordains:**

Section 1. The Council finds:

1. The Water Bureau plans to install interim security measures and make deferred maintenance improvements for both the Mt. Tabor and Washinton Park Interim Security and Deferred Maintenance Projects (the Project) in accordance with Council Resolution No. 36237.
2. In March 2005, the City Council adopted Ordinance Nos. 179096 and 179097 which exempted these projects from the requirements of competitive sealed low bidding in favor of a competitive sealed Request for Proposal (RFP) process based on the Findings of Fact contained as Exhibits A and B to this ordinance. At that time the Water Bureau intended to award each project separately. Combining the two (2) projects will be more attractive to the contracting community which will make for a more competitive procurement process and will save the City money by reducing administrative costs.
3. The Water Bureau plans to install interim security measures and deferred maintenance improvements for both Mt. Tabor and Washington Park in accordance with Council Resolution No. 36237. Work at Mt. Tabor included security upgrades, installation of a new pressure reducing vault assembly, piping, valves, actuators, vaults, conduits, telemetry, sidewalk repairs, and interior remodeling of Gatehouse No. 5 for on-site security personnel. Work at Washington Park includes security upgrades, piping valves, actuators, vaults, conduits, telemetry and sidewalk repairs.
4. The Water Bureau must maintain water quality, continue to deliver potable water to customers, maintain water storage and fire fighting capacity during construction, and provide ongoing protection of historic and environmental resources, all while minimizing impacts to the park and park users.
5. The security improvements require specialized skills and experience in construction of infrastructure security. Security and protection of the Water Bureau's critical facilities during bidding and construction are essential. The deferred maintenance improvements require highly specialized skills and extraordinary care in order to maintain continued operations of the water system during construction. Construction will require interaction with the project designers, Water Bureau, Parks Bureau, and the general public. An alternative contractive method utilizing a Construction Manager/General Contractor (CM/GC) will allow the Water Bureau to maintain a higher level of security, confidentiality and system operations.
6. The Water Bureau proposes an alternative contracting method in order to enable a CM/GC to provide input during the design process for value engineering, construct ability review and to assist in developing a construction-phasing plan. Use of an alternative contracting method is more likely to minimize costs and construction impacts while maintaining Project schedule and ensuring continuous delivery of potable water to customers.
7. The City Council is the Local Contract Review Board with the authority to exempt certain public contracts from the competitive bidding requirements of ORS Chapter 279.
8. Previously, the City Council adopted Draft Findings addressing competition, operational, budget and financial data, public benefits, value engineering, specialized expertise required, market conditions, technical complexity, public safety, and funding sources permitting the use of an alternative contracting process. Combining the projects will not result in any different findings and make the need to use the alternative contracting process all the greater. Therefore, the Council re-adopts the Findings made in Exhibits A and B which are hereby incorporated by reference. Those Findings were available 14 days in advance of the public hearing of this ordinance.

- 9. The CM/GC selection process will be competitively advertised by means of a Request for Proposal (RFP). The Selection Committee will select the CM/GC based on an evaluation of the proposals. The selection committee will contain staff from the Water Bureau, and others from the community. The selection process will be completed under the guidance and direction of the Bureau of Purchases.
- 10. The exemption of the Mt. Tabor Park and Washington Park Interim Security and Deferred Maintenance Project from the requirements of competitive bidding under ORS Chapter 279 is unlikely to encourage favoritism in the awarding of public contracts or substantially diminish competition for public contracts because the contract will be awarded using a competitive RFP process. In addition, the award will result in cost savings to the public because the CM/GC will be available during design for value engineering, construct ability review and assistance in developing a construction phasing plan as well as developing a well-coordinated project schedule, and ensuring continuous delivery of potable water, as shown in more detail in the Findings.
- 11. Construction costs are estimated at \$9,000,000.00. Appropriation for construction is included in the Water Bureau approved FY 05-06 and proposed FY 06-07 Capital Improvement Programs.

NOW, THEREFORE, The Council directs:

- a. The Findings attached as Exhibits A and B to the original of this Ordinance, are hereby adopted.
- b. The Mt. Tabor and Washington Park Interim Security and Deferred Maintenance Project is hereby exempt from the competitive low bidding requirements of ORS Chapter 279.
- c. The Purchasing Agent is authorized to use a competitive Request for Proposal process, to select a CM/GC contractor for the Project and the Commissioner of Public Affairs and the Auditor are authorized to execute a contract for CM/GC services during design of the Project.
- d. Upon Council's acceptance of the Purchasing Agent's report for recommending the acceptance of the Guaranteed Maximum Price from the CM/GC for the Project, the Commissioner of Public Affairs and the Auditor are authorized to execute a contract for construction of the Project.
- e. The Mayor and Auditor are authorized to draw and issue checks chargeable to the FY 2005-2006 and FY 06-07 Budgets; Water Fund, Project Nos. 3366 and 1028, Center Code 18089949, Account No. 567000, when demand is presented and approved by the proper authorities.

Section 2. The Council declares that an emergency exists because delays in proceeding with the alternative contracting method could result in additional expense to the project; therefore this ordinance shall be in full force and effect from and after its passage by the Council.

Passed by the Council, MAR 08 2006

Mayor Potter  
Jeff Baer  
February 1, 2006

GARY BLACKMER  
Auditor of the City of Portland  
By *Colleen Phillips*  
Deputy



**PERFORMANCE BOND**

Bond No. 104986478

Amount: \$ 23,238,377.00

KNOW ALL MEN BY THESE PRESENTS that we Slayden Construction Group, Inc.; as Principal (Contractor), and TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, a corporation organized and existing under the laws of the State of CONNECTICUT, and duly authorized to transact a SURETY business in the State of Oregon, as SURETY, are held and firmly bound unto the CITY OF PORTLAND, a municipal corporation of the State of Oregon, in the sum of Twenty Three Million Two Hundred Thirty Eight Thousand Three Hundred Seventy Seven Dollars, (\$23,238,377.00) lawful money of the United States of America, for the payment whereof well and truly to be made, we and each of us, jointly and severally, bind ourselves, our and each of our heirs, executors, administrators, successors and assigns firmly by these presents.

THE CONDITIONS of this obligation are such that, whereas the above Principal did on the 21<sup>st</sup> day of August, 20 07 enter into a Contract with the City of Portland for which Contract is made a part hereof as if fully copied herein;

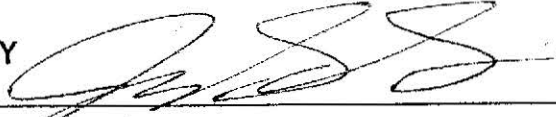
NOW, THEREFORE, if the said principal faithfully, punctually and completely performs and abides by all covenants and conditions of said Contract, and with all laws, ordinances, regulations, and orders of the State of Oregon and the City of Portland, and the agencies and bureaus thereof, directly or indirectly governing or applicable to the Principal's performance under the said Contract, including but not limited to the requirements of Oregon Revised Statutes Chapter 279 relating to public contracts, which hereby is made a part hereof as if fully copied herein, then this obligation shall be null and void, otherwise to be in full force and effect.

SURETY agrees (1) that any extension of time allowed said Principal for completion of work or for delivery under the said contract shall not impair this obligation or reduce any period of maintenance or warranty provided in said Contract; (2) that any change made in the terms or provisions of said contract increasing the price to be paid to Principal, without notice to the SURETY shall not impair this obligation, PROVIDED that all such increases shall not in the aggregate exceed twenty-five percent (25%) of the original Contract Price without consent of the SURETY, however, any such change shall not increase the obligation of the SURETY hereunder; and (3) that this obligation shall continue to bind the said Principal and SURETY notwithstanding successive payment made hereunder for successive breaches, until the full amount of the said obligation is exhausted.


IN WITNESS WHEREOF, the Principal and Surety have caused these presents to be executed on this 21<sup>st</sup> day of August, 20 07.

SLAYDEN CONSTRUCTION GROUP, INC.

**PRINCIPAL**

BY 

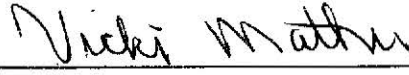
TITLE TREASURER

APPROVED AS TO FORM  
Approved:   
CITY ATTORNEY

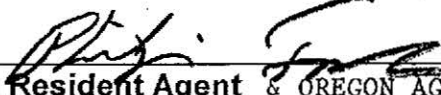
CITY ATTORNEY

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

**SURETY**

BY   
Attorney-in-Fact VICKI MATHER

**COUNTERSIGNED:**

  
Oregon Resident Agent & OREGON AGENT FOR SERVICE  
PHILIP FORKER, AGENT  
ANCHOR INSURANCE & SURETY, INC.

**Address**  
1201 SW 12TH AVE., SUITE 500  
PORTLAND, OR 97205

**NOTE**

If the Principal is operating under an assumed business name there must also be set forth in the first paragraph of the bond, the names of all the partners or the individuals owning the business, and the bond must be executed by one of them.

If the Principal is a corporation, the bond must be executed by one of the officers authorized to execute bonds, showing his official title and the seal of the corporation.

The bond must be executed by an attorney-in-fact for the surety company, showing on the face thereof the Oregon agent for service, and bear the seal of the surety company. Where the bond is executed by a person outside the state of Oregon, his authority to execute bonds should be shown.

**PAYMENT BOND**

Bond Number: 104986478

Amount: \$ 23,238,377.00

KNOW ALL MEN BY THESE PRESENTS that we, Slayden Construction Group, Inc.; as Principal (Contractor), and TRAVELERS CASUALTY AND SURETY \*, a corporation organized and existing under the laws of the State of CONNECTICUT, and duly authorized to transact a SURETY business in the State of Oregon, as SURETY, are held and firmly bound unto the CITY OF PORTLAND, a municipal corporation of the State of Oregon, in the sum of Twenty Three Million Two Hundred Thirty Eight Thousand Three Hundred Seventy Seven Dollars (\$23,238,377.00) lawful money of the United States of America, for the payment whereof well and truly to be made, we and each of us, jointly and severally, bind ourselves, our and each of our heirs, executors, administrators, successors and assigns firmly by these presents. \* COMPANY OF AMERICA

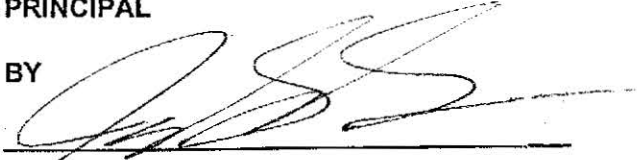
the 21<sup>st</sup> day of August, 20 07 enter into a Contract with the City of Portland for which Contract is made a part hereof as if fully copied herein;

NOW, THEREFORE, if the said principal faithfully, punctually and completely performs and abides by all covenants and conditions of said Contract, and with all laws, ordinances, regulations, and orders of the State of Oregon and the City of Portland, and the agencies and bureaus thereof, directly or indirectly governing or applicable to the Principal's performance under the said Contract, including but not limited to the requirements of Oregon Revised Statutes Chapter 279 relating to public contracts, which hereby is made a part hereof as if fully copied herein, and shall make payment promptly, as due, to the City of Portland and all other public entities as may be required, and to all subcontractors and to all persons supplying to the Principal or his(its) subcontractors, equipment, supplies, labor, or materials for the prosecution of the work or any part thereof, provided for in said Contract, then this obligation shall be null and void, otherwise to be in full force and effect.

SURETY agrees (1) that any extension of time allowed said Principal for completion of work or for delivery under the said contract shall not impair this obligation or reduce any period of maintenance or warranty provided in said Contract; (2) that any change made in the terms or provisions of said contract increasing the price to be paid to Principal, without notice to the SURETY shall not impair this obligation, PROVIDED that all such increases shall not in the aggregate exceed twenty-five percent (25%) of the original Contract Price without consent of the SURETY, however, any such change shall not increase the obligation of the SURETY hereunder; and (3) that this obligation shall continue to bind the said Principal and SURETY notwithstanding successive payment made hereunder for successive breaches, until the full amount of the said obligation is exhausted.


IN WITNESS WHEREOF, the Principal and Surety have caused these presents to be executed on this 21<sup>st</sup> day of August, 2007.

SLAYDEN CONSTRUCTION GROUP, INC.  
PRINCIPAL

BY 

TITLE TREASURER

Approved: **APPROVED AS TO FORM**

  
CITY ATTORNEY  
CITY ATTORNEY

TRAVELERS CASUALTY AND SURETY COMPANY  
SURETY OF AMERICA

BY Vicki Mather  
Attorney-in-Fact VICKI MATHER

COUNTERSIGNED:

  
Oregon Resident Agent & OREGON AGENT FOR SERVICE  
PHILIP FORKER, AGENT  
ANCHOR INSURANCE & SURETY, INC.

Address  
1201 SW 12TH AVE., SUITE 500  
PORTLAND, OR 97205

NOTE

If the Principal is operating under an assumed business name there must also be set forth in the first paragraph of the bond, the names of all the partners or the individuals owning the business; and the bond must be executed by one of them.

If the Principal is a corporation, the bond must be executed by one of the officers authorized to execute bonds, showing his official title and the seal of the corporation.

The bond must be executed by an attorney-in-fact for the surety company, showing on the face thereof the Oregon agent for service, and bear the seal of the surety company. Where the bond is executed by a person outside the state of Oregon, his authority to execute bonds should be shown.





POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
Seaboard Surety Company
St. Paul Fire and Marine Insurance Company

St. Paul Guardian Insurance Company
St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 214459

Certificate No. 001366210

KNOW ALL MEN BY THESE PRESENTS: That Seaboard Surety Company is a corporation duly organized under the laws of the State of New York, that St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company and St. Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota, that Farmington Casualty Company, Travelers Casualty and Surety Company, and Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut, that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc. is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Gene M. Dietzman, Gloria Bruning, James P. Dooney, John D. Klump, Philip O. Forker, Ray M. Paiement, Vicki Mather, J. Patrick Dooney II, Richard W. Kowalski, Tamara A. Ringeisen, and Brent Olson

of the City of Portland, State of Oregon, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 28th day of December 2006

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
Seaboard Surety Company
St. Paul Fire and Marine Insurance Company

St. Paul Guardian Insurance Company
St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: [Signature]
George W. Thompson, Senior Vice President

On this the 28th day of December, 2006, before me personally appeared George W. Thompson, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., Seaboard Surety Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2011.



[Signature]
Marie C. Tetreault, Notary Public

## ORDINANCE NO. 177300

\* Authorize a contract and provide payment for construction of the Washington Park Open Reservoirs 3 and 4 Improvements (Ordinance)

### **The City of Portland ordains:**

Section 1. The Council finds:

1. The Bureau of Water Works requires the construction of the Washington Park, Open Reservoirs 3 & 4 Improvements. The Washington Park, Open Reservoirs 3 & 4 Improvements project consist of installing floating covers on Reservoirs 3 and 4; replacing the flexible liner in Reservoir 3; and replacing yard piping between Reservoirs 3 and 4.
2. The Engineer's estimate for the construction of the improvements is \$3,800,000 allocated for FY02-03. and FY03-04
3. Appropriations for the construction of the project are included in the Bureau's FY02-03 and FY03-04 Capital Improvement Program.

NOW, THEREFORE, The Council directs:

- a. That the Commissioner of Public Affairs and Auditor are authorized to execute on behalf of the City a contract with the lowest responsive and responsible bidder for the project described in Section 1 hereof, in accordance with the plans and specifications on file with the Purchasing Agent.
- b. The Mayor and the Auditor hereby are authorized to draw and deliver checks chargeable to the FY02-03 and FY03-04 Budget, Water Fund, Account 567000, Projects 3367 and 3436, Center Code 18089949, when demand is presented and approved by the proper authorities.

Section 2. The Council declares that an emergency exists because the liner and covers installation is weather dependent and a delay in proceeding with this project will result in additional expense. Therefore this ordinance shall be in full force and effect from and after its passage by the Council.

Passed by the Council, MAR 06, 2003

Commissioner Saltzman

Jerald R. Moore  
February 24, 2003

**GARY BLACKMER**  
Auditor of the City of Portland  
By /s/Susan Parsons

Deputy

BACKING SHEET INFORMATION

AGENDA NO. 193

ORDINANCE/RESOLUTION/COUNCIL DOCUMENT NO. 177300

COMMISSIONERS VOTED AS FOLLOWS:		
	YEAS	NAYS
FRANCESCONI	----	-----
LEONARD	X	
SALTZMAN	X	
STEN	X	
KATZ	X	

**Exhibit A**

Mt. Tabor and Washington  
Park Amendment #2, Contract 36297

PORTLAND WATER BUREAU																				
Mt. Tabor and Washington Park Interim Security and Deferred Maintenance Improvements - Amendment #2																				
WORK TASKS	B&V								Alcantar & DDC	B&V Hours incl. Alcantar & DDC	Total BV Labor Cost	Allowable Expenses	HDR	HDR Hours	Alcantar & DDC	Other Subconslt.	Other Subconslt. Name	Other Subconslt. Hours	Subconslt Markup	
	Principal & QA	Project Manager	Team Leader Sr Engineer	Project Engineer	Engineer	CADD Manager	CM/GC & Estimator	Clerical												
	Ward Krueger	Peck	Gresh Spezio	Nale	Idehara		Electrical & I&C	Scott Jones	Civil Eng. & CADD ESB											
	Proposed Rates 2005	\$165	\$155	\$155	\$110	\$100	\$95	\$125	\$60	\$90										
Hourly Rates: Rates are based on the average of the category; actual billing based on salary times 3.1 mult																				
Estimated Rates 2007	\$175	\$165	\$165	\$110	\$100	\$95	\$125	\$60	\$90											
Estimated Rates 2008-09	\$193	\$182	\$182	\$121	\$110	\$105	\$138	\$66	\$99										5%	
																			<b>Costs</b>	
<b>0200 Preliminary Design Phase Tasks</b>																				
Additional Document Prep for LUR										0	\$0	\$0	\$15,000						\$750	
Hours	0	0	0	0	0	0	0	0	0	0										
Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0			\$750	\$15,750	
<b>0300 Design Phase Tasks</b>																				
Redesign Water Transmission Mains 59th-60th		60		180	80	200			70	590	\$56,700	\$1,685		\$6,300					\$315	
Specifications for metal-seated valves		8		8	26				42	42	\$4,800	\$200		\$0					\$0	
Redesign at Gatehouse 5									0	0	\$0	\$0	\$20,000	\$0					\$1,000	
LUR Requirements - Washington Park		16				20			36	36	\$4,994	\$218	\$87,000	\$0	\$10,000	Walsh			\$4,850	
Electrical Design Change - Generator system	8	24	16	20		80	60		208	208	\$27,830	\$3,320	\$25,000	\$0	\$12,000	Epsilon			\$1,850	
Hours	8	108	16	208	106	300	60	0	70	876										
Cost	\$1,540	\$19,602	\$2,904	\$25,168	\$11,660	\$31,350	\$8,250	\$0	\$6,930	\$94,324	\$5,423	\$132,000	\$6,300	\$22,000				\$8,015	\$268,062	
<b>0400 CM/GC Assistance</b>																				
Additional Partnering Workshop		8		8	8			20	44	44	\$4,620	\$1,280	\$2,500	\$0	\$4,800	RSR			\$13,200	
Hours	0	8	0	8	8	0	0	20	0	44										
Cost	\$0	\$1,452	\$0	\$968	\$880	\$0	\$0	\$1,320	\$0	\$4,620	\$1,280	\$2,500	\$0	\$4,800				\$0	\$13,200	
<b>0500 Construction Phase Tasks</b>																				
Vibration Monitoring									0	0	\$0	\$550			\$70,000	Earth Dynamics			\$3,500	
Video Documentation									0	0	\$0	\$550			\$28,000	Curtis & Jeidy			\$1,400	
Labor Escalation on Original Scope - Mt Tabor	15	156		358			10	100	180	819	\$9,210	\$170	\$5,000	\$1,620					\$16,000	
Labor Escalation on Original Scope - WA. Park	18	48		48				24	0	138	\$2,439	\$61	\$9,000	\$0					\$11,500	
Project Record Drawings- Wa Park and Mt Tabor		8		40			40		230	318	\$11,792	\$5,438	\$10,000	\$22,770					\$50,000	
Wa Park Startup and Commissioning Security									0	0	\$0	\$0	\$16,667						\$833	
Wa Park Reservoir Operational Guidelines		4		28			4		24	60	\$4,664	\$91		\$2,376	\$5,000	Hawley			\$369	
Hours	33	216	0	474	0	0	54	124	434	1335										
Cost	\$6,353	\$39,204	\$0	\$57,354	\$0	\$0	\$7,425	\$8,184	\$42,966	\$28,105	\$6,860	\$40,667	\$26,766	\$103,000				\$6,102	\$211,500	
<b>0600 BES Sewer</b>																				
BES Sewer Plan & Profile Sheets	2	36	0	40	80	40	0	24	180	402	\$23,930	\$2,560		\$16,200	\$6,000	Thurston, Cornforth			\$1,110	
Hours	2	36	0	40	80	40	0	24	180	402										
Cost	\$385	\$6,534	\$0	\$4,840	\$8,800	\$4,180	\$0	\$1,584	\$16,200	\$23,930	\$2,560	\$0	\$16,200	\$6,000				\$1,110	\$49,800	
<b>F. Construction Value Engineering</b>																				
Allowance																			\$91,688	
<b>Total amount for Amendment #2</b>																				<b>\$650,000</b>

Approved amount for Amendment #1 \$876,000  
Original Contract amount \$1,544,957

**Revised Contract amount w/ Amendment #2 \$3,070,957**  
Percent increase over Original Contract amount 99%

## Parsons, Susan

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**From:** Leslie Rose <rowopofam@gmail.com>  
**Sent:** Wednesday, May 27, 2015 2:33 PM  
**To:** Council Clerk – Testimony  
**Subject:** Mt. Tabor reservoirs

Dear City Council,

Our family urges you to reject the PWB appeal and adopt the suggestions outlined in the MTNA appeal, thus supporting and strengthening the Historic Landmarks Commission decisions. We do not understand the hostility of the PWB and the City Council towards the community that wants to protect this historic, beautiful gem in Portland. We do not understand why the PWB has neglected the upkeep of the reservoirs. It is clearly a dereliction of duty. We are appalled at this disrespect of this historic property.

Please act thoughtfully and carefully regarding this decision. You have a large community that supports this plan. The PWB has shown callous disregard toward the reservoirs and should therefore not be trusted to have the public's interest at heart. Although we are still upset and troubled about the disconnection of the reservoirs, and do not support it, there can be no doubt that the quality of Mt. Tabor park depends on the water features and the protection of this historic site.

Regards,

The Rose/Woodward/Popiel Family  
6435 SE Ivon St.  
Portland, OR 97206

## Moore-Love, Karla

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**From:** Adam, Hillary  
**Sent:** Wednesday, May 27, 2015 2:43 PM  
**To:** Council Clerk – Testimony  
**Subject:** FW: Thursday May 28 Mt. Tabor Appeal hearing  
**Attachments:** Mt Tabor Reservoirs Letter to City Council FINAL.pdf

Karla/Sue,

Please forward this letter from the Historic Landmarks Commission to City Council.

Hillary Adam  
Bureau of Development Services  
p: 503.823.3581

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**From:** Jessica Engeman [mailto:[jessica@venerableproperties.com](mailto:jessica@venerableproperties.com)]  
**Sent:** Wednesday, May 27, 2015 2:41 PM  
**To:** Adam, Hillary; Brian Emerick ([brian@emerick-architects.com](mailto:brian@emerick-architects.com)); Carin Carlson ([ccarlson@henneberyeddy.com](mailto:ccarlson@henneberyeddy.com))  
**Cc:** Heron, Tim  
**Subject:** RE: Thursday May 28 Mt. Tabor Appeal hearing

Hillary,

Please forward the attached letter to the City Council clerk.

Thanks,

Jessica

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**From:** Adam, Hillary [mailto:[Hillary.Adam@portlandoregon.gov](mailto:Hillary.Adam@portlandoregon.gov)]  
**Sent:** Tuesday, May 26, 2015 3:34 PM  
**To:** Brian Emerick ([brian@emerick-architects.com](mailto:brian@emerick-architects.com)); Jessica Engeman; Carin Carlson ([ccarlson@henneberyeddy.com](mailto:ccarlson@henneberyeddy.com))  
**Cc:** Heron, Tim  
**Subject:** Thursday May 28 Mt. Tabor Appeal hearing

Hello,

I wanted to confirm that one or more HLC Commissioners will be present at this Thursday's appeal hearing for Mt. Tabor.

I apologize that I was not more on top of things by requesting a letter of support for your decision be submitted by a certain time for distribution to City Council.  
However, if any of you would like to testify, I can get there as early as possible to get your names on the top of the list of testifiers.

Let me know if I should open this up to more Commissioners.  
~Hillary

Hillary Adam  
Design & Historic Resource Review Team

Bureau of Development Services  
1900 SW 4th Ave, Suite 5000  
Portland, OR 97201  
p: 503.823.3581





**City of Portland**  
Historic Landmarks Commission

1900 SW Fourth Ave., Suite 5000 / 16  
Portland, Oregon 97201  
Telephone: (503) 823-7300  
TDD: (503) 823-6868  
FAX: (503) 823-5630  
[www.portlandonline.com/bds](http://www.portlandonline.com/bds)

May 27, 2015

Portland City Council  
1221 SW 4<sup>th</sup> Avenue  
Portland, OR 97204

RE: LU 14-218444 HREN – Mt. Tabor Reservoirs Disconnection

Mayor Hales and City Commissioners,

The Portland Historic Landmarks Commission (PHLC) is providing this letter in support of our February 9, 2015 decision to approve the Mt. Tabor Reservoir disconnection with five (5) important conditions (listed on the following page). To assist with your deliberation of the appeals by the Water Bureau and the Neighborhood Association, we would like to give you some background information as to how and why we came to our decision.

The Mt. Tabor Reservoir land use review was among the most contentious reviews in our tenure on the Landmarks Commission. The proposed disconnection sparked much public opposition—both related to the historic resource as well as Portland's drinking water. The history of our water system and open reservoirs is unique and important, not only for the aesthetics of their park-like settings, but for their structures and interconnected engineering systems. Suffice it to say, evaluating the effects of a project on the integrity of this type of resource is significantly more complicated than that of a building.

The PHLC held the first public meeting on December 1, 2014 to review the disconnection proposal. The Commission determined that additional information was needed to fully understand whether the proposal met the approval criteria. The Water Bureau returned on January 12, 2015 with additional information. The record was requested to be held open at this hearing and additional public testimony was provided prior to the third hearing on January 26, 2015.

The Commissioners present at the January 26<sup>th</sup> hearing were split, voting 3-3 in support of Staff's recommended approval of the disconnection proposal with four (4) conditions (A-D) and a revision to condition "D" regarding archaeological discovery. Our Commission rules require a majority vote for proposed measures to pass, so this was headed to denial. Dissenting Commissioners found that approval criteria related to the preservation of the resource's integrity had not been met. The loss of purpose and function brought about by the disconnection had the potential to seriously compromise the character-defining features that convey the historical significance of these resources. In the absence of a plan for their ongoing preservation and maintenance, three Commissioners concluded that the preservation of the reservoirs' form and integrity as required in 33.846.060G of the Zoning Code could not be assured by the staff report conditions presented at this hearing.

On February 9, 2015, the PHLC held the final hearing on this case and voted to accept the staff report recommending approval of the disconnection proposal with the addition of condition "E," which required the adoption and implementation of the 2009 Mt. Tabor Reservoirs Historic Structure Report. While a formal plan that would address concerns related to preservation planning beyond



the disconnect would have been preferred, the Commissioners felt the adoption of this Historic Structures Report would help ensure that the disconnection would not jeopardize the integrity of the resource and that all approval criteria were now met.

#### Conditions of Approval

While the Commission agrees with the Applicant that the disconnection project will cause minimal visual impact to the reservoirs in the immediate term, we are concerned about the long-term implications of maintaining a large and costly resource that is no longer essential to the Water Bureau's mission.

The following conditions of approval (with the exception of condition "A" which is a standard condition related to the permitting process) are intended to preserve visual character (condition B), enhance interpretation (condition C), protect potential archaeological resources (condition D), and protect integrity through proper ongoing stewardship (condition E). These conditions aim to ensure that the historic Mt. Tabor Reservoirs are treated appropriately and do not suffer over time as a direct result of this project.

- A. As part of the building permit application submittal, the following development-related conditions (B through E) must be noted on each of the 4 required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 14-218444 HR EN." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
- B. Following completion of the disconnection, Reservoirs #1, #5, and #6 must continue to hold water within the normal historic operating range for each reservoir. The reservoirs must be maintained and cleaned, and may be emptied (partially or fully) for brief periods, as necessary, to address system operational requirements, to maintain security, regulatory compliance, or for safety concerns. Any proposal to permanently remove visible water from the site, as required in the preceding sentence, will require a follow-up land use application to be reviewed by the Historic Landmarks Commission.
- C. Within 5 years of final approval of this land use review, the City of Portland shall develop an interpretation program that tells the history of the Mt. Tabor Reservoirs and the Bull Run water delivery system, including the proposed disconnection. Prior to application for a Type II land use review, the City of Portland shall request and complete a Design Advice Request with the Historic Landmarks Commission in order to obtain advice on the parameters of the interpretation program.
- D. The applicant will engage a qualified archaeologist to assess the project's potential to impact archaeological resources. This assessment should include review by a qualified geo-archaeologist and be completed prior to issuance of construction permits. In the event of any archaeological discovery, work potentially affecting the archaeological resources will be stopped, the State Archaeologist will be notified, and the procedures specified by state regulations will be followed.
- E. The City of Portland shall formally adopt the May 2009 Mount Tabor Reservoirs Historic Structures Report and fully implement the restorative recommendations therein, including removal of non-historic elements, such as light fixtures and conduit, and restoration of the contributing resources of the Mt. Tabor Park Reservoirs Historic District by December 31, 2019.

This has been a difficult process for all parties involved. The PHLC remains concerned about the volume of public opposition on this case and the Water Bureau's dismissal of that opposition. The lack of public process employed by the Water Bureau for the Mt. Tabor Reservoir disconnect as compared to the extensive public process undertaken for the Washington Park Reservoir project is disappointing. The Water Bureau did not seek advice from the Landmarks Commission, through either briefings or Design Advice Request, prior to initiating the Land Use process.

The result of disconnecting the Mt. Tabor Reservoirs is the elimination of water flowing in and out of the basins and the seasonal fluctuation of the water level—key character-defining features of the resource. While it is theoretically possible to maintain the look of the reservoirs through regular refilling, this is a major undertaking and does not seem environmentally responsible. Divorced from their function, the historic reservoirs in effect become very expensive water features to maintain, and the Water Bureau did not have an adequate response to how this was going to be sustainable over time. Questions of this nature are deeply concerning, however they go beyond the purview of the Landmarks Commission.

In closing, we urge Council to hold the City to the same standard of care for our unique historic resources as we hold our private citizens. Given the history of neglect of this resource and disputes with the surrounding community, it seems irresponsible to approve disconnection of this resource from Portland's water system—essentially rendering it useless—without having a plan or conditions that ensure its long-term care and stewardship. While we understand that Federal mandates require some functional changes to our drinking water system, our open reservoirs are rare and hold exceptional historic significance, which should continue to be enjoyed by generations of Portlanders. As you decide the outcome of the appeals before you, please prioritize the preservation, restoration, and ongoing care of these irreplaceable resources even after they are disconnected from the larger system.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Emerick", with a long horizontal stroke extending to the right.

Brian Emerick  
Chair

A handwritten signature in black ink, appearing to read "Jessica Engeman", written in a cursive style.

Jessica Engeman  
Vice Chair

**Moore-Love, Karla**

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**From:** kathy bue <krbue@hotmail.com>  
**Sent:** Wednesday, May 27, 2015 4:20 PM  
**To:** Council Clerk – Testimony  
**Subject:** LU 14-218444 HR EN, Mt. Tabor Reservoirs Disconnection.

Please work with community activists to keep our healthful open reservoirs operational and protecting us from radon, by employing one of the many strategies for saving them outlined by Friends of Reservoirs, Mt. Tabor Neighborhood Association, and countless other activists. Our state is suffering from a drought and we need all water sources available.

Karla, please send a receipt so that I know that you received this email and acknowledging my testimony I would appreciate it, thank you.

Sincerely  
**Kathy Bue**

**Moore-Love, Karla**

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**From:** Kendal Obermeyer <kendalchen@gmail.com>  
**Sent:** Wednesday, May 27, 2015 5:03 PM  
**To:** Council Clerk – Testimony  
**Subject:** LU 14-218444 HR EN, Mt. Tabor Reservoirs Disconnection

Dear Mayor and council members,

Please work with community activists to keep our healthful open reservoirs operational and protecting us from radon, by employing one of the many strategies for saving them outlined by Friends of Reservoirs, Mt. Tabor Neighborhood Association, and countless other activists.

Thank you,  
Kendal Obermeyer

-----  
Please confirm receipt of this testimony. Thank you.

## Moore-Love, Karla

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 7:20 PM  
**To:** Council Clerk – Testimony; Hales, Mayor  
**Subject:** Mt. Tabor LU hearing May 28, 2015-Radon PWB WQ reports  
**Attachments:** Portland, OR water report.pdf

To: Portland City Council

From: Floy Jones on behalf of Friends of the Reservoirs

The attached (and linked below) submitted for the record in the Mt. Tabor disconnection LU case, **Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project.**

This supplements comments submitted by Friends of the Reservoirs and others addressing the unique public health risks associated with disconnection and demolition of Portland's open reservoirs.

RADON is a cancer causing contaminant found in the Columbia Southshore Wellfield Water.

In 2010 the PWB reported CSSWF Radon detections (as they had in previous Water Quality reports)-**310 picocuries as the minimum and maximum detected in the Wellfield aquifers.** As of 2012 in anticipation that the Radon will no longer have adequate venting through the open reservoirs and to play down public concerns raised by stakeholders the Portland Water Bureau stopped reporting (engaging in secrecy rather than being forthright) harmful Columbia SouthShore Wellfield Radon levels in their annual Water Quality report. In 2013 the PWB continued to report on all other non-regulated contaminants such as Nickel. By 2014 they limited their report on unregulated contaminants to Sodium. Venting at the Powell Butte tanks is infinitely less than the venting of Radon at the much larger surface area of the open reservoirs.

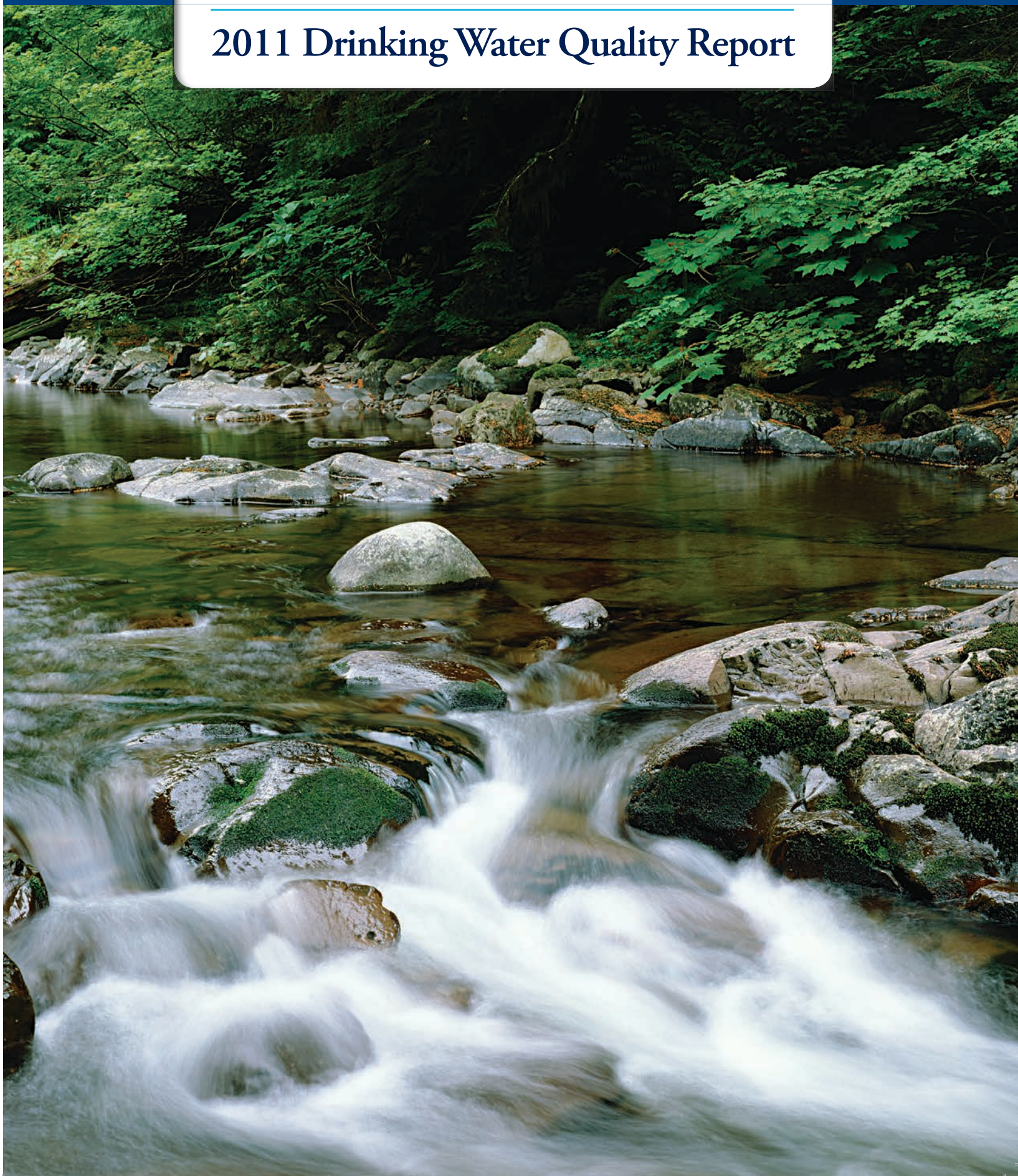
This failure to report Radon levels in the CSSWellfield water contradicts claim by the PWB that they are concerned about public safety, as there is no safe level of Radon. The fact that the Water Bureau now is hiding the level of Radon from customers when previously that they routinely included this public health risk in their annual Water Quality reports further supports that Water Bureau is more committed to tactics and strategies to thwart community interest in retaining the open reservoirs as a part of the distribution system, than in public safet . While Radon entering from the ground can easily be vented, Radon entering every time water is used cannot.

Water quality report, [http://www.waterdrs.com/water\\_reports/Portland,%20OR%20water%20report.pdf](http://www.waterdrs.com/water_reports/Portland,%20OR%20water%20report.pdf)



PORTLAND WATER BUREAU

# 2011 Drinking Water Quality Report







## From Commissioner Randy Leonard

I am pleased to share the 2011 Drinking Water Quality Report with you. The Portland Water Bureau produces this report every year as mandated by the federal government. The report provides you with an easy-to-understand overview of your drinking water.

One thing you might note is that the Water Bureau monitors Portland's drinking water for more than 200 regulated and unregulated contaminants. That makes me feel incredibly confident in the water we serve and the water you drink. Portland's water is some of the highest-quality drinking water in the world. High quality is the Water Bureau way. It's the Portland way.

I urge you to take a minute to look through this report; learn about your water system and some of what goes into delivering water to your tap. Learn why we believe, "From forest to faucet, the Portland Water Bureau delivers the best drinking water in the world!"

Randy Leonard  
Commissioner-In-Charge

## From the Administrator

Since 1997, the federal government has required municipal water providers to send customers a yearly report detailing their water system. This report, the 2011 Drinking Water Quality Report, is essentially the nutritional label for the substance you probably consume more than any other – water.

If you have questions or comments about this, please call Portland Water Bureau Customer Service at 503-823-7770. We welcome your interest in Portland's water system.

David G. Shaff  
Administrator

## Frequently Asked Questions About Water Quality

### Is my water treated by filtration?

No. Bull Run water is not filtered. The Bull Run source meets the filtration avoidance criteria of the Surface Water Treatment Rule. The State approved Portland's compliance with these criteria in 1992. Portland continues to meet these criteria on an ongoing basis.

### Does the Portland Water Bureau add fluoride to drinking water?

No. The Portland Water Bureau does not add fluoride to the water. Fluoride is a naturally occurring trace element in surface and groundwater. The U.S. Public Health Service and the Centers for Disease Control and Prevention consider the fluoride levels in Portland's water sources to be lower than optimal for the prevention of tooth decay. You may want to consult with your dentist about fluoride treatment to help prevent tooth decay, especially for young children.

### Is Portland's water soft or hard?

Portland's water is very soft. The hardness of Bull Run water is typically 4-13 parts per million (ppm) – approximately ½ a grain of hardness per gallon. Portland's groundwater hardness is approximately 86 ppm (about 5 grains per gallon), which is considered moderately hard.

### What is the pH of Portland's water?

The pH of Portland's drinking water typically ranges from 7.2 to 8.2.

### Are sodium levels in Portland's drinking water affecting my health?

There is currently no drinking water standard for sodium. Sodium is an essential nutrient. Sodium in Portland's water typically ranges between 2 and 8 ppm, a level unlikely to contribute to adverse health effects.

### Who can I call about water quality or pressure concerns?

The Water Line, **503-823-7525**, can answer your questions and concerns about water quality or pressure. The Water Line is available Monday–Friday from 8:30 a.m.– 4:30 p.m. If you have an emergency after these hours, please contact the after-hours number at **503-823-4874**.

### How can I get my water tested?

Contact the LeadLine at **503-988-4000** or [www.leadline.org](http://www.leadline.org) for information about free lead-in-water testing. For more extensive testing, private laboratories can test your tap water for a fee. Not all labs are accredited to test for all contaminants. For information about accredited labs, call the Oregon Health Authority, Oregon Environmental Laboratory Accreditation Program at **503-693-4122**.

## Public Involvement Opportunities

The Portland Water Bureau provides a variety of public information, public involvement and community outreach opportunities. If you have questions about Portland Water Bureau meetings, projects, or programs, please contact Jimmy Brown, Community Involvement and Information Manager, at **503-823-3028**, or visit the Water Blog to learn more about the bureau or leave a comment: [www.portlandoregon.gov/water/blog](http://www.portlandoregon.gov/water/blog).

## Drinking Water Treatment

The first step in the treatment process for Portland's drinking water is disinfection using chlorine. Next, ammonia is added to form chloramines which ensure that disinfection remains adequate throughout the distribution system.

The Portland Water Bureau also adds sodium hydroxide to increase the pH of the water to reduce corrosion of plumbing systems. This treatment helps control lead and copper levels at customers' taps, should these metals be present in home plumbing.

## Water Testing

The Portland Water Bureau monitors for over 200 regulated and unregulated contaminants in drinking water, including pesticides and radioactive contaminants. All monitoring data in this report are from 2010 unless otherwise noted.

**If a known health-related contaminant is not listed in this report, the Portland Water Bureau did not detect it in drinking water.**



Collecting groundwater samples for water quality analysis.

## Special Notice for Immuno-Compromised Persons

### Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at-risk from infections. These people should seek advice about drinking water from their health-care providers. Environmental Protection Agency and Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **800-426-4791**.

## What the EPA Says About Drinking Water Contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at **800-426-4791** or at [www.epa.gov/safewater](http://www.epa.gov/safewater).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

### Contaminants in drinking water sources may include:

**Microbial contaminants**, such as viruses and bacteria, which may come from wildlife or septic systems

**Inorganic contaminants**, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges or farming

**Pesticides and herbicides**, which may come from a variety of sources such as farming, urban stormwater runoff and home or business use

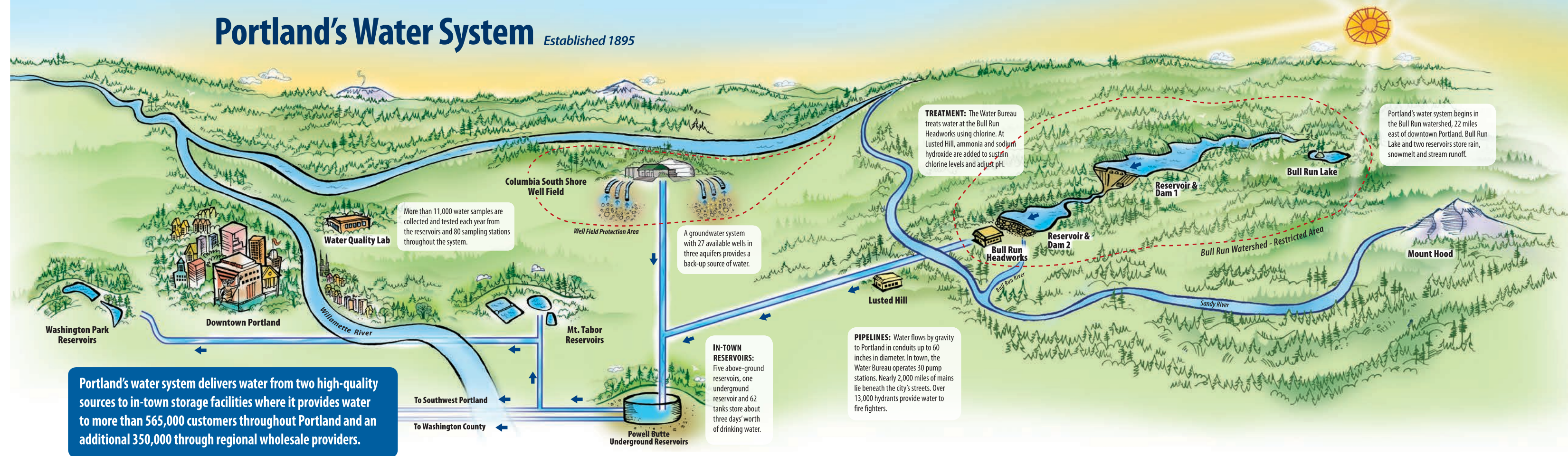
**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes, and can also come from gas stations, urban stormwater runoff and septic systems

**Radioactive contaminants**, which can occur naturally

In order to ensure that tap water is safe to drink, the EPA has regulations that limit the amount of certain contaminants in water provided by public water systems and require monitoring for these contaminants. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.



# Portland's Water System Established 1895



Benson Bubblers are Portland's iconic drinking fountains. The City currently maintains 52 of the four-bowl fountains and 74 one-bowl variations. The installation of the four-bowl fountains is limited to certain downtown boundaries so as not to diminish the uniqueness of them.

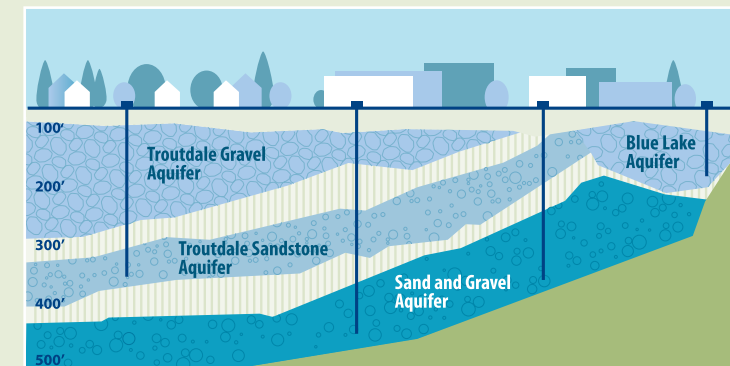
**The Bull Run Watershed** is a surface water supply within the Bull Run Watershed Management Unit located in the Mt. Hood National Forest. A geological ridge separates the watershed from Mount Hood. Current regulations, and the availability of the Columbia South Shore Well Field, allow Portland to meet federal drinking water standards without filtering this high-quality Bull Run water supply. The watershed has an area of 102 square miles, and typically receives 80-170 inches of rainfall a year. The heaviest rains occur from late fall through spring. Two reservoirs store water for use year-round, particularly during the dry summer months.

The watershed is only used for producing drinking water. Federal laws restrict public entry. No recreational, residential or industrial uses occur within its boundaries. The Portland Water Bureau carefully monitors water quality and quantity. The Oregon Health Authority Drinking Water Program regularly inspects the watershed and related treatment and distribution facilities.

The Portland Water Bureau has completed a Source Water Assessment for the Bull Run water supply to comply with the 1996 Safe Drinking Water Act amendments. The only contaminants of concern for the Bull Run water supply are naturally occurring microbial contaminants such as *Giardia lamblia*, *Cryptosporidium*, fecal coliform bacteria, and total coliform bacteria. These organisms are found in virtually all freshwater ecosystems and may be present in the Bull Run supply at very low levels. The Bull Run supply complies with all applicable state and federal regulations for source water, including the 1989 Surface Water Treatment Rule filtration-avoidance criteria. The Source Water Assessment report is available at [www.portlandoregon.gov/water](http://www.portlandoregon.gov/water) and by calling 503-823-7404.

**The Columbia South Shore Well Field** provides high-quality drinking water from groundwater production wells located in three different aquifers. In 2010, the City of Portland supplemented the Bull Run drinking water supply with approximately 28 million gallons of groundwater over a 6-day period beginning on August 9th. This was done as part of a groundwater maintenance exercise.

Portland has a long history of groundwater protection. The groundwater protection area encompasses portions of Portland, Gresham and Fairview. Together, these cities regulate businesses in the groundwater protection area to prevent hazardous material spills that could seep into the ground. The cities also educate local residents on what can be done to help protect groundwater with events such as Aquifer Adventure, Cycle the Well Field and Groundwater 101. To learn more about Portland's groundwater protection program, upcoming events and how to protect groundwater, visit [www.portlandoregon.gov/water/groundwater](http://www.portlandoregon.gov/water/groundwater) or call 503-823-7404.



There are 27 usable wells capable of pumping water from three aquifers on the south shore of the Columbia River. The well field serves as a backup water supply during turbidity events and emergencies and when the bureau needs additional summer supply. The well field can produce up to 102 million gallons of water per day.

The Clackamas River Water District, City of Gresham, City of Lake Oswego, Rockwood Water People's Utility District, the Sunrise Water Authority and the Tualatin Valley Water District provide drinking water to some Portland customers who live near service area boundaries. Customers who receive water from these providers will also receive detailed water quality reports about these sources in addition to this report.



## Regulated Contaminants Detected in 2010

Regulated Contaminant	Minimum Detected	Maximum Detected	Maximum Contaminant Level (MCL), Treatment Technique or Maximum Residual Disinfectant Level (MRDL)	Maximum Contaminant Level Goal (MCLG) or Maximum Residual Disinfectant Level Goal (MRDLG)	Sources of Contaminant
<b>SOURCE WATER FROM THE BULL RUN WATERSHED</b>					
Turbidity	0.23 NTU	2.0 NTU	Cannot exceed 5 NTU more than two times in twelve months	Not Applicable	Erosion of natural deposits
Giardia	Not Detected	8 samples of 10 liters each had 1 <i>Giardia</i> cyst	Treatment technique required: Disinfection to kill 99.9% of cysts	Not Applicable	Animal wastes
Fecal Coliform Bacteria	Not Detected	3 samples each had 4 bacterial colonies (100% of samples had 20 or fewer bacterial colonies per 100 milliliters of water)	At least 90% of samples measured during the previous six months must have 20 or fewer bacterial colonies per 100 milliliters of water	Not Applicable	Animal wastes

<b>ENTRY POINTS TO THE DISTRIBUTION SYSTEM — from the Bull Run Watershed and Columbia South Shore Well Field</b>					
<b>NUTRIENTS</b>					
Nitrate Nitrogen	0.01 parts per million	0.09 parts per million	10 parts per million	10 parts per million	Erosion of natural aquifer deposits; animal wastes
<b>METALS AND MINERALS</b>					
Antimony	<0.05 parts per billion	0.12 parts per billion	6 parts per billion	6 parts per billion	Found in natural deposits
Arsenic	<0.5 parts per billion	1.4 parts per billion	10 parts per billion	0 parts per billion	
Barium	0.00079 parts per million	0.00959 parts per million	2 parts per million	2 parts per million	
Chromium (total)	<0.2 parts per billion	0.3 parts per billion	100 parts per billion	100 parts per billion	
Copper <sup>1</sup>	<0.03 parts per million	0.0036 parts per million	Not Applicable	1.3 parts per million	
Fluoride	<0.050 parts per million	0.13 parts per million	4 parts per million	4 parts per million	
Lead	<0.02 parts per billion	0.15 parts per billion	Not Applicable	0 parts per billion	
<b>RADIONUCLIDES</b>					
Gross Beta <sup>2</sup>	3.4 picocuries per liter	3.4 picocuries per liter	50 picocuries per liter <sup>3</sup>	0 picocuries per liter	From man-made sources and natural deposits

<b>DISTRIBUTION SYSTEM OF RESERVOIRS, TANKS AND MAINS</b>					
<b>MICROBIOLOGICAL CONTAMINANTS</b>					
<i>E. Coli</i> Bacteria	Not Detected	Routine samples in April and June had detectable <i>E. coli</i> bacteria	A routine sample and a repeat sample are total coliform positive, and one is also <i>E. coli</i> positive	0% of samples with detectable <i>E. coli</i> bacteria	Human and animal waste
Total Coliform Bacteria	Not Detected	6 samples out of 248 in October (2.42%) had detectable coliform bacteria	Must not detect coliform bacteria in more than 5.0% of samples in any month	0% of samples with detectable coliform bacteria	Found throughout the environment
<b>DISINFECTION BYPRODUCTS</b>					
<b>TOTAL TRIHALOMETHANES</b>					
Running Annual Average of All Sites	21 parts per billion		80 parts per billion	Not Applicable	Byproduct of drinking water disinfection
Single Result at Any One Site	15 parts per billion	30 parts per billion	Not Applicable		
<b>HALOACETIC ACIDS</b>					
Running Annual Average of All Sites	25 parts per billion		60 parts per billion	Not Applicable	Byproduct of drinking water disinfection
Single Result at Any One Site	13 parts per billion	36 parts per billion	Not Applicable		
<b>DISINFECTANT RESIDUAL</b>					
Total Chlorine Residual	0.1 parts per million	2.2 parts per million	4 parts per million	4 parts per million	Chlorine and ammonia are used to disinfect water

Regulated Contaminant	90th Percentile Values	Number of Sites Exceeding Action Levels	Lead and Copper Rule Exceedance	Maximum Contaminant Level Goal (MCLG)	Sources of Contaminant
<b>LEAD AND COPPER SAMPLINGS AT HIGH-RISK RESIDENTIAL WATER TAPS</b>					
Copper	0.34 parts per million	0 of 112 samples exceeded the copper action level of 1.3 parts per million	More than 10% of the homes tested have copper levels greater than 1.3 parts per million	1.3 parts per million	Corrosion of household and commercial building plumbing systems
Lead	12 parts per billion	10 of 112 samples (8.9%) exceeded the lead action level of 15 parts per billion	More than 10% of the homes tested have lead levels greater than 15 parts per billion	0 parts per billion	Corrosion of household and commercial building plumbing systems

<sup>1</sup> During the year, two different methods with different method reporting limits (MRLs) were used to analyze copper. The sample with results of <0.03 was analyzed by the method with the less sensitive MRL.

<sup>2</sup> These results are from 2009. The Oregon Health Authority – Drinking Water Program allows water utilities to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<sup>3</sup> The MCL for gross beta is 4 mrem/yr. EPA considers 50 picocuries per liter to be the level of concern for gross beta.

## Unregulated Contaminants Detected in 2010

Contaminant	Minimum Detected	Average Detected	Maximum Detected	Sources of Contaminant
<b>ENTRY POINTS TO THE DISTRIBUTION SYSTEM — from the Bull Run Watershed and Columbia South Shore Well Field</b>				
Nickel	<0.2 parts per billion	<0.2 parts per billion	0.7 parts per billion	Found in natural aquifer deposits
Radon	310 picocuries per liter	310 picocuries per liter	310 picocuries per liter	Found in natural aquifer deposits
Sodium	2.5 parts per million	8.5 parts per million	24.4 parts per million	Added to water during treatment Erosion of natural deposits
Vanadium	4.9 parts per billion	4.9 parts per billion	4.9 parts per billion	Found in natural aquifer deposits

See *Notes on Regulated and Unregulated Contaminants* for more information.

### Definitions

#### Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

#### Maximum Contaminant Level or MCL

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

#### Maximum Contaminant Level Goal or MCLG

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

#### Maximum Residual Disinfectant Level or MRDL

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

#### Maximum Residual Disinfectant Level Goal or MRDLG

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

#### Part Per Billion

One part per billion corresponds to one penny in \$10,000,000 or approximately one minute in 2,000 years.

#### Part Per Million

One part per million corresponds to one penny in \$10,000 or approximately one minute in two years. One part per million is equal to 1,000 parts per billion.

#### Picocuries Per Liter

Picocurie is a measurement of radioactivity. One picocurie is a trillion times smaller than one curie.

#### Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

## Notes on Regulated Contaminants

### Turbidity

The Bull Run is an unfiltered surface water supply. The rules for public water systems have strict standards for unfiltered surface water supplies. Turbidity levels in unfiltered water must not exceed 5 NTU (nephelometric turbidity units) more than two times in a twelve-month period. The typical cause of turbidity is sediment suspended in the water that can interfere with disinfection and provide a medium for microbial growth. Large storm events can result in increased turbidity, causing the Portland Water Bureau to shut down the Bull Run system and serve water from the Columbia South Shore Well Field.

### Giardia

Wildlife in the watershed may be hosts to *Giardia lamblia*, the organism that causes giardiasis. The Portland Water Bureau uses chlorine to control these organisms.

### Fecal Coliform Bacteria

The presence of fecal coliform bacteria in source water indicates that water may be contaminated with animal wastes. The Portland Water Bureau uses chlorine to kill these bacteria.

### Nitrate - Nitrogen

Nitrate, measured as nitrogen, can support microbial growth (bacteria and algae). Nitrate levels exceeding the standards can contribute to health problems.

### Antimony, Arsenic, Barium, Chromium (total), Copper, Fluoride and Lead

These metals are elements found in the earth's crust which can dissolve into water that is in contact with natural deposits. At the levels found in Portland's drinking water, they are unlikely to contribute to adverse health effects. There is no maximum contaminant level (MCL) for copper or lead at the entry point to the distribution system. Copper and lead are regulated at customers' taps. For more information see **Chromium-6** on page 10 and **Reducing Exposure to Lead** on page 8.

### Gross Beta

Certain elements are radioactive and may emit forms of radiation known as photons and beta radiation. Gross beta was detected in Portland's groundwater at the entry point to the distribution system in 2009. At levels detected in Portland's drinking water, gross beta is unlikely to contribute to adverse health effects.

### E. Coli Bacteria

*E. coli* are bacteria that indicate that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches or other symptoms. The microbes may pose a special health risk for infants, young children, some of the elderly and people with severely compromised immune systems. The Portland Water Bureau uses chlorine to kill these bacteria.

### Total Coliform Bacteria

Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present.

### Disinfection Byproducts

During disinfection, certain byproducts form as a result of chemical reactions between chlorine and naturally occurring organic matter in the water. These byproducts can have negative health effects. Trihalomethanes and haloacetic acids are regulated disinfection byproducts which have been detected in Portland's water. The disinfection process is carefully controlled to keep byproduct levels low.

### Total Chlorine Residual

Total chlorine residual is a measure of free chlorine and combined chlorine and ammonia in our distribution system. Chlorine residual is necessary to maintain disinfection throughout the distribution system. Adding ammonia to chlorine results in a more stable disinfectant and helps to minimize the formation of disinfection byproducts.

## Reducing Exposure to Lead

Portland has removed all known lead service connections from its distribution system. Exposure to lead through drinking water is possible if materials in a building's plumbing contain lead. The level of lead in water can increase when water stands in contact with lead-based solder and brass faucets containing lead.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Portland Water Bureau is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to request a free lead-in-water test from the LeadLine. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the **LeadLine, 503-988-4000, [www.leadline.org](http://www.leadline.org)** or the Safe Drinking Water Hotline **800-426-4791, [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)**.

People are exposed to lead in many other ways. In the Portland area, dust from paint in homes built before 1978 is the most common source of exposure to lead. Other sources include soil, pottery, traditional folk medicines or cosmetics, some sports equipment such as fishing weights and ammunition, and some occupations and hobbies.

### Corrosion Treatment

The Portland Water Bureau's corrosion control treatment reduces corrosion in plumbing by increasing the pH of the water. Comparison of monitoring results with and without pH adjustment shows more than 50 percent reduction in lead and 80 percent reduction in copper at the tap with pH adjustment.

### Water Testing

Twice each year the Portland Water Bureau monitors for lead and copper in tap water from a sample group of more than 100 homes. These are homes in Portland's service area where the plumbing is known to contain lead solder which is more likely to contribute to elevated lead levels. These houses represent a worst-case scenario for lead in water. Samples are collected after the water has been standing in the household plumbing for more than 6 hours. A Lead and Copper Rule exceedance for lead occurs when more than 10 percent of these homes exceed the lead action level of 15 parts per billion. In the most recent round of testing, less than 10 percent of homes exceeded the lead action level.

If you are concerned that your home tap water may have lead, call the LeadLine for a free lead-in-water test kit and to learn ways to reduce your exposure to all sources of lead. This program targets testing the water in households most at-risk from lead in water. These are homes built between 1970 and 1985 with pregnant women or children ages six or younger in the home.



## Easy steps to avoid possible exposure to lead in drinking water

### ▶ Run your water to flush out lead.

If the water has not been used for several hours, run each tap for 30 seconds to 2 minutes or until it becomes colder before drinking or cooking. This flushes water which may contain lead from the pipes.

### ▶ Use cold, fresh water for cooking and preparing baby formula.

Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.

### ▶ Do not boil water to remove lead.

Boiling water will not reduce lead.

### ▶ Consider using a filter.

Check whether it reduces lead – not all filters do. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality. Contact NSF International at **800-NSF-8010** or **[www.nsf.org](http://www.nsf.org)** for information on performance standards for water filters.

### ▶ Test your water for lead.

Call the **LeadLine** at **503-988-4000** to find out how to get a **FREE** lead-in-water test.

### ▶ Test your child for lead.

Ask your physician or call the **LeadLine** to find out how to have your child tested for lead. A blood lead level test is the only way to know whether your child is being exposed to lead.

### ▶ Regularly clean your faucet aerator.

Particles containing lead from solder or household plumbing can become trapped in your faucet aerator. Regular cleaning every few months will remove these particles and reduce your exposure to lead.

### ▶ Consider buying low-lead fixtures.

New brass faucets, fittings and valves, may contribute to lead in your drinking water. Federal law currently allows brass fixtures, such as faucets, to contain up to 8% lead. These fixtures are labeled as "lead-free." When buying new fixtures, consumers should seek out those with the lowest lead content. Visit **[www.nsf.org](http://www.nsf.org)** to learn more about lead content in plumbing fixtures. See **Reduction of Lead in Drinking Water Act** on page 10 for more information.

## Leadline - 503-988-4000

Call the **LeadLine** or visit **[www.leadline.org](http://www.leadline.org)** for information about lead hazards, free lead-in-water testing, free childhood blood lead testing and referrals to other lead reduction services.

**[www.leadline.org](http://www.leadline.org)**

## Notes on Unregulated Contaminants

### Unregulated contaminant monitoring helps the EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants in the future.

### Nickel

Nickel is a metal found in the earth's crust; it can dissolve into water that is in contact with natural deposits. There is currently no maximum contaminant level for nickel. At the levels found in Portland's drinking water, it is unlikely to contribute to adverse health effects.

### Radon

Radon is a naturally occurring radioactive gas that cannot be seen, tasted or smelled. Radon has not been detected in the Bull Run supply. It has been detected at varying levels in Portland's groundwater supply. For information about radon, call the EPA's Radon Hotline (**800-SOS-RADON**) or **[www.epa.gov/radon/rnwater.html](http://www.epa.gov/radon/rnwater.html)**.

### Sodium

Sodium is a metal found in the Earth's crust; it can dissolve into water that is in contact with natural deposits or added to water during treatment. There is currently no drinking water standard for sodium. Sodium is an essential nutrient. At the levels found in drinking water, it is unlikely to contribute to adverse health effects.

### Vanadium

Vanadium is a metal found in the earth's crust, which can dissolve into water that is in contact with natural deposits. Based on concerns regarding vanadium as a potential emerging contaminant, the Portland Water Bureau tested water from the Columbia South Shore Well Field for vanadium in 2010. All of the results for vanadium were below the 50 parts per billion Notification Level set by the State of California. At these levels it is unlikely to contribute to adverse health effects.



## The LT2 Rule

In January 2006, the federal Environmental Protection Agency (EPA) issued a drinking water rule called the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) principally to reduce the risks of illness from *Cryptosporidium*, a protozoan parasite found in the intestines and fecal material of mammals. If ingested, infectious forms of *Cryptosporidium* can cause cryptosporidiosis which results in gastrointestinal illness in humans and more serious illness in immunocompromised populations (see *Special Notice for Immuno-Compromised Persons* on page 2 in this report). The LT2 rule has two principal requirements which affect Portland's water system: 1) the installation of additional treatment processes to address *Cryptosporidium* in Bull Run source water by 2014, and 2) ending the use of uncovered finished drinking water reservoirs in Mt. Tabor and Washington Parks.

### Compliance with Additional Treatment Requirements

#### Portland's Request for a Treatment Variance

The Safe Drinking Water Act enables Portland to apply for a variance to the surface water treatment requirements of the LT2 rule if it can demonstrate that such treatment is not necessary to protect public health. In December 2009, the Water Bureau began a comprehensive water sampling program to investigate whether *Cryptosporidium* is a public health risk in the Bull Run watershed. For a one year period the City conducted intensive testing of water samples from its untreated source water. After collecting 449 water samples at the water supply intake and an additional 315 samples from several upstream watershed locations, zero instances of *Cryptosporidium* were detected. These results build on those from previous testing for *Cryptosporidium* in the Bull Run watershed. Although *Cryptosporidium* has been detected in the past, monthly tests from the watershed have not detected the pathogen since August 2002.

The absence of *Cryptosporidium* in the City's water quality sampling results is consistent with the natural conditions and legal protections in place for the Bull Run watershed which serve to reduce the risk of *Cryptosporidium* exposure for Portland's drinking water.



No *Cryptosporidium* were found in the year-long water quality monitoring in support of a variance request to the treatment requirements of the LT2 rule.

Because public entry and any associated recreational, agricultural or development activities are prohibited in the Bull Run watershed, wildlife is the only significant potential *Cryptosporidium* source in the watershed. Analysis of wildlife in the predominant old growth forest conditions in the watershed indicates that total population density of animals is relatively low and that incidence of animals shedding *Cryptosporidium* in the watershed is extremely low. From August 2009 through December 2010, the Water Bureau collected and analyzed 251 wildlife scat samples in and around the watershed for the presence of *Cryptosporidium*. Only a single sample tested positive containing just two individual *Cryptosporidium* oocysts.

Vegetation and hydrologic conditions in the watershed may further reduce the limited risk of *Cryptosporidium* contamination by restricting the movement of potential pathogens through the watershed. The dense forest canopy, low to moderate rainfall intensities, and porous soil that have a high capacity for infiltration result in most water flow occurring below the ground surface. This flow through vegetation and soil can trap pathogens, preventing them from reaching streams and the drinking water supply reservoirs.

An analysis of available health related data appears to show that the majority of the reported cases of cryptosporidiosis in the Portland region are sporadic in nature and that there was no evidence which would suggest that drinking water has been a significant source of cryptosporidiosis. This health data shows that under current conditions in the Bull Run, adding additional water treatment is not likely to result in a measurable decrease in the occurrence of reported cases of cryptosporidiosis in the Bull Run service area.

Based on these sampling results and analysis, the City intends to submit a treatment variance request to the Oregon Drinking Water Program in June 2011 and anticipates hearing back regarding its request by the end of 2011.

#### UV Treatment as a Last Resort

In the event the Oregon Drinking Water Program rejects the City's request for a treatment variance, the City is also in the process of designing an ultraviolet light (UV) treatment facility to meet the treatment requirements of the LT2 rule. The UV design phase is scheduled to be completed by the end of 2011 when a final decision on the City's eligibility for a treatment variance is anticipated. This timing will enable the City to meet the April 1, 2014 deadline for constructing the UV treatment facility if it proves to be necessary.

#### Uncovered Finished Drinking Reservoirs: Storage Replacement Underway

In November 2009, the City requested direction from EPA regarding the possibility of a variance to the uncovered finished drinking reservoir requirements of the LT2 rule. In December 2009, the EPA replied that no such option exists. As required by the LT2 Rule, the City is currently implementing a multi-year plan to develop alternative enclosed storage and end the use of its open finished drinking water reservoirs in Mt. Tabor and Washington Parks by December 31, 2020. For updates on the Portland Water Bureau's response to the LT2 rule visit [www.portlandonline.com/water/LT2](http://www.portlandonline.com/water/LT2).

## Developments in Water Quality

### Chromium-6

The progress on research into chromium-6 made news in December 2010 when the Environmental Working Group, an environmental advocacy group, said it had found chromium-6 in the water of 31 cities and urged the EPA to adopt new rules regarding the regulation of this compound.

Currently, there are no federal regulations or requirements to test for chromium-6 in drinking water. In January 2011, the EPA issued recommendations for enhanced chromium-6 monitoring of surface water supplies quarterly and groundwater supplies semi-annually. Portland is voluntarily following these recommendations and has contracted with an accredited laboratory to conduct chromium-6 analysis of the Bull Run water supply quarterly and groundwater in summer 2011.

Chromium is a naturally occurring element found in rocks, animals, plants, soil, and in volcanic dust and gases. Chromium can exist in a variety of forms, but is typically found in the environment and drinking water in two main forms: trivalent chromium (chromium-3) and hexavalent chromium (chromium-6). Chromium-3 occurs naturally in the environment and is an essential human dietary nutrient. Chromium-6 is the more toxic form and is generally associated with industrial processes. Recent studies have shown that ingestion of drinking water or food containing chromium-6 may cause cancer in laboratory mice and rats. Chromium can transform from one form to another in water and soil, depending on the conditions present.

EPA's final toxicological review of chromium-6 is expected in 2011. This risk assessment will form the basis of any regulations that may be developed. PWB will continue to work closely with the EPA and with organizations such as the American Water Works Association to monitor this issue as developments emerge.



### Reduction of Lead in Drinking Water Act

In December 2010, US Congress passed the Reduction of Lead in Drinking Water Act. The new law will reduce the amount of lead in new household plumbing fixtures. Currently, "lead-free" plumbing fixtures can contain up to 8% lead. Under the new law the maximum lead content allowed will be 0.25%. The new regulations only apply to new faucets and fixtures and will take effect in three years. The new law will not have any effect on existing home plumbing. The Portland Water Bureau supports the passage of this law and submitted a letter of support for passage of the bill. Household plumbing is the largest source of lead in water in the Portland area.

The Portland Water Bureau encourages customers to carefully choose new faucets and fixtures for their home. Many manufacturers are already producing components that meet the new standards. These components can most easily be purchased through retailers in California, Vermont and Maryland where the new standards have already been implemented. By 2014, all components sold in Portland will meet the higher standards.



The Portland Water Bureau has 184 water quality sampling stations throughout the distribution system to monitor water quality on a regular basis.





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CITY OF PORTLAND, OREGON  
**Portland Water Bureau**  
 Commissioner Randy Leonard  
 Administrator David G. Shaff  
 1120 SW Fifth Avenue / Room 600  
 Portland, Oregon 97204

\*\*\*\*\***ECRWSS**  
**POSTAL CUSTOMER**

**Drinking water regulations require the city to mail this information to customers each year — It's the law.**

Most of the language is also required – Congress and the EPA want to be sure that people know what is in their drinking water. The Portland Water Bureau agrees.

The Portland Water Bureau makes significant efforts to produce this complex information readable and at a low cost. *The Portland Water Bureau produced and mailed this report for 29 cents each.*



Dam 1 in the Bull Run watershed

ROMAN JOHNSTON

Printed on recycled paper  
 JUNE 2011

**CONTACT INFORMATION**

**Portland Water Bureau**  
 1120 SW Fifth Avenue/ Room 600  
 Portland, Oregon 97204  
[www.portlandoregon.gov/water](http://www.portlandoregon.gov/water)  
 Public Water System #4100657

**Portland Water Bureau**  
**Customer Service:** 503-823-7770  
**Portland Water Bureau**  
**Water Line:** 503-823-7525

**FOR ADDITIONAL INFORMATION**

**Oregon Health Authority –  
 Drinking Water Program:**  
 971-673-0405  
[www.public.health.oregon.gov/  
 HealthyEnvironments/DrinkingWater](http://www.public.health.oregon.gov/HealthyEnvironments/DrinkingWater)

The City of Portland will provide auxiliary aids/services to persons with disabilities. To request an ADA accommodation, please call 503-823-7404 or by TTY at 503-823-6868. Copies of this report are available in Braille, large format type and on the Portland Water Bureau's website — [www.portlandoregon.gov/water](http://www.portlandoregon.gov/water).

**Spanish**

Para obtener una copia de este reporte en español, por favor llame al 503-823-7770 o visite [www.portlandoregon.gov/water](http://www.portlandoregon.gov/water)

**Russian**

Чтобы получить копию этого отчета на русском языке, пожалуйста, позвоните **503-823-7770** или зайдите на сайт [www.portlandoregon.gov/water](http://www.portlandoregon.gov/water)

**Vietnamese**

Để được một bản báo cáo này bằng tiếng Việt, xin gọi số **503-823-7770** hoặc đến mạng lưới [www.portlandoregon.gov/water](http://www.portlandoregon.gov/water)

**Chinese**

若想获得本报告的中文版本, 请拨打**503-823-7770** 或访问: [www.portlandoregon.gov/water](http://www.portlandoregon.gov/water)

Moore-Love, Karla

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 8:43 PM  
**To:** Council Clerk – Testimony; Hales, Mayor  
**Subject:** Mt. Tabor Disconnection LU hearing May 28, 2015  
**Attachments:** FERCItrSept2012FERCseismic.tif; Novick letter to OHA Drinking Water Program.pdf; OpenResStudy TechMemo5.70001.pdf - Google Drive.webarchive

To: City council  
From: Floy Jones

The attached documents are submitted for the Mt. Tabor disconnection LU hearing, **Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project**

These documents support comments submitted separately.

- 1) Federal Energy Regulatory Commission Reservoir communication that supports that the PWB overestimates risk including potential inundation risk in the case of massive seismic event. This letter addresses the tanks at Mt. Tabor.
- 2) Steve Novick OHA deferral request documents that other utilities are retaining their open reservoirs as a functional part of their distribution system, promoting economic health for that community, supporting community interests over corporate interests and avoiding cancer causing Nitrification..
- 3) MWH Global Open Reservoir study Tech Memo Montgomery Watson Harza Global, was hired by the Water Bureau and studied the open reservoirs under a 9-year contract 30491 (1995-2004) . In a 2001 document<sup>[4]</sup>, that firm rated the reservoirs as being in "good condition" and listed projects (see pp. C1-5 in this link) that, if completed over a 20-year period, would maintain the safe function of reservoirs until **2050**  
Referenced in separate comments.

FEDERAL ENERGY REGULATORY COMMISSION  
Office of Energy Projects  
Division of Dam Safety and Inspections  
Portland Regional Office  
805 SW Broadway, Suite 550  
Portland, Oregon 97205

SEP 6 2012

In reply refer to:  
P-6957- OR  
NATDAM No. OR00327  
OR00317  
OR83058

Mr. Frank R. Galida  
Hydroelectric Power Section  
City of Portland  
1120 S.W. 5th Avenue, 5th Floor  
Portland, Oregon 97204-1975

**Subject: GIS Inundation Mapping for the Mt. Tabor Hydroelectric Project**

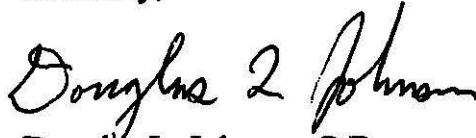
Dear Mr. Galida:

This is to acknowledge your July 9, 2012 letter transmitting three copies of your plan and schedule for completing revisions to the Geographic Information System (GIS) inundation mapping for the Emergency Action Plan (EAP) for the Mt. Tabor Hydroelectric Project, FERC No. 6957. We have reviewed the information provided and have the following comments:

1. The response regarding the Inundation Polygon is adequate. The information should be added to the EAP so that emergency responders clearly understand why the inundation boundary exactly follows Hawthorne Blvd for the Reservoir 5 & 6 failure.
2. The schedule for completing the updates with the annual EAP update in early 2013 is satisfactory.
3. Our review of the GIS information included a review of the Dam Break study in the EAP. The Commission's Guidelines for Dam Break studies support the use of conservative assumptions. The assumptions used in the Mt. Tabor Dam Break study appear to be overly conservative and likely results in a larger inundation area. We are concerned that emergency responders will be trying to cover a larger area than they need to and this could result in confusion or delays in reaching those areas where assistance would be needed. We recommend that the City review the assumptions used in the dam break study to see if they are conservative while still being realistic. If you decide to complete new Dam Break studies, please provide a plan and schedule for completing the study.

Your cooperation in dam safety efforts is appreciated. If you have any questions regarding this matter, please contact Mr. Ron Wright of this office at (503) 552-2736.

Sincerely,

A handwritten signature in black ink that reads "Douglas L. Johnson". The signature is written in a cursive style with a large, prominent "D" and "J".

Douglas L. Johnson, P.E.  
Regional Engineer



CITY OF  
**PORTLAND, OREGON**  
OFFICE OF PUBLIC SAFETY

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February 4, 2013

Mr. David Leland, Program Manager  
Oregon Health Authority Drinking Water Program  
P.O. Box 14450  
Portland, OR 97293-0450

Subject: Request for Schedule Adjustment of LT2 Requirements for Uncovered Finished  
Drinking Water Reservoirs

Dear Mr. Leland:

As you well know, the Portland Water Bureau (PWB) currently stores finished drinking water in uncovered reservoirs at Mt. Tabor and Washington Park. On March 27, 2009, PWB submitted a schedule that was approved by the U.S. Environmental Protection Agency (EPA) to comply with the uncovered finished drinking water reservoir requirements in the Long Term 2 Enhanced Surface Water Treatment Rule (LT2). Portland's approved 2009 compliance schedule requires that it disconnect the reservoirs at Mt. Tabor from the distribution system by December 31, 2015, and cover Reservoir 3 and disconnect Reservoir 4 in Washington Park by December 31, 2020.

In a letter dated February 10, 2012, the City of Portland requested an extension of its LT2 reservoir compliance plan. That request was denied by OHA in a letter dated May 17, 2012. Since that request, new information has come to light that I feel merits additional reconsideration of our request for a deferral.

Having become aware that the City of Rochester, New York has been granted a request to amend its LT2 reservoir compliance schedule, the City of Portland again respectfully requests approval for a schedule adjustment for projects related to our compliance plan to replace its uncovered reservoirs with covered storage.

Specifically, on behalf of the Portland City Council, I request approval for a deferral of completion of the Mt. Tabor and Washington Park LT2 reservoir compliance projects to December 31, 2024, which is consistent with the City of Rochester's extension.

Portland is making this request for a new timeline because material economic and regulatory circumstances have changed since our compliance plan was submitted in early 2009. These circumstances include:

- Increasing water rates.
- Water demand that is declining steadily, resulting in even higher rates.



- Increasing debt-to-revenue ratio.
- Water Research Foundation Study 3021 which found no *Cryptosporidium* following extensive sampling in Portland's open reservoirs.
- Decision by the EPA to review and reassess the LT2 rule in response to President Obama's Executive Order and appeals from municipalities with uncovered reservoirs similar to Portland's.

In response to a request from New York's Senator Schumer and to President Obama's Executive Order 13563 requiring agencies "*...To facilitate the periodic review of existing significant regulations, agencies shall consider how best to promote retrospective analysis of rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned.*", the EPA announced in 2011 its plan to review and possibly revise the LT2 regulation.

In an August 2011 letter EPA Administrator Lisa Jackson advised Senator Schumer that "*...different reservoirs around the country have different specific conditions and protections that may have a bearing on the public health benefits of the LT2 coverage requirements.*" EPA has said that they will, "*...reassess and analyze new data and information regarding occurrence, treatment, analytical methods, health effects, and risk from viruses, Giardia, and Cryptosporidium to evaluate whether there are new or additional ways to manage risk while assuring equivalent or improved public health protection.*"

The Portland Water Bureau, community stakeholders, other utilities, industry organizations such as the American Water Works Association (AWWA) and the Water Research Foundation (WRF), industry consultants, and university researchers are participating in the LT2 review and revision process scheduled to be complete by 2016. As part of this process, the Portland Water Bureau has submitted to the EPA relevant reservoir data associated with WRF study 3021 "*Detection of Infectious Cryptosporidium in Conventionally Treated Drinking Water*" and relevant disease surveillance data.

Since submitting our LT2 compliance plan in 2009, the WRF 3021 researchers have published their study. Among its conclusions, "*...According to the USEPA's SWTR, the goal of conventional water treatment plants should be a maximum annual risk of Cryptosporidium infection of 1 in 10,000. The results from these 14 plants indicated that the occurrence of infectious Cryptosporidium in conventionally treated drinking water in some areas of the U.S., produced by correctly operating treatment plants, was low and drinking water meets this risk goal.*" In our previous communications with you, the Portland Water Bureau informed OHA of Portland's 7000 liter open reservoir sampling, but not of the conclusions of the published report.

In addition, as part of EPA's LT2 rule revision process, New York City has supplied EPA with extensive new uncovered reservoir data demonstrating that their Hillview reservoir is not a source of *Cryptosporidium*. Finally, last year, Rochester, New York, which secured an amendment to their LT2 reservoir compliance schedule to 2024, is currently collecting 50 liter *Cryptosporidium* samples twice per month, having previously not collected any samples prior to securing an extension of its LT2 reservoir compliance projects.

While it is uncertain what changes the EPA might ultimately make to the LT2 rule, the City of Portland has an interest in benefiting from any alternative compliance options that may develop through the revision process. What I hope to avoid, and what I believe you can agree would be unacceptable, would be to proceed with the construction of these reservoir projects only to find out in 2016 they are no longer mandated.

Such an outcome would leave Portland ratepayers in debt for hundreds of millions of dollars with no regulatory mandate for a project that is not a public health priority.

With regard to the legitimacy of economic arguments as a basis for project deferral, I point to the City of Rochester which has a physical infrastructure very similar to Portland's open reservoir infrastructure. Rochester had three (3) uncovered reservoirs including two historic reservoirs which, like ours, are highly engineered reservoirs not subject to run-off of surface water and are over 100 years old and set in city parks. In 2012 Rochester completed covering one reservoir and successfully secured a 10-year extension until 2024 from the EPA LT2 "treat or cover" requirement for their remaining two historic open reservoirs arguing financial hardship, limited resources, and questioning the requirement of onerous expenditures without any measurable public health benefit.

Rochester sought to amend, on economic grounds, their previous compliance agreement of the LT2 rule as it applies to their open drinking water reservoirs. The request was granted in March 2012 by the State of New York, in consultation with the Environmental Protection Agency. Portland deserves the same consideration and reprieve, based on analogous circumstances, stronger justification, and an equitable and consistent application of federal law.

In its December 20, 2011 letter requesting an amendment to their LT2 project schedule, Rochester cited a variety of economic challenges, including a drop in water demand and rising water rates, *"While the population decreased by 10% since 2000, the water rates increased 44%. We have sought alternative funding sources such as congressional earmarks, EPA appropriations, and NYSDWSRF funding, but we have been unable to secure funding to lessen the financial hardship for the Cobbs Hill and Highland UV improvement. Due to the capital investment needs of the water system, we are carrying a very high debt load with a total principal and debt load payment of approximately \$5.5 million due in 2014. This debt load includes the \$15 million we have already spent on LT2ESWTR compliance projects."*

The City's letter goes on to say, *"US EPA Administrator Lisa Jackson recently announced a review of the LT2 rule. Ms. Jackson was prompted to review the LT2 rule because of requests from New York City, US Senator Charles Schumer, and others to reevaluate the effectiveness of the regulation in light of new data that brings into question the assumptions upon which the LT2 rule was promulgated."*

The Portland Water Bureau has a much stronger argument for deferral of LT2 projects on economic grounds than Rochester. During the same period of time cited by Rochester (FY 2000-01 to FY 2011-12), retail water rates in Portland increased by 89% compared to Rochester's 44%. In the same period retail water demand has declined in Portland 12%. Since then, Portland's rates increased by 7.6% this year and are expected to rise by a similar amount in July.

Rising water rates place a burden on residential ratepayers, both homeowners who receive the bill directly, and renters for whom water costs are built into base rent increases. Water consumption is, of course, a basic human necessity, unlike other elective utilities such as cable TV, cell phones and internet. While Portland offers a generous low-income discount program for both water and sewer rates, the program does not shield enrolled ratepayers from water rate increases. In fact, those enrolled in the low income discount program see the same annual rate of increase in their bills as conventional retail ratepayers.

Rising water rates also have an impact on our commercial customers. Last year, Siltronic Corp.—the City's largest water customer and a major employer—shuttered half of its Portland manufacturing capacity, laying off 350 workers. While rising water rates were not cited as the primary reason for the closure, the company made the point at the time that rising rates threaten the competitiveness of its remaining silicon wafer manufacturing plant.

Siltronic is representative of many major water customers in the City of Portland, in that it operates in a commodity market with little ability to pass rising production costs on to its customers through higher prices. Therefore, as water rates have risen in Portland by double digits each of the last few years, large water users in commodity markets like dairy products, textiles, food processing, and chemicals are finding Portland a less and less competitive place to do business.

In 2000, the PWB held \$134.8 million in outstanding debt, with annual debt service of \$12.8 million. As of July 1, 2012, the PWB is carrying \$440.1 million in outstanding debt, with annual debt service of \$36.1 million, representing about 26% of annual revenues. Much of this debt has been taken on to pay for expensive LT2 compliance projects.

The City of Portland has made significant investments in open reservoir upgrades, completing upgrade work and closing out a \$23 million contract in 2011. One of the tasks assigned to a consulting firm studying the open reservoirs over a 9-year period was to outline projects necessary to keep the open reservoirs safely operating. Many of these projects have been completed over the last 10 years under four contracts totaling \$40 million. These contracts were financed by 25-year revenue bonds. Approval of the new timeline supports Portland's interest in good governance and in protecting this significant investment.

The PWB has robust risk mitigation measures in place to protect public health during the extension period. As stated in earlier correspondence, the PWB believes that the current observable risk to public health is low. Additionally, allowing the schedule adjustment will provide opportunity for the PWB to address deferred maintenance projects that will provide greater public health protections. For example a strategic objective of the PWB is to improve distribution system water quality by increasing unidirectional system flushing. Given the resources assigned to LT2, the PWB's ability to increase the number of miles of piping that are flushed each year has been limited.

Finally, since the original compliance schedule was adopted in 2009, it is again worth noting and repeating that in 2012 OHA granted a first of its kind in the nation variance to the LT2 source

water treatment rule to Portland recognizing the outstanding nature of the Bull Run raw water source and the protections developed and put into place over the past several decades by the city to protect its source water. I suspect that our Cryptosporidium testing and monitoring is among the most extensive in the country.

Approval of a schedule adjustment will enable PWB to pay down some water bond debt, and reduce the financial impact on ratepayers during the current recession, when households are facing financial pressures on many fronts.

For the reasons described above, the City of Portland hereby requests revisions to our compliance schedule that defer completion of the Mt. Tabor and Washington Park LT2 reservoir compliance projects to December 31, 2024.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Novick", written in a cursive style.

Commissioner Steve Novick  
City of Portland, Oregon

c. Mel Kohn, M.D., M.P.H.

Enclosures

## EXECUTIVE SUMMARY

### INTRODUCTION

The City of Portland, Bureau of Water Works (Bureau) owns and operates five finished water open reservoirs within its distribution system. Reservoir 1 at Mt. Tabor and Reservoirs 3 and 4 at Washington Park were constructed in 1894, and have been in continuous operation for over 100 years. Reservoirs 5 and 6 at Mt. Tabor were constructed in 1911, and have been in service for 90 years. The open reservoirs provide a combined storage capacity of 170 million gallons. The Bureau has expressed an interest in determining the state of the reservoirs including the level of repairs, maintenance and rehabilitation required to keep the reservoirs in service to the year 2050 if needed.

### STUDY OBJECTIVES

The purpose of this report is to summarize evaluations of the existing conditions at the reservoirs, and provide preliminary recommendations for capital improvements. The information contained in this report will be used in the development of the Enhanced Maintenance Benchmark Program, a detailed maintenance program that could extend the useful life of the open reservoirs to the year 2050. A number of tasks were performed in order to evaluate the condition of the open reservoirs:

- Evaluation of the condition of the reservoirs and auxiliary elements;
- Structural evaluation of the gatehouses, and evaluation of the steel tanks;
- Identification of valves, gates and yard piping which require replacement;
- Miscellaneous items were also addressed, including video surveillance, lighting, chlorination, metering, and emergency power generation;
- Assessment of the historical and aesthetic significance of the open reservoirs.
- Preparation of preliminary site plans showing above and below-ground facilities;

Montgomery Watson Harza (MWH) in conjunction with Construction Technology Laboratories, Inc. (CTL) performed the visual surveys of all five reservoirs in 1996. Physical testing of the concrete floor, the subgrade and the underdrain for Reservoir 5 was carried out in conjunction with a liner installation project in 1998. The condition of the gatehouses including valves and pipes was conducted by MWH and Advanced Engineering, P.C. based on site inspections. The corrosion investigation of the tanks located in the gatehouses was completed by Corpro Companies Incorporated in 1998. The historic analysis was completed by Shapiro & Associates, Inc. in late 1996 and 1997. This information was initially summarized in a draft technical memorandum (TM) dated October, 1997. The TM was updated with the aid of Bureau review comments to draft TM 5.7 and with input from Bureau Operating Engineers in December 1998, January 1999 and June 2001. Additional site visits were made in June 2001 to update repairs or equipment replacement since the initial draft TM 5.7. Cornforth Consultants completed a preliminary geotechnical and seismic evaluation of the Washington Park Reservoirs in July 1997. Further investigation needed to provide recommendations is described in that TM and therefore is not provided in this memorandum.

## CONCLUSIONS AND RECOMMENDATIONS

A number of recommendations were developed from the evaluation of the reservoirs. Based on their age of approximately 100 years, it is expected that repairs or replacement of the reservoirs and their components are necessary to continue operation. Considering their age, the reservoirs and facilities are generally in good condition. However, in order to extend the life of these facilities, replacement and repair is needed.

- The concrete lining in Reservoir 1 leaks excessively and a membrane liner is recommended. This installation would be similar to that installed in Reservoir 5 in 1998.
- The Hypalon liner in Reservoir 3 has reached the end of its useful life. Installation of a membrane liner should be considered.
- Repair of the asphalt liner in the north cell at Reservoir 6 is needed. Repair of the liner would decrease leakage and delay the installation of a new membrane liner.
- In general, the sidewalks, concrete walls and parapet caps at all the reservoirs are cracked and need repair. Due to the irrigation leakage at Reservoir 1 and the continuing landslide at Reservoir 3 and 4, it is recommended that these issues be resolved before proceeding with the replacement or repair of the sidewalks.
- Further investigation of the crack in the Reservoir 3 dam wall is recommended to determine its extent. Based on this investigation, a more definitive recommendation can be made for the repair of the leak.
- Washdown piping at all reservoirs leaks, with the exception of Reservoir 5, should be replaced. New 4-in. diameter washdown piping with valve boxes should be installed. This work can be completed in conjunction with liner replacements or other major work at the reservoirs.
- The wrought iron fences at Reservoirs 1, 6, 3 and 4 should be removed, recoated and reinstalled due to peeling paint and rusting. This could be accomplished at Reservoir 1 at the same time of the liner installation and at Reservoir 6 at the time, the access road is completed. The restoration at Reservoirs 3 and 4 is not a priority since they are not highly visible to the public.
- Most of the pipes are 100 years old or more and show extensive deterioration. At a minimum, gates and valves should be refurbished or replaced. Replacement should occur on an as needed basis.
- New hypochlorite piping at Reservoir 5 is needed to avoid potential leaks in Reservoir 6 and the hillside. The Bureau plans to reroute the new lined piping around the south side of Reservoir 6, thus collecting any leaks into a vault.
- The existing lights at the reservoirs are "modern" in appearance and do not match the historical appearance of the reservoir structures and fences.
- The security cameras at the reservoirs should be updated by replacing the cameras with higher quality units, which would provide clearer images at night with the existing lighting.
- Yard piping at Reservoir 3 should be replaced. The 18-in. diameter line from the dam wall and the 30-in. diameter supply line from the gatehouse are scheduled for replacement in the summer of 2002.
- Elimination of cross-connections is necessary to reduce the potential for water quality issues. The restroom at Washington Park should be tied directly into an existing sanitary

line. A dedicated line would prevent any cross connection between the waste lines and storm systems.

- Adequate setbacks with security fencing of Mt. Tabor reservoirs are needed to continue to deliver a safe and dependable water supply to the City.
- Install the necessary valves and piping to isolate and operate each reservoir off -line for extended periods of time.



**Table C-1**  
**Open Reservoir Facilities at Mt. Tabor and Washington Park**  
**Schedule of Proposed Capital Facility Projects by Year**

Year	Location	Recommended Improvement	Ranking Score	Estimated Cost
2002/2003	Reservoir No. 1	New CCTV security system	13.5	\$20,000
	Reservoir No. 3	New CCTV security system	13.5	\$20,000
	Reservoir No. 4	New CCTV security system	13.5	\$20,000
	Reservoir No. 5	New CCTV security system	13.5	\$20,000
	Reservoir No. 6	New CCTV security system	13.5	\$30,000
	Reservoir No. 1	Construct security fence as a setback with recreational walkway	13	\$190,000
	Reservoir No. 5	Construct security fence as a setback with recreational walkway	13	\$722,000
	Reservoir No. 6	Construct security fence as a setback with recreational walkway	13	\$652,000
	Reservoir No. 5	Install new valves for better isolation of reservoir	10.5	\$400,000
	Washington Park Yard Piping and Site Facilities	Remove cross connection at Pump House No. 1	7.5	\$150,000
	<b>2002/2003 Subtotal:</b>			
Year 1	Reservoir No. 3	Repair bulge on west side, verify structural integrity w/ GPR and corings, repair crack in the base of the south wall and make other concrete repairs, replace membrane liner	25.5	\$675,000
	Reservoir No. 3	Repair parapet wall	4	\$15,000
	Reservoir No. 3	Sidewalk repair	3	\$27,000
<b>Year 1 Subtotal:</b>				<b>\$717,000</b>
Year 2	Reservoir No. 1	Repair localized areas of damaged concrete, investigate structural integrity of reservoir, repair south wall w/ shotcrete, install membrane liner	22.25	\$641,000
	Reservoir No. 1	Rehabilitate steel tank	10.5	\$27,000
	Reservoir No. 1	Repair parapet wall	4	\$20,000
	Reservoir No. 1	Restore historical wrought iron fencing	4	\$147,000
	Reservoir No. 1	Repair sidewalks	3	\$8,000
<b>Year 2 Subtotal:</b>				<b>\$843,000</b>
Year 3	Reservoir No. 4	Repair concrete cracking in reservoir and panel joints	22.25	\$27,000
	Reservoir No. 4	Repair parapet wall	4	\$27,000
	Reservoir No. 4	Repair sidewalks	3	\$31,000
	Mt. Tabor Yard Piping	Modifications to chlorination system yard piping	16.5	\$120,000
<b>Year 3 Subtotal:</b>				<b>\$205,000</b>



Year	Location	Recommended Improvement	Ranking Score	Estimated Cost
Year 4	Reservoir No. 1	Structural rehabilitation of gatehouse	18	\$50,000
	Reservoir No. 3	Structural rehabilitation of the gatehouse	18	\$50,000
	Reservoir No. 4	Structural rehabilitation of gatehouse	18	\$50,000
	Reservoir No. 5	Structural rehabilitation of gatehouse	18	\$50,000
	Reservoir No. 6	Structural rehabilitation of inlet gatehouse	18	\$50,000
	Reservoir No. 6	Structural rehabilitation of outlet gatehouse	18	\$50,000
	Washington Park Yard Piping and Site Facilities	Structural testing and rehabilitation of Pump House No. 1	18	\$50,000
			<b>Year 4 Subtotal:</b>	<b>\$350,000</b>
Year 5	Washington Park Yard Piping and Site Facilities	Replace 150-feet of 30-inch piping	10.5	\$64,000
	Washington Park Yard Piping and Site Facilities	Replace 300-feet of 18-inch pipe with 24-inch pipe	10.5	\$79,000
	Washington Park Yard Piping and Site Facilities	Replace 100-feet of 6-inch pipe	10.5	\$18,000
	Washington Park Yard Piping and Site Facilities	Install one 6-inch gate valve and three 30-inch gate valves	10.5	\$260,000
			<b>Year 6 Subtotal:</b>	<b>\$421,000</b>
Year 6	Mt Tabor Yard Piping	Replace 30-inch butterfly valve #181	10.5	\$37,000
	Mt Tabor Yard Piping	Replace 12-inch valve #184	10.5	\$22,000
	Reservoir No. 1	Replace 24-inch gate valve 3103	10	\$45,000
	Reservoir No. 3	Replace 18" gate valves 303/304	9	\$56,000
	Reservoir No. 4	Replace 24" gate valve 405	9	\$45,000
			<b>Year 5 Subtotal:</b>	<b>\$205,000</b>
Year 7	Reservoir No. 6	Repair concrete and replace sealant in the barrier wall	10.5	\$66,000
	Reservoir No. 6	Repair asphalt overlay	6	\$27,000
	Reservoir No. 6	Concrete panel repair	6	\$36,000
	Reservoir No. 6	Repair parapet wall	4	\$8,000
	Reservoir No. 6	Restore historical wrought iron fencing	4	\$474,000
			<b>Year 7 Subtotal:</b>	<b>\$611,000</b>
Year 8	Mt Tabor Yard Piping	Replace 48-inch and 36-inch pipeline discharging from Reservoir No. 5	9	\$1,100,000
			<b>Year 8 Subtotal:</b>	<b>\$1,100,000</b>

Year	Location	Recommended Improvement	Ranking Score	Estimated Cost
Year 9	Reservoir No. 3	Mechanical modifications to eliminate steel tank in the Gatehouse	9	\$320,000
	Washington Park Yard Piping and Site Facilities	Install 32-inch gate valve on supply line to Reservoir No. 3	9	\$76,000
	Washington Park Yard Piping and Site Facilities	Install automatic transfer switch for Pump House No. 1 generator	9	\$75,000
			<b>Year 9 Subtotal:</b>	<b>\$471,000</b>
Year 10	Reservoir No. 5	Replace 54" sluice gates 504/506 and 42" sluice gate 3505	9	\$182,000
	Mt Tabor Yard Piping	Replace two 30-inch gate valves and one 30-inch butterfly valve close the Mt. Tabor Pump Station	8.5	\$135,000
			<b>Year 10 Subtotal:</b>	<b>\$317,000</b>
Year 11	Mt Tabor Yard Piping	Replace 30-inch pipeline south of Reservoir No. 6	8.5	\$650,000
			<b>Year 11 Subtotal:</b>	<b>\$650,000</b>
Year 12	Reservoir No. 6	Sidewalk replacement	8.5	\$635,000
			<b>Year 12 Subtotal:</b>	<b>\$635,000</b>
Year 13	Reservoir No. 1	Install new 4" washdown header pipe w/ valves and hose connections	8	\$61,000
	Reservoir No. 3	Install new washdown header pipe and valves	8	\$87,000
	Reservoir No. 4	Install new 4" washdown header pipe and valves	8	\$103,000
			<b>Year 13 Subtotal:</b>	<b>\$251,000</b>
Year 14	Mt Tabor Yard Piping	Replace sluice gates #1510 and #1511, 42-inch x 66-inch	7.5	\$99,000
	Reservoir No. 6	Replace 30" butterfly valves 602/603 at Inlet Gatehouse	7.5	\$80,000
	Reservoir No. 6	Replace 54" sluice gate 604	7.5	\$70,000
			<b>Year 14 Subtotal:</b>	<b>\$249,000</b>
Year 15	Reservoir No. 1	Install bird wire	5.5	\$29,000
	Reservoir No. 3	Install bird wire	5.5	\$33,000
	Reservoir No. 4	Install bird wire	5.5	\$41,000
	Reservoir No. 5	Install bird wire	5.5	\$100,000
	Reservoir No. 6	Install bird wire	5.5	\$211,000
			<b>Year 15 Subtotal:</b>	<b>\$414,000</b>

Year	Location	Recommended Improvement	Ranking Score	Estimated Cost
Year 16	Washington Park Yard Piping and Site Facilities	Install 600-feet of 8-inch sanitary sewer pipe from Pump Station No. 1 to sanitary collection system	5.5	\$42,000
	Reservoir No. 6	Replace 30" gate valves 650/651/654/655 at Outlet Gatehouse	4.5	\$268,000
	Reservoir No. 6	Reconstruct restroom at Outlet Gatehouse including sanitary sewer pipeline	3	\$17,000
	Reservoir No. 6	Intake screen for hydropower facility	3	\$10,000
			<b>Year 16 Subtotal:</b>	<b>\$337,000</b>
Year 17	Reservoir No. 1	Rehabilitate steel balcony at the gatehouse and steel balcony west of the gatehouse	2	\$29,000
	Reservoir No. 4	Rehabilitate steel balcony at the gatehouse	2	\$12,000
	Reservoir No. 6	Rehabilitate steel balconies at Inlet and Outlet Gatehouses	2	\$24,000
	Reservoir No. 4	Mechanical modifications to eliminate steel tank in the Gatehouse	1.5	\$180,000
			<b>Year 17 Subtotal:</b>	<b>\$245,000</b>
Year 18	Reservoir No. 1	Replace existing light fixtures w/ historically accurate fixtures (23 lamps)	1	\$359,000
	Reservoir No. 1	Replace sidewalk	1.5	\$72,000
			<b>Year 18 Subtotal:</b>	<b>\$431,000</b>
Year 19	Reservoir No. 5	Replace existing light fixtures w/ historically accurate light fixtures	1	\$687,000
	Reservoir No. 5	Repair sidewalks	3	\$8,000
			<b>Year 19 Subtotal:</b>	<b>\$695,000</b>
Year 20	Reservoir No. 6	Replace existing light fixtures w/ historically accurate light fixtures	1	\$890,000
			<b>Year 20 Subtotal:</b>	<b>\$890,000</b>

Total of All Recommended Improvements: \$12,261,000

Valve Replacement: \$2,296,000

Total: \$14,557,000

Year	Location	Recommended Improvement	Ranking Score	Estimated Cost
Year 9	Reservoir No. 3	Mechanical modifications to eliminate steel tank in the Gatehouse	9	\$320,000
	Washington Park Yard Piping and Site Facilities	Install 32-inch gate valve on supply line to Reservoir No. 3	9	\$76,000
	Washington Park Yard Piping and Site Facilities	Install automatic transfer switch for Pump House No. 1 generator	9	\$75,000
			<b>Year 9 Subtotal:</b>	<b>\$471,000</b>
Year 10	Reservoir No. 5	Replace 54" sluice gates 504/506 and 42" sluice gate 3505	9	\$182,000
	Mt Tabor Yard Piping	Replace two 30-inch gate valves and one 30-inch butterfly valve close the Mt. Tabor Pump Station	8.5	\$135,000
			<b>Year 10 Subtotal:</b>	<b>\$317,000</b>
Year 11	Mt Tabor Yard Piping	Replace 30-inch pipeline south of Reservoir No. 6	8.5	\$650,000
			<b>Year 11 Subtotal:</b>	<b>\$650,000</b>
Year 12	Reservoir No. 6	Sidewalk replacement	8.5	\$635,000
			<b>Year 12 Subtotal:</b>	<b>\$635,000</b>
Year 13	Reservoir No. 1	Install new 4" washdown header pipe w/ valves and hose connections	8	\$61,000
	Reservoir No. 3	Install new washdown header pipe and valves	8	\$87,000
	Reservoir No. 4	Install new 4" washdown header pipe and valves	8	\$103,000
			<b>Year 13 Subtotal:</b>	<b>\$251,000</b>
Year 14	Mt Tabor Yard Piping	Replace sluice gates #1510 and #1511, 42-inch x 66-inch	7.5	\$99,000
	Reservoir No. 6	Replace 30" butterfly valves 602/603 at Inlet Gatehouse	7.5	\$80,000
	Reservoir No. 6	Replace 54" sluice gate 604	7.5	\$70,000
			<b>Year 14 Subtotal:</b>	<b>\$249,000</b>
Year 15	Reservoir No. 1	Install bird wire	5.5	\$29,000
	Reservoir No. 3	Install bird wire	5.5	\$33,000
	Reservoir No. 4	Install bird wire	5.5	\$41,000
	Reservoir No. 5	Install bird wire	5.5	\$100,000
	Reservoir No. 6	Install bird wire	5.5	\$211,000
			<b>Year 15 Subtotal:</b>	<b>\$414,000</b>

**City of Portland Water Bureau  
Open Reservoir Study**

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**TM 5.7  
FACILITIES EVALUATION**

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NOVEMBER 2001



## SUMMARY OF EVALUATION

A matrix of the evaluations and recommendations for all five reservoirs is located in Table ES-1.

### STRUCTURAL

#### *MT. TABOR RESERVOIRS*

The condition of the concrete panels and joints in Reservoir 1 warrant the installation of a membrane liner to mitigate excessive leakage. The Bureau plans to install a membrane liner by the summer of 2003. Additionally, the south wall needs to be rehabilitated with a shotcrete coating.

A Hypalon geomembrane liner was installed in Reservoir 5 in 1998. The liner is effective in mitigating reservoir leakage. The results of a GPR survey, drilled holes, slab removal, and camera inspection of the underdrain showed that the subgrade below Reservoir 5 did not contain substantial voids; the panels were of reasonably-sound quality; and a functional underdrain.

For Reservoir 6, the interior dividing wall leaks and requires repair. The asphalt overlay in the north cell is reported to require repair. Installation of a membrane liner is not warranted at Reservoir 6 at this time.

In general, the structure of the gatehouses are in good condition considering their age. There is some minor concrete restoration and crack repair required at most of the gatehouses. In addition to concrete restoration and crack repair, the gatehouses require other miscellaneous repairs. Finally, at the inlet and outlet gatehouse of Reservoir 6, there is a steel access platform adjacent to the operators for sluice gates at each structure which are badly corroded and should be replaced.

#### *WASHINGTON PARK RESERVOIRS*

The liner has reached the end of its useful life. Bureau plans to reline Reservoir 3 by the summer of 2003. At the time of liner installation, the crack in the south dam wall and the bulge on the west side of the reservoir should be repaired.

Installation of a geomembrane liner is not warranted at Reservoir 4 at this time. The concrete panels on the interior of the reservoir do not appear to be in need of major upgrading, but panel joints are in need of repair.

In general, the structure of the gatehouses and Pump Station No. 1 are in good condition considering their age. There is some minor concrete restoration and crack repair required at most of the gatehouses. In addition to concrete restoration and crack repair, the gatehouses require other miscellaneous repairs.

### OPERATIONAL/MECHANICAL

The steel tanks used to maintain head pressure within each gatehouse were observed for corrosion/pitting and tank wall thickness was measured using an ultrasonic probe. All of the tanks appear to have useful service life remaining. The tank at Reservoir 4 was recently



painted in the 1990s and the tank at Reservoir 5 was recoated in 1998 at the time of the Hypalon liner installation. Painting the tanks will extend their life 20 years. Pitting-type corrosion of the tanks' exterior shell plate is apparent, and may require some external repair via patching or weld metal build-up. It should be noted that observation of internal corrosion was not possible during this evaluation. It is recommended that the exteriors of the tanks at Reservoirs 1 and 3 be recoated, and that tank interiors be inspected and recoated if required. An alternative to repair of the tanks at Washington Park reservoirs is to eliminate the steel regulating tanks and replumb the inlet and outlet piping. With the installation of an isolation valve, the Mayfair tank could be used as a regulating tank.

Also evaluated were valves and sluice gates, within gatehouses and in the yard. Twenty-one valves and eight sluice gates are identified herein as requiring replacement or refurbishment. Due to the extreme age of approximately 100 years for most of the valves/gates, it is recommended that nearly all these valves be replaced and that all gates be refurbished over the next 20 years as needed.

Because most pipes are located underground, it was not possible to conduct a complete evaluation. Much yard piping is in need of replacement due to its age and method of fabrication. The oldest yard piping was constructed of riveted steel. Lock Bar pipe is also present. This fabrication method was introduced in 1905 and, like the riveted method, was phased out in the 1930's as welding became the predominant fabrication technique. Generally, riveted and Lock Bar steel pipes leak more than welded steel piping, due to their age and due to fabrication techniques.

## SECONDARY

Fences, parapet walls, and sidewalks should be refurbished at all reservoirs, with the exception of Reservoir 5. This work was completed in 1998 at the time of the Hypalon geomembrane liner installation. The sidewalks on the west side of Reservoirs 3 and 4 are buckling badly due to the landslide above. This will continue to worsen as the slide continues to move. The fence on this side also shows evidence of buckling due to the slide. At Reservoirs 1 and 3, this work should be done in conjunction with liner installation. Recommended repairs to site drain systems, and a discussion of cross connections, is contained within this report. A new restroom is recommended at Reservoir 6 for Bureau personnel.

## MISCELLANEOUS

This memorandum also discusses the issues of video surveillance, site lighting, chlorination, metering, and emergency power generation. The Bureau replaced the older tube-based surveillance cameras with chip-based cameras in order to optimize video surveillance of the reservoirs and camera reliability. However, higher quality units are needed for better night vision. The Bureau also is considering replacement of site lighting in order to improve lighting and to provide an appearance that is consistent with the architectural theme of the reservoirs. The Bureau is considering replacement of chlorine yard piping, and is currently evaluating options for pipe material, and for size and type of trench or pipe corridor. Meters are located at all inlet weirs. Reservoirs 5 and 6 also have underdrain meters. All meters are in good working condition.

## **SECTION 6 – CONCLUSIONS**

As part of the Open Reservoir Study, an assessment of the structural conditions and operation and maintenance of the open reservoirs and their ancillary facilities was performed. The objective of this work was to develop recommendations for capital and O&M improvements that will extend the useful life of the open reservoirs. This Benchmark Maintenance Program stemmed from the Open Reservoir Study; the purpose of this document is to make recommendations to maintain the existing reservoirs in operation and to propose a schedule of implementing the proposed improvements.

All five of the open reservoirs owned and operated by the Portland Water Bureau are extremely aged and are suffering from deterioration as a result. Problems include water loss, vulnerability to water quality problems, excessive operation and maintenance requirements and loss of value of the facilities. These problems need to be addressed in order to safely and reliably continue operating the open reservoirs. Water loss experienced as a result of leaking reservoirs is inconsistent with conservation policy. Leaking valves and pipes make it difficult to adequately isolate portions of the system in the event of an emergency. It is difficult to quickly isolate reservoirs in the event of an emergency. Structural deterioration of the Gatehouses, regulating tanks, pipes and valves pose a safety threat for Bureau employees. The aged facilities cause operators to spend more time maintaining open reservoir facilities. Continuing to operate the open reservoir facilities without capital improvements places these facilities at risk.

Recommendations made in this documents range from small projects that can be done in-house without major design efforts to full-scale projects requiring design effort as well as preparation of contract documents and a bidding process. Some of the projects should be carried out concurrently with other projects in order to minimize overall costs. Some of the projects are solely for aesthetics purposes and are ranked as low priority projects. All projects are shown as being implemented within a 20 year period, with the addition of several projects recommended to be completed immediately.

It is difficult to predict when all of the facilities will require repair or replacement. For example, in order to continue using the open reservoirs until the year 2050, many of the existing valves and much of the original piping will need to be replaced. For valves, it is recommended that funds be set aside annually and that valves are replaced on a "as needed" basis until all of the valves have been replaced.

Major repair recommendations resulting from the facility evaluations include:

- New security cameras
- Implementation of set-backs for the reservoirs at Mt. Tabor Park.
- Installation of membrane liners for Reservoirs No. 1 and 3.
- Repair work for Reservoirs No. 6 and 4.



Moore-Love, Karla

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 9:07 PM  
**To:** Council Clerk – Testimony; Hales, Mayor  
**Subject:** Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Projec  
**Attachments:** Historic Structure reportTabor.pdf

To:Portland City Council

Re: **Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection hearing**

From: Floy Jones on behalf of Friends of the Reservoirs

Attached find the PWB's 2009 Historic Structures Report Contrary to their statements to the Historic Landmark Commission the Water Bureau has completed but a few of mainenance and preservation projects outlined in this report.

The PWB's 2009 "Mt. Tabor Reservoirs Historic Structures" completed document by Rob Dortignacq of Cascade Design, states that if maintained the open reservoirs could continue to function for another 50 years as did the MWH Global 9-year reservoir study wherein one of their tasks was to list projects (see pp. C1-5 in this link) that would maintain the safe function of reservoirs until 2050.

NYC/Rochester reservoir efforts compared to PWB

In 2011, thanks to the efforts of New York City's water department and mayor, and New York's Senator Chuck Schumer, the EPA committed to reviewing the LT2 rule as part of the agency's review of regulations responsive to President Obama's Executive Order 13563(3 pp, 56K,About PDF). The purpose of the review is to determine whether the regulation should be modified, streamlined, expanded, or repealed. The goal is to make the regulatory programs more effective or less burdensome in achieving objectives.

In support of inclusion of the LT2 reservoir requirements in EPA's review, on March 18, 2011 NYCsubmittedsubstantive, comments (see pp. 1-10) and very specific objections to LT2 Open Reservoir requirements (pp. 8-10). The PWB failed to submit any comments objecting to the reservoir requirement despite having collected significant scientific sampling data at the outlets of Portland's open reservoirs that supports either repeal or at a minimum modification of the EPA LT2 reservoir requirements. As a part of the PWB's participation in the American Water Works Association Research Foundation's #3021 *Cryptosporidium* study, the PWB sampled 7000 liters at the outlet of Portland's open reservoirs in 2008-09, detecting zero *Cryptosporidium*. Additionally the PWB collected extensive disease surveillance data that supports that *Cryptosporidium* is not a problem with Portland's drinking water.

In April 2012 EPA held a LT2 open reservoir public meeting at their headquarters in Washington D.C. related to the underway review/revision of the reserovir requirements. Portland's grassroots Friends of the Reservoirs, PWB's David Shaff and a newly-hired (no-longer employed) PWB "water quality" manager also participated alongside

scientists with New York's water department and representatives from research organizations and universities, as well as other utilities including Rochester. Rochester, a city with two historic open reservoirs set in City parks extended their reservoir compliance schedule to 2024 such that they will not be taking any action toward either "treating or covering" their two historic open reservoirs until after the revision of the LT2 rule. New York extended their schedule from 2028 until 2034. EPA has stated that their plan is to conclude their review/ revision by 2016.

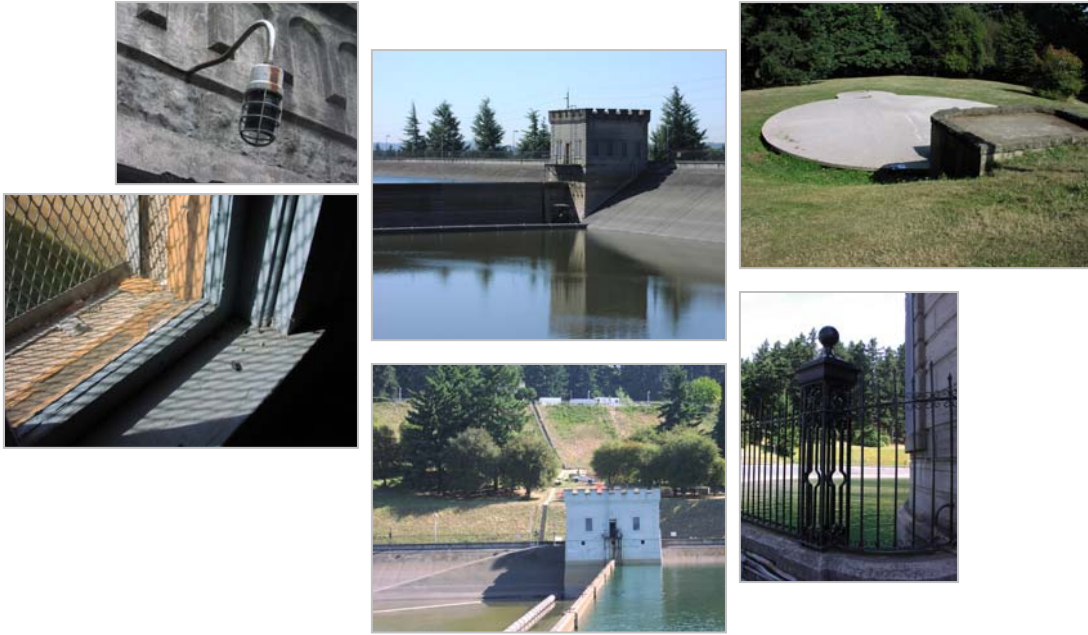
New York and other utilities have requested that EPA restore the risk-mitigation option for open reservoirs such that their open reservoirs can remain without additional treatment or covering. No utility has documented any difference in public health risk between their open and covered storage reservoirs.

A broad-based group of community organizations including public health, environmental, business, equity, and neighborhood associations and coalitions have consistently supported retaining Portland's open reservoirs as a functional part of our drinking-water system. No community organizations have shown up to support the PWB corporate contracts related to degrading Portland's open reservoir water system assets.

# MOUNT TABOR RESERVOIRS HISTORIC STRUCTURES REPORT

Reservoir Nos. 1, 5, 6 and 7

City of Portland Water Bureau



May 2009



THE OFFICE OF ROBERT DORTIGNACQ, AIA

**MOUNT TABOR RESERVOIRS  
HISTORIC STRUCTURES REPORT  
Reservoir Nos. 1, 5, 6 and 7**

**City of Portland Water Bureau**

**May 2009**



THE OFFICE OF ROBERT DORTIGNACQ, AIA

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## EXECUTIVE SUMMARY

The Mount Tabor Park Reservoirs' structures and buildings are considered nationally significant as part of an early design for a city's open water storage system. The system is historically significant for its initial construction and subsequent additions involving monumental civic undertakings, for the exemplification of early concrete engineering construction technology, and for its architectural design. As recognition of their historic significance, the buildings, structures, and site were nominated to the National Register of Historic Places and received designation as the Mount Tabor Park Reservoirs Historic District on January 15, 2004. Generally, those features within the district boundary that date from the initial construction in 1894 through construction and additions dating to 1951 are considered historic contributing.

As viewed from a historic resource perspective, the historic resources in the Mount Tabor Park Reservoirs Historic District are, for the most part, in good condition. The structures and buildings were carefully designed and were built for durability and low maintenance. Those considerations have allowed the structures to age gracefully. The facilities are currently used on a daily basis. Very few original construction components have been lost or removed. There have been minor modifications to the facilities to allow continued operation. In many cases, these alterations, such as new electronic measuring or pipe controls, supplement the historic resources instead of replacing them. The most significant deterioration is found at the oldest facility, Reservoir No. 1, where the decorative concrete finishes on the site wall and gate house are deteriorated. Some components have been recently renovated, such as painting of the wrought iron fencing assembly located around Reservoirs No. 1 and No. 5. Other components, such as roofing, are currently in serviceable condition but will need to be replaced shortly. Still other features may be advised to be replaced for restoration purposes.

The Portland Water Bureau contracted with Cascade Design Professionals and historic architect, Robert Dortignacq, in mid 2008 to develop a Reservoirs Historic Structures Report (RHSR), in order to provide expert advice on the condition, maintenance, rehabilitation and preservation of the historic features within the Mount Tabor Park Reservoirs Historic District,

The work on this RHSR included a review of existing historic research and documentation of the features, review of prior alterations, visual observations to physically determine the condition of the resources, assessment of the findings, and development of recommendations for preservation. A Tabular Summary (included at the end of this section) was developed and includes preservation recommendations that are noted sufficiently to define the overall scope of the project, uncover significant unknowns, and provide a basis for establishing a construction planning budget. They are not defined to a construction bid level in nature, but rather are intended to provide a comprehensive, overall condition assessment of the historic features, and to provide a strategy for their continued preservation. Specific repair methods and development of rehabilitation construction documents was not part of this scope.

The history and significance of the district and its context have been well-researched and documented, and therefore that information is not repeated in this report. Instead, a condensed statement of history and significance is provided for the user's reference. In addition, a



Construction and Materials Reference Guide discussing the type of deterioration and typical remedial treatment for the different materials used in the district has been specifically developed, and is included in the appendix. A brief bibliography is also included for further reference. As the sole owner and operator of the facilities, the Portland Water Bureau has an extensive library documenting the initial construction, prior projects, and maintenance as well as photographs.

The Reservoirs Historic Structures Report (RHSR) includes the analysis of historic resources as identified in the Mount Tabor Park Reservoirs Historic District National Register nomination. The buildings, structures, and objects included in this analysis are those noted as “contributing” according to the historic district National Register nomination. Fifteen (15) resources (7 buildings; 4 structures, including their basins, site walls, and improvements; and 1 object) were reviewed:

**Reservoir 1** Gatehouse 1  
Weir Building 1  
Fountain Structure (16” round concrete basin at north end of Reservoir 1)  
Site (Reservoir Structure, Site Wall (Parapet Wall) Assembly, Valve Platform, Walkways, Stairs)

**Reservoir 5** Gatehouse 5  
Weir House 5 (commonly know as Hypochlorite Building)  
Site (Reservoir Structure, Site Wall (Parapet Wall) Assembly, Walkways, Tunnels, Roadway)

**Reservoir 6** Inlet Gatehouse 6  
Outlet Gatehouse 6  
Site (Reservoir Structure, Site Wall (Parapet Wall) Assembly, Walkways)

**Reservoir 7** Building  
Underground Tank Structure

Several historic resources that were not included in the 2004 nomination are also discussed. These are: the access stairways between Reservoirs 5 and 6; the 44” Meter House at Reservoir 1; and the remains of an old house foundation at Reservoir 5.

This report discusses the components of these resources, e.g., doors, windows, and structure, by similar construction groupings for ease of identity and recommendations. The Historic District boundary, including structures and other features, is shown on the Site Plan in Figure 1 in the Introduction.

The Portland Water Bureau is currently in the process of constructing or implementing several changes to the Mount Tabor Reservoir facilities as part of the “Mount Tabor Interim Security & Deferred Maintenance Improvements Project” (Water Bureau Project No. 3366). Some of the planned improvements affect the condition assessments made in this report, and those items are identified as they relate to the observations.

Two Technical Memoranda were issued in the performance of this work. Technical Memorandum No. 1 (TM1) presented a review of background information, results of site visits and staff

interviews, and an assessment of the condition of each reservoir component. Technical Memorandum No. 2 (TM2) presented recommendations for the preservation treatment of the various reservoir components. TM1 and TM2 have been combined into this Final Report, along with the cost estimate and Tabular Summary.

In conjunction with preparation of the Technical Memoranda and Final Report, ongoing meetings were held with stakeholders and members of the Mount Tabor Neighborhood Association at key points in the project. A ‘Conditions Workshop’ was held with Portland Water Bureau staff and stakeholders to review report findings, recommendations, and alternatives as well as formatting for the Final Report. The Condition Analysis and Recommendations are organized by reservoir, then by subcomponent to facilitate use of the report. The report is provided in a loose leaf binder and in electronic format to further allow ease of use and periodic updating of preservation projects.

The Tabular Summary, below, is a condensed version of the main report following its organization. It contains an abbreviated version of the observations and recommendations, as well as a prioritization, cost estimate, and mechanic skill level judgment. The Summary uses abbreviations to facilitate sorting according to Structure and Component. The Structure (first column) is identified by its affiliated Reservoir, such as “GH1” for Gatehouse at Reservoir 1 and “OG6” for Outlet Gatehouse at Reservoir 6. The Component (second column) for each structure is further abbreviated by using letters from the component, such as “CONC” for concrete walls, floor and roof. The third and fourth columns briefly describe the work and recommended treatment. For some recommendations there may be alternative, but equally acceptable, solutions. When multiple options are listed, PWB shall evaluate which option to pursue prior to completion of any work. Those are labeled as sub-items, such as A.1 and A.2. A detailed explanation of the observations and recommendations is found in the main body of the RHSR. The fifth column notes the assigned priority – Short-term (less than 5 years), Long-term (5-10 years), or Maintenance level. The sixth column notes the estimated cost for the anticipated work including 10 percent contingency. The seventh and final column assigns a construction skill (practitioner) level for each recommendation that ranges from ‘A’, an historic preservation specialist, to ‘C’, a qualified contractor or PWB staff.

Several work projects from the Tabular Summary that are recommended to be completed before others are noted in a memo titled “High Priority Project List” which is included in the Appendix. These more immediate work projects were identified either due to urgency, or because the task is both needed and is a readily achievable work item.

**Mount Tabor Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
<b>RESERVOIR 1</b>								
<b>GATEHOUSE 1</b>								
GH1	CONC	Wall surface spalling, deterioration and exposed reinforcing	Clean exterior, test for absorption, apply sealer	X			\$12,000	A
GH1	CONC	Wall openings and projections deteriorated	Clean exterior, test for absorption, rebuild severely deteriorated projections, apply sealer	X			\$56,000	A
GH1	CONC	Roofing in fair condition, ponding at drain, inadequate roof drip	Replace roofing, provide overflow drain	X			\$25,000	B
GH1	BALC	Iron work is rusted, ladder connections rusted	Further investigation needed, clean and repair rusted connections, repaint.		X		\$8,000	B
GH1	DOOR	Non-original main entry doors	Option A.1: Repaint doors, preserve cast-iron sills			X	--	C
			Option A.2: Repair and replace with units matching original design and materials				\$6,000	B
GH1	WIND	South and west side wood members weathered, paint missing/oxidized; glass units need reputtying	Option A.1: Rehabilitate windows and deteriorated frame parts; select certain openings to be operable		X		\$3,500	B
			Option A.2: Rehabilitate all windows and deteriorated frame parts; all openings to be operable		X		\$11,500	B
GH1	INT	Damage to concrete floor deck; metal stair rusting	Option A.1: Maintain wood restroom structure, stairway, equipment			X	--	B
			Option A.2: Limited interpretive tours; signage, graphics		X		\$4,000	-
			Option A.3: Additional documentation, inventory and photographs of existing historic equipment		X		\$4,000	--
GH1	STEP	Substantial spalling; coating breaking up	Clean concrete surfaces, remove loose and deteriorated material; patch tests; patch spalled areas	X			\$12,000	B

(1)  
S: Short-term (less than 5 yrs)  
L: Long-term (5-10 yrs)  
M: Maintenance (Varies/Ongoing)

(2)  
A: Requires Historic Preservation Consultant  
B: Contractor w/ preservation background  
C: Qualified contractor or PWB Maintenance Personnel

**Mount Tabor Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
<b>RESERVOIR 1</b>								
<b>WEIR BUILDING</b>								
WB1	CONC	Moisture entering at parapet capstone	Option A.1: Concrete repair & seal	X			\$28,000	A
			Option A.1: Roofing replacement	X			\$19,000	C
			Option A.2: Metal cap parapet	X			\$52,000	B
			Option A.3: Downspout repair		X		\$5,500	B
WB1	DOOR	Need repainting; slightly rusty light fixture	Option A.1: Maintain existing doors; preserve historic light fixture			X	--	C
			Option A.2: Restore wood doors and frames		X		\$5,500	B
WB1	WIND	Fair condition; new grating on interior planned	Maintain as is			X	--	C
WB1	INT	No issues	Maintain as is			X	--	C
<b>RESERVOIR 1</b>								
<b>FOUNTAIN STRUCTURE</b>								
FS1	FS	Front level top has hole and corners spalled and broken; side walls have spalling; cup and chain missing; securing bolt deteriorated	Option A.1: Clean and patch damaged areas; brush out adjacent planting		X		\$3,500	A
			Option A.2: Clean and patch damaged areas; brushing; investigate-reconnect water source, replace cup and chain; provide signage		X		\$7,000	A
<b>RESERVOIR 1</b>								
<b>SITE</b>								
S1	RES	Breaks and spalls in concrete; weeds; unsound valve platform	Option A.1: Routine maintenance; salvage historic materials from valve platform			X	--	C

(1)  
S: Short-term (less than 5 yrs)  
L: Long-term (5-10 yrs)  
M: Maintenance (Varies/Ongoing)

(2)  
A: Requires Historic Preservation Consultant  
B: Contractor w/ preservation background  
C: Qualified contractor or PWB Maintenance Personnel

**Mount Tabor Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
			Option A.2: Remove bituminous patching, replacement liner		X			
S1	WALL	Substantial wear and deterioration; exposed reinforcement	Option A.1: Repair deteriorated surfaces and detail; preserve intact portions; clean, patch and repair damaged areas; test	X			\$50,000	A
			Option A.2: In addition to A.1, replace existing pole lighting, remove surface mounted conduit, provide entry lights at fence corner posts		X		\$155,000	B
S1	WALK	Broken slabs, corners, spalls, rough surface, settlement	Patch-replace damaged portions; control vegetation; preserve/maintain stair and railing, cast iron grates and lids		X		\$16,000	C
S1	METR	Vandalism, damaged entry door frame, damaged concrete edges of opening	Monitor and remove graffiti; replace door			X	--	C
<b>RESERVOIR 5</b>								
<b>GATEHOUSE 5</b>								
GH5	CONC	Wall spalling, weathered concrete capstones, interior concrete topping slab spider cracking; worn roofing membrane	Option A.1: Roof and flashing	X			\$19,000	B
			Option A.1: Clean concrete exterior; test for water absorption, renew sealer to parapet; preserve-repair historic light fixtures	X			\$16,000	A
			Option A.2: Replace downspouts, remove surface conduit		X		\$6,000	B
GH5	BALC	Balcony not needed for operations	Alter; install protective guardrail, remove/salvage exterior light fixture; cap conduit		X		\$1,600	C

(1)  
S: Short-term (less than 5 yrs)  
L: Long-term (5-10 yrs)  
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(2)  
A: Requires Historic Preservation Consultant  
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**Mount Tabor Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
GH5	DOOR	Bottoms rusted out, moderate damage to side door	Option A.1: Maintain non-original doors, retain cast iron sills			X	--	C
			Option A.2: Restore wood doors and frames		X		\$8,000	B
GH5	WIND	South and west sides: weathered, paint missing, sills deteriorated	Preserve			X	--	C
GH5	INT	Metal stair rusting, exposed gearing and valve stems	Option A.1: Maintain restroom structure, metal stairway, historic equipment			X	--	C
			Option A.2: Provide add'l documentation, inventory and photographs of historic equipment		X		\$4,000	--
GH5	STEP	Spalling	Clean, test, patch	X			\$4,000	B
<b>RESERVOIR 5</b>								
<b>HYPOCHLORITE BUILDING (WEIR HOUSE)</b>								
WH5	CONC	Soiling, some loose termination points, roof drains susceptible to clogging, visible roof equipment	Roof repair & flashing	X			\$13,500	C
			Clean concrete; test for water absorption; breathable sealer to flat capstone; minor roof repairs	X			\$5,000	B
WH5	DOOR	Need repainting	Remove hoist crane, replace doors similar to original, repaint		X		\$4,500	B
WH5	WIND	Need repainting	Option A.1: Repaint and caulk			X	--	C
			Option A.2: Replace windows		X		\$18,000	B
WH5	INT	No significant issues	No scheduled work					

(1)  
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L: Long-term (5-10 yrs)  
M: Maintenance (Varies/Ongoing)

(2)  
A: Requires Historic Preservation Consultant  
B: Contractor w/ preservation background  
C: Qualified contractor or PWB Maintenance Personnel



**Mount Tabor Reservoirs Historic Structures Report  
Condition Analysis and Recommendations  
TABULAR SUMMARY**

Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
<b>RESERVOIR 5</b>								
<b>SITE</b>								
S5	RES	New liner has abated deterioration	Preserve and maintain			X	--	C
S5	WALL	Defects at cap end joints, no fence lighting in place	Option A.1: Clean, minor patching	X			\$11,500	B
			Option A.2: Maintain			X	--	C
			Option A.3: Replace existing non-historic pole lighting around perimeter walkway	X			\$250,000	B
			Option A.3: Fence lighting; restore iron fence post tops; install LED lighting	X			TBD	B
S5	WALK	Broken slabs, corners, spalls, rough surfaces, settlement	Minor patching or replacement, preserve cast iron grates and lids	X			\$11,500	C
S5	STAIR	Portions of stairway replaced/patched, finish not match original pattern	Option A.1: Minor patching/replacement, preserve historic railing	X			\$5,000	C
			Option A.2: In addition to A.1, repair/replace newer concrete with matching finish		X		\$10,000	B
T1	Tunnel	(Not Accessed)	Preserve - ongoing maintenance			X	--	C
T6	Tunnel	Paint	Preserve - ongoing maintenance			X	--	C
<b>RESERVOIR 5</b>								
<b>OTHER FEATURES</b>								
OT5	ROAD	Roadway repaved, curb on westside added	Option A.1: Preserve; ongoing maintenance			X		
			Option A.2: Possible historic paving restoration		X			
OT5	HOUS	Cobblestone remains of old house foundation	Option A.1: Protect existing historic walls			X	--	C

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Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
			Option A.2: Provide historic interpretive information on the house		X		\$2,000	
<b>RESERVOIR 6</b>								
<b>INLET GATEHOUSE 6</b>								
IGH6	CONC	Spalling, soiling, weathered capstones, spider cracking, door slab breakup, worn roofing membrane, roof ponding	Option A.1: Replace roofing, drains	X			\$19,000	C
			Option A.1: Minor exterior cleaning, renew parapet as needed	X			\$16,000	B
			Option A.2: Remove surface conduit		X		\$5,000	C
			Option A.3: New breathable sealer		X		\$26,000	B
IGH6	BALC	Iron work rusted, upper portion of ladder deformed	Inspect metal connections, clean and repair connection and damaged parts, repaint		X		\$8,000	B
IGH6	DOOR	Rusting, need repainting, weathered exterior facing	Option A.1: Repaint doors, frames; maintain wood door, frame, sills,; patch side door landing			X	--	C
			Option A.2: Replace metal doors and frame; repair existing wood door, frame and hardware		X		\$5,000	B
IGH6	WIND	Weathered wood members, paint missing/oxidized, need reputtying	Option A.1: Rehabilitate windows and deteriorated frame parts, repaint, repair select openings, evaluate interior security grill		X		\$4,000	B
			Option A.2: Rehabilitate all windows and deteriorated frame parts, repair all openings		X		\$16,000	B
IGH6	INT	No issues	Option A.1: Ongoing maintenance			X	--	C
			Option A.2: Additional documentation, inventory and photographs		X		\$4,000	--

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**Mount Tabor Reservoirs Historic Structures Report  
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Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
IGH6	STEP	Spalling	Clean concrete surfaces, remove loose and deteriorated material; patch tests; patch spalled areas	X			\$8,000	B
<b>RESERVOIR 6</b>								
<b>OUTLET GATEHOUSE 6</b>								
OG6	CONC	Areas of spalling; exposed, corroding reinforcing bars; soiling; weathered capstones; cracking; worn roof membrane	Option A.1: roofing, roof drains	X			\$19,000	C
			Option A.1: Clean soiled exterior; test for water absorption	X			\$22,000	B
			Option A.2: Repair; remove surface conduit as other project allow		X		\$5,000	C
OG6	BALC	Iron work rusted, original wheel valves rusted and inoperable	Further inspection, clean and repair connections and damaged parts, repaint		X		\$8,000	B
OG6	DOOR	Some rusting, weathered exterior facing, need repainting	Option A.1: Repaint doors and frames, maintain cost iron sills			X	--	C
			Option A.2: Replace metal doors and frame, repair existing wood door, frame and hardware		X		\$5,000	B
OG6	WIND	Weathered, missing/oxidized paint, need reputtying	Option A.1: Rehabilitate windows and deteriorated frame parts, repaint, repair select openings, evaluate interior security grill		X		\$4,000	B

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**Mount Tabor Reservoirs Historic Structures Report  
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Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
			Option A.2: Rehabilitate windows and deteriorated frame parts; repair all openings		X		\$14,000	B
OG6	INT	Corroded wheeled gate operator on exterior balcony corroded, stem cover needs repair/replace	Option A.1: Preserve existing office, historic light fixture, wood doors and trims; preserve metal stairway and equipment; add new equipment as needed			X	--	C
			Option A.2: Addition documentation, inventory and photographs of equipment		X		\$4,000	--
<b>RESERVOIR 6</b>								
<b>SITE</b>								
S6	RES	Reservoir structure in good condition	Option A.1: Preserve the existing structure and liner			X	--	C
			Option A.2: Remove bituminous patching, new replacement liner		X			C
S6	WALL	Normal wear and tear, fencing in good condition, lighting discontinued	Option A.1: Clean and provide minor conc patching		X		\$16,000	B
			Option A.1: Metal framing repairs		X		\$110,000	B
			Option A.2: Replace existing non historic pole lighting with historically compatible design		X		\$370,000	B
			Option A.3: Fence lighting; repair-restore fence post tops; install new LED lighting		X			B
S6	WALK	Many damaged areas, little base remaining for concrete slabs	Provide minor patching or replacement at damaged areas; preserve assorted cast iron grates and lids		X		\$12,000	C

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B: Contractor w/ preservation background  
C: Qualified contractor or PWB Maintenance Personnel

**Mount Tabor Reservoirs Historic Structures Report  
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TABULAR SUMMARY**

Structure	Component	Observation	Recommendation	Priority <sup>(1)</sup>			Cost	Contractor Skill Level <sup>(2)</sup>
				S	L	M		
<b>RESERVOIR 7 BUILDING</b>								
B7	BUILD	Drainage problems, water damage, some deterioration, nonhistoric door hardware and security, frame molding partially missing, badly deteriorated wood louver vents	Option A.1: Roof and upper wall	X			\$6,000	B
			Option A.1: Repair wood door and frame, repair louver vents where venting required	X			\$6,000	B
			Option A.2: In addition to A.1, restore louver vents on sidewalls		X		\$2,500	B
<b>RESERVOIR 7 UNDERGROUND TANK STRUCTURE</b>								
TS7	TANK	New top; good condition	Ongoing maintenance as required			X	--	C
	(1)	S: Short term (1 to 5 years) L: Long term (5 to 10 years) M: Maintenance (Varies and ongoing)						
	(2)	A: Requires Historic Preservation Specialist/Specialty Contractor B: Contractor with preservation background (i.e. 5 similar projects) C: Qualified contractor or Water Bureau Maintenance Personnel						

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M: Maintenance (Varies/Ongoing)

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A: Requires Historic Preservation Consultant  
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# INTRODUCTION

## MOUNT TABOR HISTORY AND SIGNIFICANCE

Portland first established its municipal water system in the 1890s. This was representative of other sizable municipalities across the country that sought to provide urban utility systems with an adequate supply of water for their growing cities. The supply was necessary not only to ensure safe water for domestic consumption, but also for fire fighting and manufacturing. The creation of the Portland water system involved significant effort and cost. The supply source, distribution network and reservoir system all needed to be assembled. Portland's leaders believed that the development of a dependable and safe water supply demonstrated the City's commitment to growth and the well-being of its citizens and future generations.

The effort to establish the municipal water system was the responsibility of Portland's Water Committee, a group created by the state legislature during special session in 1885. At that time there were issues relating to constant, adequate supply, and of water purity facing the growing city that then depended on the local, privately owned water companies. Portland was growing, becoming industrialized and, located downstream from other developing towns that used the river for waste and sewage disposal. Its residents were faced with degradation of the river water like many other comparably sized cities in the country.

Water was needed for a wide variety of purposes, including domestic, agriculture, manufacturing, construction, and notably, fire fighting. The city's growth resulted in areas of densely populated, wooden structures, with essentially no fire protection. Although building practice was beginning to change from all wooden structures to a more substantial type with masonry exteriors and wood interior framing, nearly all remaining buildings from that era reveal fire scars on their interior framing, attesting to the day-to-day fire risks.

During this time period health science was developing. New research discovered that certain epidemic diseases were water borne. As water purity increasingly became a concern for city leaders, municipalities across the country began to develop and control their own water supplies. Portland's Water Committee led the local effort to secure a clean, dependable source and supply of water at reasonable cost to its residents.

The new water system required a dependable source, the means to transmit the water, local storage facilities and the local distribution network. The Water Committee hired Colonel Isaac Smith as lead engineer for the project, and directed him to find a dependable water source replacement for the Willamette River. He recommended the Bull Run Watershed and River, which the Committee was able to secure, along with some surrounding watershed area. In addition, the Committee was able to secure federal protection for the greater watershed area (a current no trespass reserve).

Construction of Conduit No. 1 (pipeline) from the Bull Run Watershed to Portland was a considerable undertaking. The distance was great, the terrain difficult and largely wilderness. Construction required excavations, trestles and bridges to carry the water by gravity from an initial elevation of 710 feet at the intake Bull Run River to Mount Tabor, the chosen distribution site, at an elevation of 411 feet.



In Portland, Reservoir No. 1 was built at the Mount Tabor site. This reservoir fed and worked in conjunction with Reservoir No. 2 at the foot of Mount Tabor for east Portland service. The reservoirs at Mount Tabor supplied Reservoirs No. 3 and No. 4 at City Park (now Washington Park) through a conduit beneath the Willamette River for westside and downtown service. These four reservoirs provided a combined capacity of 66 million gallons of water, a 4-5 day reserve supply for Portland.

In years following the 1905 Lewis and Clark Exposition, Portland grew significantly to a size nearly triple that when the initial system was designed. The increase in population was accompanied by a similar increase in business and industry, making it necessary to enlarge the capacity of the water system to accommodate this new growth. A second supply line from Headworks, Conduit No. 2, was added along with additional storage Reservoirs No. 5, No. 6, and No. 7 at Mount Tabor in 1911. The reservoirs were interconnected by conduits in concrete tunnels between Reservoirs No. 1 and No. 5 (same elevation) and Reservoir No. 6 on the lower west slope of Mount Tabor. In 1923 a weir building (screen house) was added at Reservoir No. 1 with Conduit No. 3 construction. Since that period there have been periodic enlargements and improvements to the Bull Run source supply, system conduits, and operations to keep pace with technology and growth. Yet, the system still utilizes the core design and most of the structures from the original period, a testament to its thoughtful long-term vision.

The construction of the first structures at Mount Tabor consisted of Reservoirs No.1 and No. 2 and their gatehouses. The reservoir design took engineering advantage of the natural terrain and also reflected the ideals of the City Beautiful Movement that was then becoming popular. These concepts sought to reinforce natural beauty within the built environment by creating a sense of order in the setting and harmony between structures and landscape. This was exemplified by the perimeter walkway with decorative fencing surrounding the reservoirs, the paths and parkland, the water fountain and other public areas within a complex that provided municipal services. The gatehouses used a Romanesque Revival design that was then popular in the country for engineering works, but was also a design reference to fortress gatehouses in England and the Continent, where the structures also employed the use of water. The design conveyed a sense of strength and durability. It now also conveys a romantic setting.

Mount Tabor Reservoir No. 1 dam, lining, perimeter wall, and gatehouse are constructed of poured in place concrete, the first large scale projects using the Ransome method that utilized twisted iron reinforcing bars. This was cutting edge technology at the time, as were the early concrete mix designs using Portland cement. The ability of liquid concrete to be formed and cast into a variety of shapes and surface textures added to its attractiveness. Popular styles could be constructed faster, stronger and more economically than previously. Work at Reservoirs No. 5 and No. 6 and ancillary buildings continued the design style and type of construction using current engineering and construction technology, but still with craft and attention to details. The original piping, equipment, and mechanical construction still exist to a large extent.

The Mount Tabor Park Reservoirs structures and buildings are nationally significant as part of a vanishing design for a city's open water system. Only a small number of major water districts still utilize and operate their historic open reservoirs within an urban setting. The system is historically significant for its initial construction and additions involving monumental civic undertakings, for the exemplification of early concrete engineering construction technology, and for its architectural design.

## **PROJECT SCOPE & APPROACH**

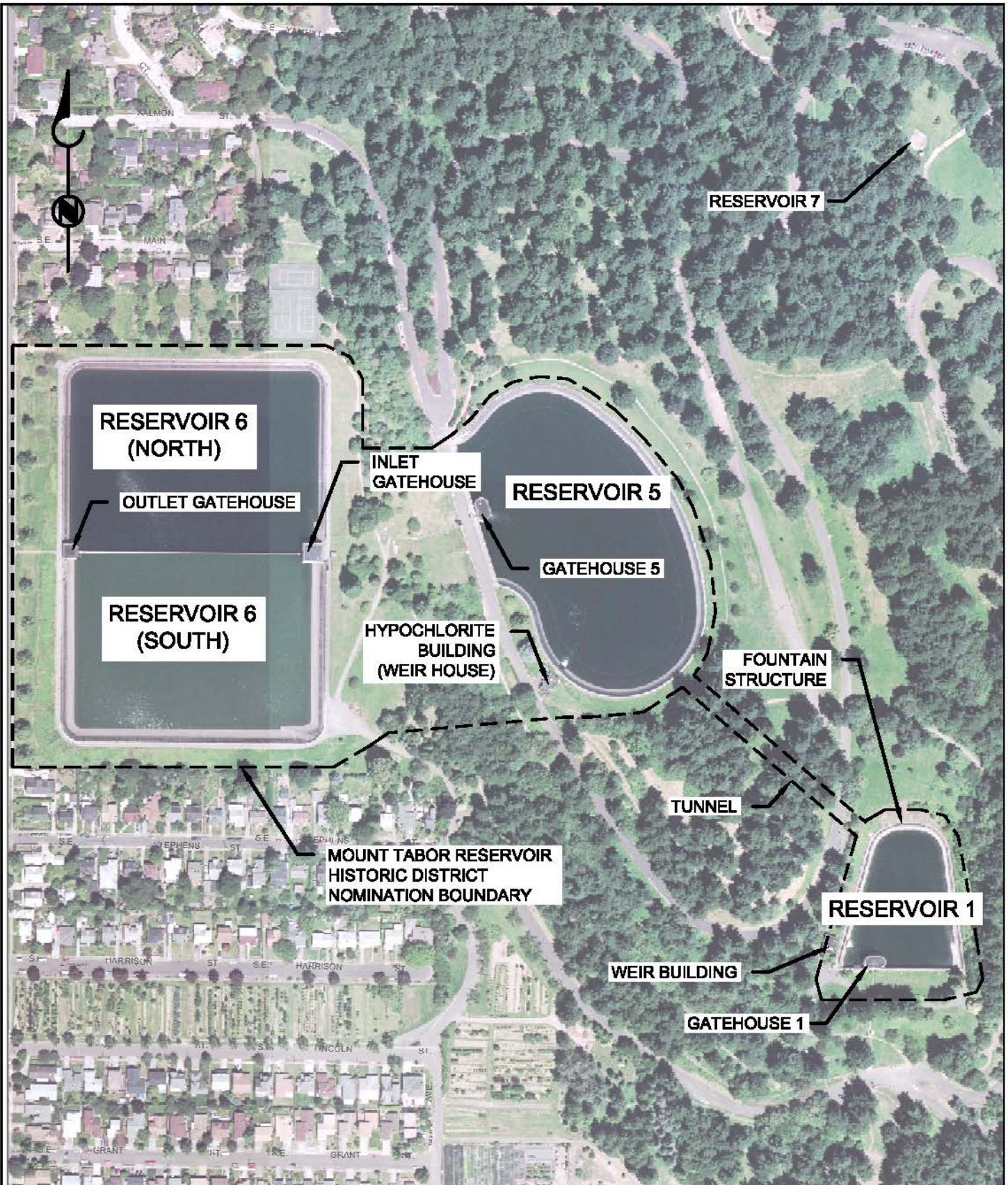
The purpose of this project is to develop a Reservoirs Historic Structures Report (RHSR) to provide an assessment of current conditions and recommendations for immediate and on-going maintenance, and for long-term preservation of the historic features within the Mount Tabor Park Reservoirs and Washington Park Reservoirs Historic Districts. The work items and procedures noted are generally not defined to a construction bid level in nature, although work items are noted sufficiently to define the project, uncover significant unknowns, and provide a basis for establishing a construction budget. This RHSR is based on the existing National Register Historic District nomination and includes review of existing historic research and documentation of the features, review of prior alterations, fieldwork for condition assessments, a tabular summary of results, and creation of an implementation plan. The tabular summary includes a prioritization list which identifies the immediate maintenance required to preserve the facilities against significant deterioration and the ongoing maintenance recommendations for items of lesser concern and significance.

The work is divided into two phases: Phase A – Mount Tabor Park, and Phase B – Washington Park. This RHSR pertains only to Phase A – Mount Tabor Park Reservoirs Historic Structures, and analyzes the condition of historic features as identified in the Mount Tabor Park Reservoirs Historic District (January 15, 2004). Buildings, structures, and objects included in this analysis are:

- Reservoir 1** Gatehouse 1  
Weir Building  
Fountain Structure (16" round concrete basin at north end of Reservoir 1)  
Site (Reservoir Structure, Site Wall (Parapet Wall) Assembly, Valve Platform, Walkways, Stairway, 44" Meter House)
- Reservoir 5** Gatehouse 5  
Hypochlorite Building (Weir House)  
Site (Reservoir Structure, Site Wall (Parapet Wall) Assembly, Walkways, Stairway, Roadway, and Conduit Tunnels to Reservoirs No. 1 and No. 6)
- Reservoir 6** Inlet Gatehouse 6  
Outlet Gatehouse 6  
Site (Reservoir Structure, Site Wall (Parapet Wall) Assembly, Walkways, Stairway)
- Reservoir 7** Building  
Underground Tank Structure

The Historic District boundary, including structures and other features, is shown in Figure 1, Site Plan.





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**FIGURE 1 - SITE PLAN**  
**MT. TABOR HISTORIC**  
**STRUCTURES REPORT**  
 PORTLAND WATER BUREAU  
 PORTLAND, OREGON



Phase A was divided into two parts. In Part 1 of Phase A, each of the historic contributing features of the above resources in the Mount Tabor Reservoirs Historic District were identified and reviewed, with a condition assessment developed for each. These were discussed with the Portland Water Bureau, the stakeholder group and members of the Mount Tabor Neighborhood Association. The results were documented in Technical Memorandum No. 1.

The consultant team visited each of the historic contributing resources over a three-week period during the field work portion. The visits were conducted by a team consisting of an architect to review the overall condition of the building or structure, a structural engineer to identify any pertinent structural deficiencies, and a civil engineer to review operational concerns. Each discipline then reviewed the findings in light of the building's or structure's historical significance. The reviews were visual and documented by digital photography. No testing or analysis was done in the course of the reviews.

Each of the contributing features was then reviewed. A condition assessment for each of the features was developed, including a description of the facilities, discussion of the operations, photos, and an itemized list of apparent deficiencies. The Portland Water Bureau is currently in the process of constructing or implementing several changes to the Mount Tabor Reservoir facilities as part of the "Mount Tabor Interim Security & Deferred Maintenance Improvements Project" (Water Bureau Project No. 3366). Since some of the planned improvements would affect the condition assessments made in this report, those items were identified as they related to the observations.

Subsequently, in Part 2 of Phase A, alternative treatment means and methods to address deficiencies identified in the condition assessment were analyzed. Recommendations for improvements and a plan to implement the preferred alternatives were developed and discussed with the Portland Water Bureau, the stakeholder group and members of the Mount Tabor Neighborhood Association. The recommendations and implementation plan included a prioritization of major repairs and an ongoing maintenance plan. The results were documented in Technical Memorandum No. 2. For some recommendations there may be alternative, but equally acceptable, solutions. Those are labeled as sub-items, such as A.1 and A.2.

## **Final Report Format**

The information from the two technical memoranda have been integrated into this final RHSR. In the report, a separate, tabbed section is presented for each of the four Reservoirs (1, 5, 6, and 7). Within a particular section, each contributing resource is listed separately, such as Gatehouse 1, Weir Building, etc. The building or structure is further broken down by contributing feature or component (such as balcony, windows, doors, etc), each of which includes a brief description, observations/conditions, treatment recommendations, alternative treatment options, and a priority (urgency, not significance) ranking. This information is summarized in the Executive Summary, which includes a tabular summary as well. Report appendices include a selected bibliography and relevant Department of Interior Historic Preservation Briefs. (These Briefs are typically not directed specifically toward the types of features and materials found at Mount Tabor, but they have some useful information and relevant methodology.) In addition, a Construction and Materials Reference Guide discussing the type of deterioration and typical remedial treatment for the different materials used in the district has been specifically developed and included.

## METHODOLOGY FOR REPAIRS

### Treatment Guidelines

The recommendations and principles presented in this RHSR are in accordance with accepted good practice, and follow the Guidelines For Rehabilitating Historic Buildings as developed by the Secretary of the Interior in their “Standards for Rehabilitation”. These recommendations for specific work on the buildings and structures follow those principles, guidelines, and methodology and are described below.

#### **Fundamental Guideline for Treatment:**

Work on historically significant buildings and structures seeks to

#### **Identify, Retain and Preserve**

those historic features and resources that distinguish their historic character.

### Alternatives for Treatment

Once historic character defining features are identified and their conditions are assessed, recommendations can be made for their preservation. Those decisions need to consider both the nature of the feature and its anticipated use.

The following Secretary of the Interior guidelines define the possible alternatives for treatment, starting from the least invasive:

**Protect and Maintain (Preserve):** This method essentially seeks to slow deterioration. Often this is the recommended procedure, and always is the situation when there are adjacent projects that may damage the feature. This could be the recommendation when the feature can continue its intended use as is, or with minimal intervention, or when other repairs might threaten its integrity, or as an interim step until other treatment can occur. This work can also be considered as good maintenance.

**Repair:** When the physical condition of the historic character defining materials or features warrant, repairing is recommended. The general principle is to consider the least amount of repair necessary, then move to more extensive or invasive work where necessary. Repair may include limited replacement of heavily deteriorated materials. A project may, for example, include a basic level of repair work that satisfies most of the problem, and a smaller amount of more extensive repair. The existing condition should be well documented before any work commences.

**Replace:** The most invasive method of preservation is replacement. Generally this is only employed when the physical condition of the historic character defining materials or features is so deteriorated that suitable repairs are not feasible. The best replacement materials are those that are in ‘kind’ or close to the original material in composition, performance and resultant expression (See Restore below). Replacement can also occur for other reasons, such as structural conditions, or greatly altered operational use. In these situations, the replacement required within the new design should be incorporated into the historic fabric as much as possible. The existing conditions should be well documented before any work commences.

**Restore, Design For Missing Historic Features:** When an entire feature or component is missing, it no longer plays a part in physically defining the historic character of the structure or building unless it can be accurately recovered. Salvage of the missing item is most preferable and should be the first objective. But salvage may not be feasible (or may occur later at an unknown time in the future). An alternative is to reproduce the feature. Typically, use of similar materials and the same design is necessary. For example, a new door or window, or lantern may be made using an original as the pattern and study guide. A second acceptable option is the replacement of the item with an alternative, historically compatible design. This design should not detract from the remaining historic feature attributes in its design, materials and finish. This alternative might be a necessary, but temporary solution for the continued protection of the structure (such as roofing or downspouts) that is then later removed when the original can be restored. The alternative design (second option, not first) should be sufficiently differentiated from the original historic feature so that it is not generally perceived as the original historic component.

**Alterations/Additions:** It is important that the historic building or structure be able to continue its use. Alterations or additions might be necessary to achieve this goal. They may be part of the overall preservation strategy, and may affect historic features directly or indirectly. Such work needs to be considerate of the character defining materials and features and should weigh alternative solutions or strategies. Work should be designed in such a manner that there is the least impact. This may include work on lesser or non-character defining features rather than on the primary ones. The work should not radically change, obscure or destroy character defining features. Reversibility of the proposed work should be considered (Can this be easily removed in the future? Could the original be restored?). Alterations can include removal of non-historic materials or elements. The existing conditions should be well documented before any work commences.

## **Prioritization**

The highest priority is for the continued preservation of the most significant historic features, and for those that are most in danger of being lost. This is followed by those features having lesser deterioration, or having less imminent damage. The recommendations are grouped into Short-term, ideally to be completed within 5 years, and Long-term, from 5-10 years. No sub-definition should be used, since it is beneficial to allow preservation to occur as funding for other operational projects is obtained. In this way, lower priority items may be completed earlier than expected, but in concert with adjacent work, which improves construction and funding efficiency and does not require revisions of otherwise completed work. Other work may be best considered as maintenance and thus performed on a regular cycle using annual funding.

Preservation recommendations are primarily concerned with the continued retention, structural integrity, and ‘well being’ of the historic building and its features. A secondary aspect is the aesthetic quality of the resource and its environment or context. These attributes are those that can be reconciled over time without great concern for loss of historic material. Although secondary, they are important since they provide additional citizen support and pride.



## **Procedures**

Work procedures on historic materials are very important. Inadequate knowledge, preparation, skill, or inappropriate materials can do more harm than good for particular items. However, the historic materials used on buildings and structures in the Mount Tabor Park Reservoirs Historic District are generally durable and heavily constructed. These materials, though worn, have a very long life span and can last much longer with appropriate maintenance.

While each specific material needs to be handled with regard to its specific properties, the general procedure for all repairs is as follows:

1. Inspect deteriorated conditions thoroughly to determine scope and degree of work. Document and photograph existing conditions.
2. Develop appropriate preservation and repair options; this often is a combination of strategies, not “one size fits all”.
3. Fragile and very important historic features need closer guidance and review throughout the design and repair process.
4. Use test samples to determine the best remedial solution for the particular work; at highly visible features or where the outcome is not certain, first utilize separate test samples, then try field samples on the structure when reasonably assured of favorable results.
5. Use the gentlest means first, then step to more aggressive means if necessary; keep in mind that more aggressive repairs can also mean more loss of historic integrity, and potentially more rapid future deterioration.
6. If materials and products do not work satisfactorily, consider benefits of scaling back to a ‘Preserve’ strategy; future technology may provide a better result if the feature can last.
7. Since many repairs over time result in accumulated loss of original material, repair only what is necessary.
8. Replacements usually involve removal of original materials. Apply the test of reversibility to determine the best design; evaluate the ability to retain original materials in the replacement; document historic conditions; salvage materials in sound condition.
9. Review prior alterations and rehabilitation work to determine whether there is an adverse impact to the historic materials. If so, evaluate alternatives to design and installation.

## **Skill Level of Practitioners**

The background and skill level of those involved in the repairs of historic features is an important aspect in the success of the repair and in the long term preservation of the resource. The formulation, design, specification and at times, the monitoring of most projects should be performed by individuals having adequate professional knowledge and historic expertise. The Tabular Summary assigns a construction skill level for each recommendation that is based on the combination of the feature or material’s historic or unique nature, the current general availability of repair and replacement materials and the provider’s skills.

- Skill Level: A: Use of a specialist historic preservation contractor is necessary; typically involves specialty products requiring prior experience on historic projects.
- B: Use of a contractor with similar historic preservation experience; suggested: 5 similar firm projects, and primary workers to have experience on at least 3 similar projects.
- C: Use of a qualified contractor or maintenance crew from PWB.

## **SUMMARY OF FINDINGS**

Overall, the historic features in the district are in fair to good condition, are largely intact, and reflect their original construction. The buildings, structures and site are actively utilized and are maintained. Most of the rehabilitation work necessary is not of an immediate nature. That is, the historic features are not in a position of needing urgent repairs to prevent their loss. There are, however, various projects that need to be completed soon to prevent worsening conditions. The exterior concrete surface at Gatehouse 1 and its reservoir site wall are examples of deteriorated conditions that need addressing soon. They were part of the earliest construction effort, built when there was much less technological knowledge and quality control of concrete than with the later built structures in the district. Other noted short-term projects include building components that generally have shorter life cycles, such as roofing and flashings. These projects require attention since their failure can greatly increase damage to the building. There are a large percentage of projects that can be remedied under a long-term time frame. These also include restoration-type projects that would enhance the district. Finally, there are various projects that can be incorporated as maintenance.

## **IMPLEMENTATION PLAN**

The Implementation Plan will be based on the Tabular Summary provided in this report. The Tabular Summary uses abbreviations to facilitate sorting according to Feature, Structure and Component and corresponds to the report narrative. The Feature or Structure (first column) is identified by its affiliated Reservoir, such as “GH1” for Gatehouse at Reservoir 1 and “OG6” for Outlet Gatehouse at Reservoir 6. The Component (second column) for each structure is further abbreviated by using letters from the component, such as “CONC” for concrete walls, floor and roof.

Portland Water Bureau (PWB) will use the Tabular Summary as a starting point to develop a detailed Implementation Plan. A PWB Stakeholder group will be established consisting of the appropriate representatives and will use the Tabular Summary to facilitate sorting work projects by priority, cost, or skill level and update as necessary to reflect personnel availability and financial conditions.

## RESERVOIR 1

Contributing historic features at Reservoir 1 include the parabolic basin, its perimeter wall system, gutter and walkway, the gatehouse on the south side, the weir (screen) house on the west side and the small drinking fountain object on the north.





*Reservoir 1 Gatehouse*

## Reservoir 1 - Gatehouse 1

### Concrete Walls, Floor and Roof

The building is a poured in place reinforced concrete structure, oval in plan, measuring 42 feet east-west and 26 feet north-south, and is symmetrically composed and located on the south side of the reservoir toward the inlet chamber on the west. It was constructed using Ransome construction and finish patents that were the latest technological achievement at the time of its 1894 construction. The exterior was formed with a rusticated block pattern that was bush hammered to provide a heavy rock finish, while the interior is coated or painted. There is a low projecting parapet with a frieze using repetitive chamfered square recesses, horizontal molding lines with a crenel course below aligning with the frieze pattern. The continuous parapet capstone is covered with prefinished standing seam painted steel. Door and window openings are round arch headed and have projecting surrounds with a prominent sill projection. There is a molded water table base. The lower water facing exterior below the water table line (floor line projection) is unpatterned and coated with cement plaster. The concrete floor deck is finished with a smooth troweled concrete and is without other finishes. The floor has imbedded glass relights installed under the Ransome's patent method. The concrete roof deck is supported on concrete beams and is covered with a membrane roofing. Roof drainage is internal by means of cast iron pipe connected to outside site drainage facilities.

**Condition/Observations:** The exterior wall, though mostly sound, has many areas of surface spalling, deterioration and some with reinforcement exposed. The wear is primarily on the south side, but also extends around each end. The least upper wall deterioration is on the north, facing the reservoir. The wall openings and projections have deterioration. Previously (before metal parapet cap), the upper wall and roof edge deterioration was accelerated due to the broad concrete parapet cap and inadequate design for roof drip. The surface of the concrete is generally weathered and soiled. Some areas appear to have been patched in the past. It also appears that the building had a finish coating as part of its original construction. The soiling and deterioration is most notable on and around the parapet and on horizontal projections. The exterior water coating is spalled in the vicinity of the former high waterline and below. The upper portion of this coating is in better condition. There is one interior roof drain (southside) that daylights onto a small gutter crossing the walkway near the entry doors. The modified bitumen roofing is in fair condition, some of the sheet's scrim showing. There is ponding around the single drain.



**Treatment Recommendations:** The articulated above water concrete has surface deterioration that includes loss of material, especially that at horizontal projections, and friable material extending slightly into the outer surface. It is expected that the original concrete finish may be difficult to match.

**Option A.1: Preserve and Repair** – Gently clean the concrete exterior; test for water absorption, patch tests; install cementitious patching to rebuild severely deteriorated horizontal projections and apply a breathable sealer to the above waterline, articulated concrete finish; retain lower below waterline wall as is. Replace worn roofing; provide overflow drain. (Ref.: Pres. Brief 1, 15)

**Priority:** Short-term

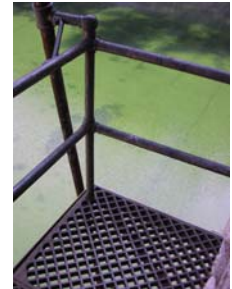


*Metal Balcony,  
Gatehouse 1*

### **Metal Balcony**

The partial width balcony (north side) is constructed of cast iron grating with a wrought iron framework that is diagonally braced back to the concrete wall of the gatehouse and has a pipe railing enclosure. All of the items are painted black. It was designed for reservoir valve (extant) operation; there is a fixed wrought iron ladder for Gatehouse roof access.

**Condition/Observations:** The iron work is rusted, particularly at joints and connections to the concrete structure. The ladder is intact, but also has rusted connections. The cast iron grating appears to be in useable condition. A gate operator is mounted on a metal balcony at the rear of the building. The balcony does not have adequate handrail for fall protection. A closer evaluation may be needed to better determine the condition of the connections to the building structure.



**Treatment Recommendations:** The platform and valves are used for normal operations, so replacement or retrofit to meet current codes and standards is not necessary.

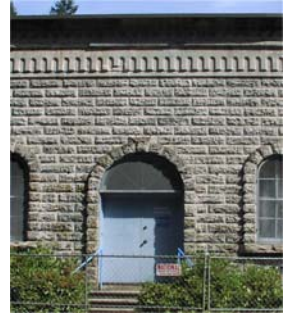
**Option A.1: Preserve and Repair** – Further inspection of the metal connections is required; clean and repair connections and damaged parts where structurally unstable; provide fall restraint anchors; possibility to revise valve operation from interior; repaint. (Ref.: Pres. Brief 13 & 27)

**Priority:** Long-term



## Doors

There is a single entry with inswinging paired doors at the top of 5 exterior concrete steps on the south side. There is a minimal top landing and two splayed side handrails (non public use). The doors are flush steel with a hollow steel frame that are replacements. The original wood jambs have been cut off at the transom line. The arched transom and fan light remain as does the cast iron sill. The reservoir side door is a replacement flush type wood door with wood frame.



**Condition/Observations:** The non-original paired hollow metal main entry doors and frame are in fair condition, and need repainting. This opening is not scheduled for revision under Water Bureau Project No. 3366. The reservoir-side door and its hardware are weathered and are non-historic replacements.

### Treatment Recommendations:

**Option A.1: Preserve** – Repaint the doors and frames and retain as is; preserve cast iron sills  
**Priority:** Maintenance

**Option A.2: Repair, Replace** – Replace doors and frame with units matching the original design and materials

**Priority:** Long-term

## Windows

There are two windows on the south side flanking the door opening, one on the east end of the north side, and three on each of the curved east and west ends. Windows are typically arch topped, wood double hung, 4/4 with rope suspension, some ropes missing. Glass is intact but most of it appears to have been replaced over time and is not historic. Windows have been fitted with exterior security grilles.

**Conditions/Observations:** The windows are generally in good to fair condition depending upon their orientation to weather. On the south and west sides the wood members are weathered and paint is missing or oxidized. A number of glass units need reputtying. A few of the windows are opened on an occasional basis. There have been a variety of previous paint colors on the windows. There are plans to remove the existing exterior protection grilles and install new interior grilles as part of Water Bureau Project No. 3366. No other alterations are planned.

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Rehabilitate windows and deteriorated frame parts; repaint; select certain openings to be operable, repair their suspension and hardware; evaluate interior security grill effectiveness (Ref.: Pres. Brief 9, 10)

**Priority:** Long-term

**Option A.2: Preserve and Repair** – Rehabilitate all windows and deteriorated frame parts; all openings to be operable, repair their suspension and hardware

**Priority:** Long-term

## Interior Space

The interior retains much original wheeled valve and mechanical equipment in addition to new equipment. Chain driven flat valves are intact and operable. Overhead trolley, curved track, and lifting cranes are intact. There is an original wood framed restroom enclosure (water closet removed) with a raised floor and half light door to the southwest. A curved iron stairway descends counterclockwise to the lower level starting near the north door. The treads have been overlaid with expanded metal for better traction, but otherwise the assembly is in historic condition. The interior lighting is by surface-mounted modern floodlights.



**Condition/Observations:** There is some damage to the concrete floor deck. The metal stair has some rusting, but appears structurally well maintained. The metal stairway to the lower level is consistent with the design shown on drawings dated 1917. The anchorage was recently repaired or replaced.



*Curved iron stairway,  
interior Gatehouse 1*

### Treatment Recommendations:

**Option A.1: Preserve** – Maintain wood restroom structure, (seal waste pipe) metal stairway and existing historic mechanical equipment intact; New equipment modifications added as needed with minimal removal or replacement of historic materials

**Priority:** Maintenance

**Option A.2** – Provide for limited interpretive tours, develop portable signage and graphics

**Priority:** Long-term

**Option A.3** – Provide additional documentation, inventory and photographs of existing historic mechanical equipment

**Priority:** Long-term

## Entry Steps

There are five concrete steps plus the narrow upper landing with cast iron threshold that ascend from the walkway to the entry doors. The steps have a full bull nosed edge, and extend past the door to the reservoir wall returns. The two lowest steps that project past the wall are radiused back in the Romanesque style.

**Condition/Observations:** It is believed that the steps were originally constructed with a rough base and a top finish coating. There is substantial spalling of the outer coating at the steps; this coating is breaking up.



### **Treatment Recommendations:**

*Entry Steps, Gatehouse 1*

**Option A.1: Preserve and Repair** – Clean concrete surfaces, remove loose and deteriorated material; patch tests; patch spalled areas (Ref.: Pres. Brief 1, 15)

**Priority:** Short-term



*Reservoir 1 Weir Building*

## **Reservoir 1 - Weir Building**

The 1923 Weir or Inlet building is located a short distance to the west. It was originally the screen house and necessary when Conduit 3 was constructed. The screening function was replaced by facilities at Powell Butte. The building currently is utilized for storage.

### **Concrete Walls, Floor and Roof**

The rectangular reinforced concrete building measures approximately 40 feet north to south and 25 feet east to west and is set close to the adjacent grade. The exterior wall surface and parapet ornamentation reflects the style and pattern of the gatehouse. The concrete roof deck is supported by steel I beams. Some roof deck openings have been made to allow for access. The roof has a membrane covering that terminates on the parapet wall. There are two through wall scupper drains emptying into surface mounted painted metal downspouts on the mid point of each of the long sides. These replaced the original roof drains with pipes cast into the concrete walls.

**Condition/Observations:** The exterior walls are generally in fair condition and do not have excessive soiling. The wall surface has a thin coat that appears to date to the original construction. There are, however, projecting areas that have spalled where the reinforcement is exposed. Some of the wall staining is associated with moisture entering the wall at the parapet capstone or eave drip. There are a number of horizontal cracks and some spalls on the backside of the parapet at the level of the upper frieze. This is an indication of water penetration damage. The modified bitumen roofing is worn; it has missing or loose termination bars at the wall joint.



### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Exterior Elevations: Clean concrete surfaces, remove loose and deteriorated material; patch tests; patching at missing portions. Parapet: Repair cracks and spalls; replace roofing; test parapet cap for water absorption; apply breathable water sealer (Ref.: Pres. Brief 1, 15)

**Priority:** Short-term

**Option A.2: Repair** – All work noted on A.1 and install metal parapet cap and wall liner on inside face of parapet

**Priority:** Short-term

**Option A.3: Repair-Replace** – Replace exterior downspouts with interior roof drain and pipe; use scuppers for overflows

**Priority:** Long-term

## Doors

The primary entry is with an inswinging door on the south side. It is a hollow metal door with hollow metal frame and not original. Over the entry door there is a historic exterior light consisting of shaped conduit and an incandescent light in a caged fixture. There is an equipment entry with a similar door located at the midpoint of the west side.

**Condition/Observations:** The non-original paired hollow metal entry doors and frame are in fair condition, and need repainting. The openings are not scheduled for revisions under Water Bureau Project No. 3366. The light fixture is intact, but slightly rusty.



*Historic exterior light over door*

### **Treatment Recommendations:**

**Option A.1: Preserve** – Maintain existing non original doors; preserve historic exterior light fixture

**Priority:** Maintenance

**Option A.2: Repair-Replace** – Restore wood doors and frames

**Priority:** Long-term



## **Windows**

Windows are located on each side; one on the south, one at each end of the west, a pair on the north and a center pair flanked by two on the east. All windows are intact originals that are rectangular headed, wood double hung, 6/6; rope suspension missing; all have exterior security grating.

**Condition/Observations:** The windows are in fair condition. Water Bureau Project No. 3366 plans to remove the exterior security grating and install new grating on the interior.

### **Treatment Recommendations:**

**Option A.1: Preserve** – Maintain windows as is (Ref.: Pres. Brief 9, 10)

**Priority:** Maintenance

## **Interior Space**

**Condition/Observations:** No issues observed.

### **Treatment Recommendations:**

**Option A.1: Preserve** – Maintain as is; retain water measure device

**Priority:** Maintenance

## Reservoir 1 - Fountain Structure

At the north end of the reservoir, just above the perimeter walk and gutter, is a small fountain structure, approximately thirty inches wide. The structure is considered a historic contributing object. The fountain is believed to have been filled by a spring or artesian well.



*Reservoir 1 Fountain Structure*

The concrete fountain features a 16 inch diameter circular basin set into a level top that is half covered with a niched roof. There is a small overflow hole at the back of the basin. It has partial 8 inch thick side walls with a raised detail on the inner half of the top surface. The walls and roof extend back into the hillside. The face of the roof is embossed with the date of 1894. There are remains of an iron rod and chain, presumably for a dipping cup. There is an iron step installed on the back side of the gutter that allows a user easy access to the basin.

**Condition/Observations:** The basin, top and inner niche surface are in good condition except toward the front exposed portion, where the level top has a 5 inch hole and the front corners are spalled and broken. The side walls have spalling at the lower end of their raised detail. The basin retains a small amount of water. The cup and chain are missing; the securing bolt is badly deteriorated.

### **Treatment Recommendations:**

**Option A.1: Repair** – Clean and patch damaged areas; brush out adjacent planting (Ref.: Pres. Brief 1,15)

**Priority:** Long-term

**Option A.2: Repair** – Clean and patch damaged areas; brush out adjacent planting; investigate-reconnect water source, replace cup and chain; provide interpretive signage (Ref.: Pres. Brief 1, 15)

**Priority:** Long-term

## Reservoir 1 – Site

### Reservoir Structure

The basin retains the original concrete lining as installed under the Ransome method. It was constructed in a south facing drainage by enclosing the end with a concrete dam further supported by earthen fill; the basin was not designed with an underlying drain system. A vehicle ramp descends from the southeast corner reaching the bottom near the north end. There is a metal valve platform between the gatehouse and the southwest corner.



*Reservoir Structure, Reservoir 1*

**Condition/Observations:** There are numerous breaks and spalls showing in the patched concrete, giving a mottled appearance. Weeds are growing out of cracks. The reservoir has had leakage issues over time. The bituminous water proofing coating remains in portions. The valve platform is not sound and is being replaced under Water Bureau Project No. 3366. A new wash down pipe system is desired.

### Treatment Recommendations:

**Option A.1: Preserve** – Routine maintenance on reservoir liner; there is adequate structure and underlying support at repair areas; salvage historic materials from valve platform

**Priority:** Maintenance

**Option A.2: Repair-Replace** – Remove bituminous patching; there is adequate structure and underlying support at repair areas; install reservoir basin liner

**Priority:** Long-term

## Site Wall (Parapet Wall) Assembly

Bordering the basin is a low concrete wall with wrought iron fence. The wall is designed with a projecting crowned cap, an apron beneath and a tall base. The wall is approximately 42 inches high along the south, most visible side. Due to variations in the walkway grade, the exposed face along the hillsides is closer to 24 inches. It is smooth finished concrete with elongated, raised diamond pattern on the taller south side. The fence consists of decorated upper and lower rails, and vertical bars alternating in height all with a spear design; the taller spears each have a pair of leaves. Fence posts at the ends of segments are set into the concrete cap. These posts have a sphere ornament just below their spear tips. At the gatehouse the wall returns to connect to the building. Non-historic pole lighting (50-foot spacing) is located adjacent to the low wall around the basin. The poles are outside of the walkway at the dam portion.

**Condition/Observations:** The low wall has substantial wear with many areas that are deteriorated, including the cap, projecting diamond patterns, and joint edges. It is not difficult to locate exposed reinforcement. In some instances, the reinforcement is located too close to the exterior surface. There have been some prior patching repairs, but many other defects now are evident. The fencing has recently been renovated under Water Bureau Project No. 3366; it is now being reinstalled with posts set in cored drilled holes with non shrink cementitious grout. Electrical conduit feeds for the light poles are surface mounted on the walkway side of the low wall and junction down to the base of each metal lamp post (50-foot spacing).



### Treatment Recommendations:

**Option A.1: Repair** – The south wall requires substantial repairs to the deteriorated surfaces and detail; preserve the most intact portion(s), the other perimeter wall portions have less deterioration, but not minimal; clean, patch and repair damaged areas; test for water absorption, apply breathable sealers if beneficial (Ref.: Pres. Brief 1, 15)

**Priority:** Short-term

**Option A.2: Repair-Replace** – Replace existing non historic pole lighting at south (first) and around perimeter walkway; utilize historically compatible design and products, underground wiring; remove surface mounted conduit; provide entry lights at the adjacent fence corner posts (Ref.: Pres. Brief 1,15)

**Priority:** Long-term

## **Walkways**

The basin wall is surrounded by a continuous five-foot wide concrete walkway. The walk is scored in 30-inch squares and has a light finish. The length along the hillside has an integral concrete gutter to receive and direct surface runoff. There are historic cast iron bar grates on the south gutter corners. In addition, there are several cast iron lids around the perimeter of the reservoir.

**Condition/Observations:** The walkway has many damaged areas, including broken slabs, corners, spalls, roughened surfaces and settlement. There does not appear to be much of a base remaining for the concrete slabs. The gutter is in better condition, although there are areas without uniform transition to the walkway.

### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Patch-replace damaged portions of the south walk and the perimeter walk, gutter, and transitions between; cut back and control vegetation at bank above gutter; preserve, repair and maintain stair and railing to meter house; coordinate repairs with site lighting changes and surface mounted conduit removal; preserve cast iron grates and lids.

**Priority:** Long-term



## 44" Meter House



44" Meter House  
Reservoir 1

This structure is not included in the National Register Nomination, but it is historically significant. The reinforced concrete structure is located at the foot of the stairway descending south from the bench area adjacent to the gatehouse and it is located along the vehicle drive. It measures 9 feet by 16 feet and is 13 feet

high at the road side; other sides are dug into the hillside.

There is a single entry door on the east, now hollow metal with hollow metal frame, three 1/1 double hung wood windows with exterior security screens, one on each daylight side. Walls are board formed concrete and end at the 8-inch roof overhang. Inside, there is steel ladder access to lower level equipment. The accessway is protected with steel pipe railing. There are new concrete steps.



**Condition/Observations:** The structure is outside of the vehicle controlled area, and appears to receive vandalism as a result. The entry door frame is damaged at the head member, and there are damaged concrete edges around that opening.

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Monitor graffiti and remove promptly; replace damaged metal (non-historic door)

**Priority:** Maintenance

## RESERVOIR 5

Contributing historic features at Reservoir 5 include the large kidney shaped basin, its perimeter wall system and walkway, the gatehouse on middle of the straight dam portion of the west side and the hypochlorite building (former weir house) on the southeast corner. The dam has a controlled access roadway that runs past the gatehouse and hypochlorite building and thence to Reservoir 1 and the upper portion of Mount Tabor. There are also assorted cast and wrought iron grates and lids and light poles of historic interest.





*Reservoir 5 Gatehouse*

## **Reservoir 5 - Gatehouse 5**

### **Concrete Wall, Floor and Roof**

The building is a poured in place concrete structure, oval in plan, measuring 40 feet north-south and 24½ feet east-west, and is symmetrically composed. It is very similar in many ways to the gatehouse of Reservoir 1. The exterior was formed with a rusticated block pattern, while the interior shows a 6-inch board form work pattern. There is a low crenellated (indented) projecting parapet with corbel courses below and cast concrete capstones at both the merlons (solid higher portion) and the crenel (lower indent portion). The exterior lower walls have a substantial amount of surface mounted conduit and numerous cored access holes. Door and window openings are round arched and have projecting quoined surrounds. The lower water facing exterior below the water table line (floor line projection) is unpatterned and coated with cement plaster. The concrete floor deck is finished with a smooth troweled topping slab and is without other finishes. The concrete roof deck is covered with a membrane roofing. The roof is drained by through wall scuppers on either side of the entry with replacement painted plastic downspouts that are daylighted. There are partial remains (curved overhead conduit) of an exterior historic light over the reservoir valve balcony door.

**Condition/Observations:** The exterior wall is mostly sound, although there are areas of spalling, primarily on the south side. Some areas have been patched in the past. There is some soiling and staining from metals and bio matter. Horizontal cold joints from the original construction are visible (inside and out) at roughly two-foot spacing; the joint lines do not line up with the exterior block pattern. The concrete capstones are weathered. The parapet has an elastomeric coating on all surfaces except the exterior elevation. The exterior water coating is spalled in the vicinity of the former high waterline. The interior concrete topping slab has some spider cracking. The roofing membrane is worn.

### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Clean the concrete exterior; minor patching of spalled areas; test for water absorption; renew the sealer to the parapet; verify if breathable sealer is needed at walls above waterline; replace roof membrane; retain lower below waterline wall as is; preserve-repair historic light fixtures

**Priority:** Short-term

**Option A.2: Repair and Replace** – Replace surface mounted downspouts with interior roof drains; remove surface conduit as other projects allow (Ref.: Pres. Briefs 1, 15)

**Priority:** Long-term

## **Metal Balcony**

The partial width original balcony (east side) and ladder have been removed years ago due to deteriorated conditions and lack of need for valve operation. It was constructed of cast iron grating with an iron framework with diagonal braces and was similar to the other platforms.

**Condition/Observations:** There is evidence of the former balcony attachment points. Due to changes in the valve operations, the balcony is not needed for operations. Roof access is obtained by portable ladder from the street side.

### **Treatment Recommendations:**

**Option A-1:** Alter; install protective guardrail at reservoir side doorway; remove and salvage the remains of the exterior light fixture; cap off the conduit

**Priority:** Long-term

## Doors



There is a single entry with inswinging paired doors at the top of five exterior concrete steps on the west side. There is a minimal top landing and two side handrails (non public use). The doors are flush steel with a hollow steel frame that are replacements. The original wood jambs have been cut off at the transom line. The arched transom and fan light remain as does the cast iron sill. The reservoir side door is the original single wood cross buck door with wood frame and fan light transom.

**Condition/Observations:** The non-original paired hollow metal entry doors and frame are in fair condition, though the bottoms have rusted out. This opening is scheduled for revision under Water Bureau Project No. 3366 that shall remove the wood transom and install a new hollow metal arched frame with metal paneled doors and metal fan light. The reservoir side door has moderate damage and is scheduled for repairs and new hardware. There are partial remains of an exterior historic light fixture (a curved overhead conduit) at the reservoir valve operator balcony door.



### Treatment Recommendations:

**Option A.1: Preserve** – Maintain non-original doors; retain cast iron sills

**Priority:** Maintenance

**Option A.2: Replace** – Restore wood doors and frames

**Priority:** Long-term



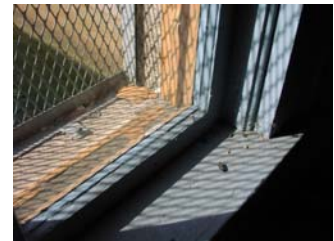
## Windows



*Typical Window,  
Gatehouse 5*

There are two windows on the west side flanking the door opening, one on each side of the reservoir facing door, and three on the each of the curved north and south ends. Windows are typically arch topped, wood double hung, 4/4 with chain suspension, some chains missing. Glass is intact but most of it appears to have been replaced over time and is not historic. At the former toilet room the glass is obscure. Windows have been fitted with exterior security grilles.

**Condition/Observations:** The windows are generally in fair condition depending upon their orientation to weather. On the south and west sides the wood members are weathered and paint is missing or oxidized. A number of glass units need reputtying and many of the sills are deteriorated. The windows are only occasionally opened, and primarily just a few windows. There have been a variety of previous paint colors on the windows. The current security project shall replace the sills, and make sash operable (no suspension repairs). The exterior security grilles shall be removed and new ones installed on the interior.



### **Treatment Recommendations:**

**Option A.1: Preserve**

**Priority: Maintenance**



## Interior Space

The interior retains much original wheeled valve, water level measurement and mechanical equipment that is intact and operable, in addition to new equipment. Overhead trolley and lifting cranes are intact. There is extensive interior framing in progress that is associated with the new security provisions. The work is modifying and replacing, mostly, other non historic interior framing. A former restroom enclosure to the north has been removed and no longer exists. An iron stairway descends counterclockwise along the northeast curved wall, to the lower level. The treads have been overlaid with expanded metal or straight bars for better traction, but otherwise the assembly is in original condition. At the base there is access to the tunnel that descends to Reservoir 6.

*Interior  
Gatehouse 5*



**Condition/Observations:** The concrete floor and roof decks appear to be in good condition. The metal stair has rusting, but appears structurally well maintained. Existing valve operators appear to be in good condition and are well-maintained; however, exposed gearing and valve stems may present a safety concern.

### **Treatment Recommendations:**

**Option A.1: Preserve** – Maintain metal stairway and existing historic mechanical equipment intact; new equipment modifications added as needed with minimal removal or replacement of historic materials

**Priority:** Maintenance

**Option A.2:** Provide additional documentation, inventory and photographs of existing historic mechanical equipment

**Priority:** Long-term



## Entry Steps

There are five concrete steps including the narrow upper landing that ascend from the walkway to the entry doors. All steps curve back to the front wall. The fourth step is imprinted with “Reservoir 5” with “1911” on the next lower third step.

**Condition/Observations:** There is some spalling at the steps. New angled handrails are planned to replace the existing side rails.

### Alternatives/Recommendations:

**Option A.1: Preserve and Repair** – Clean, test and patch steps

**Priority:** Short-term



Entry Steps  
Gatehouse 5



*Hypochlorite Building (Weir House). Gatehouse 5*

## **Reservoir 5 - Hypochlorite Building (Weir House)**

### **Concrete Wall, Floor and Roof**

The 1951 building is a poured in place concrete structure, rectangular in plan, measuring 25 feet north-south and 40 feet east-west, and is symmetrically composed. The building is situated close to the grade level at the reservoir inlet on the southwest corner. The exterior was formed with a rusticated block pattern similar to the older buildings, while the interior is smooth. There is a low crenellated (indented) but otherwise unadorned parapet (without projection or horizontal moldings) and cast concrete capstones. The four building corners are defined with a projected parapet and quoins formed in the concrete. Door and window openings are rectangular and have projecting surrounds in a modified Gibbs surround with a lintel head. The concrete floor deck is finished with a smooth troweled topping slab and has a paint finish. The concrete roof deck is supported on concrete cross beams and is covered with a membrane roofing. A bay of the roof has been altered to allow taller tanks. A lift beam and steel framed brace extends from the center of the paired equipment doors (added in the 1980's and no longer used). The former hatches have been replaced with wood decking.

**Condition/Observations:** The exterior walls are in good condition. There is some soiling, most notably at the upper wall and around the parapet. The capstones are weathered. The modified bitumen roofing is in fair condition; there are some termination points that are loose and susceptible to water entry. The four roof drains are susceptible to debris clogging. Roof top alterations have been made and equipment is visible from a short distance away.



### **Treatment Recommendations:**

**Option A.1: Preserve-Repair** – Clean concrete; test for water absorption; apply breathable sealer to flat capstones; replace roofing membrane and flashings

**Priority:** Short-term

## **Doors**

The original primary entry was on the west side is with an inswinging door. This entry is not frequently used and overgrown plantings hide the door. There is an equipment entry with similar paired doors at the midpoint of the north side. There is also another single half light door on this side near the east end. These northside entries are the day-to-day use doors. All doors are 1983 replacements, flush with hollow metal frames. The design and construction of original doors is not known.

**Condition/Observations:** The hollow metal doors and frames are in fair to good condition, and need repainting. The openings are not scheduled for revisions under Water Bureau Project No. 3366.

### **Treatment Recommendations:**

**Option A.1: Preserve, Replace** – Remove hoist crane and its assembly, replace doors with units similar to originals; repaint

**Priority:** Long-term

## **Windows**

Windows are located on each side; four on the south, one at the west, one on the north, and a triple unit on the east. The windows were all replaced in 1983; the design of the originals is not known. All windows are intact rectangular full light units in hollow metal frames; all have exterior security grating.

**Condition/Observations:** The windows are in fair condition and need repainting. Water Bureau Project No. 3366 plans to remove the exterior security grating and install new grating on the interior.

### **Treatment Recommendations:**

**Option A.1: Preserve** - Repaint and caulk as needed

**Priority** – Maintenance

**Option A.2: Replace** – Replace existing windows at the end of their useful life with a design that matches the original design

**Priority** – Long-term

## **Interior Space**

The interior has been divided into a main treatment room with tanks and piping and retainment curb, and a raised control-work area at the east end. The interior dividing wall is constructed of concrete block units and is painted.

**Condition/Observations:** No significant issues observed, although the chemicals may require more ventilation to minimize adverse effects. The interior does not contain historic material.

### **Treatment Recommendations:**

**Option A.1:** No scheduled work

## **Reservoir 5 – Site**

### **Reservoir Structure**

The basin retains the original concrete lining as installed under a recently installed, heavy hypolon liner. The reservoir was constructed in a west facing drainage by enclosing the end with a Reinforced Concrete Counterfort Wall with downstream earthen embankment dam, and working the hill side slopes to form the present somewhat kidney shaped basin. A concrete stairway with stainless steel railing descends from the northwest corner reaching the bottom near the gatehouse. Overflow and aqueduct structures are located along the west side and the gatehouse is at the midpoint of the straight dam portion. To avoid flow into the City storm system, the reservoir was designed with an under drain system; the system is now metered. Reservoir 5 is linked by tunnel and pipes to Reservoir 1 (same elevation) with a connection on the southeast and to Reservoir 6 also by tunnel and pipes. Those corridors as well as the slope down to Reservoir 6 are part of the historic district.

**Condition/Observations:** The new liner has rectified water loss issues and abated the deterioration of the basin structure. Its dark color has soiled and oxidized some so that it visually blends better into the setting.

### **Treatment Recommendations:**

#### **Option A.1: Preserve and Maintain**

**Priority:** Maintenance



## Site Wall (Parapet Wall) Assembly

Bordering the basin is a low 30” high concrete wall with wrought iron fence. The wall is designed with a projecting crowned and chamfered cap, an apron beneath and a projecting base. It is smooth finished concrete without pattern. The fence consists of decorated upper and lower rails, and vertical bars alternating in height all with a spear design. Fence segments are set into the concrete cap and have a curved brace on the reservoir side. At approximately every seventh segment (approximately an 80-foot spacing) there is a four-sided ornamental fence column.



*Fence, Reservoir 5  
Site Wall Assembly*

At these locations the concrete wall widens to receive the metal post. These posts once held a tapered wrought iron top fitted with twin lamps to provide walkway lighting, alternating with posts that held cast ball tops. Currently, the posts all have a cast ball shaped cap. According to Bureau staff, the mold for these items is stored in the gatehouse and some tapered top sections are reported to be in storage at the Hazelwood facility. Provisions are made in the wall and fence for basin access. At the gatehouses the wall returns to join the gatehouse wall. The wall has a substantial amount of surface mounted conduit, particularly along the straight dam portion.



*Non-historic light  
posts, Reservoir 5*

Concrete posts and lantern light fixtures are located along the roadway. These are the historic fixtures used throughout the park, but these lie within the reservoir historic district. Non-historic light posts with “shoebox” fixtures are installed around the basin at a 50-foot interval.

**Condition/Observations:** The low wall has normal wear and tear associated with its age. There have been some prior patching repairs, but defects remain, often at the cap end joints that are approximately every 25 feet. The fencing has recently been removed, stripped of lead based paint, repaired, recoated and reinstalled. Lighting on the fence was discontinued long ago, and none of the fixture arms or tapered tops are in place. Electrical conduit feeds for the newer separate pole lighting are surface mounted to the walkway side of the low wall and provide a junction point to feed each of the new metal lamp posts (ca 1978, 250w High Pressure Sodium lamps, spaced at 50-foot intervals and are similar to those on Reservoir 6.)

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Clean and provide minor degree of patching at damaged areas

**Priority:** Long-term

**Option A.2: Preserve** – Preserve existing historic lamps; maintain non historic lights until end of natural life or substantial technology change warrants

**Priority:** Maintenance

**Option A.3: Replace** – In addition to above replace existing non historic pole lighting at west (first) and around perimeter walkway; utilize historically compatible design and products, underground wiring, remove surface mounted conduit

**Priority:** Long-term

**Option A.4: Replace-Restore** – Fence lighting; restore alternate wrought iron fence post tops (some still exist); install new LED lighting using small cabling

**Priority:** Long-term

## Walkways

The basin wall is surrounded by a 46-inch wide concrete walkway that surrounds the reservoir. Outside of the walkway there is a level grassy area that extends to the toe of the hill slope. No drains were located around the perimeter, except along the gutter on the west side. Those grates are straight bar type made of cast iron. The walk is scored in squares and has a light finish. Along the west, the walkway doubles in width and extends to the roadway curb and gutter.



**Condition/Observations:** The walkway has some damaged areas, including broken slabs, corners, spalls, roughened surfaces and settlement. There does not appear to be much of a base remaining for the concrete slabs. The walkway is in better condition than at the other reservoirs.

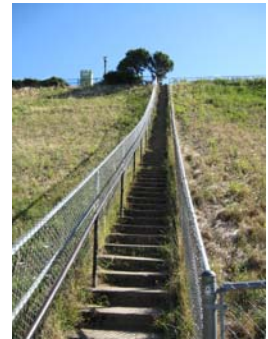
### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Provide minor degree of patching or replacement at damaged areas, particularly at widened entry to Gatehouse; preserve assorted cast iron grates and lids

**Priority:** Long-term

## Stairway

A concrete stairway descends from the road to Reservoir 6. The stairway has a pipe handrail on the north side and fencing on both sides. The original paving finish was ribbed crosswise to the direction of travel. There are semi-recessed concrete bollards with steel loops on the hill either side of the stair – their original function is not determined.



*Stairway, Reservoir 5  
to Reservoir 6*

**Condition/Observations:** Portions of the stairway have been replaced or patched; the finish does not match original pattern. A low chainlink fence encloses the hillside and creates a corridor for the stairway. It was installed for structural reasons to limit pedestrian access and prevent erosion that regularly occurred on the west dam hillside face.

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Provide minor degree of patching or replacement at damaged areas; preserve historic railing

**Priority:** Long-term

**Option A.2: Replace** – In addition to Option A.1 repairs, replace newer concrete not matching original finish with that which does

**Priority:** Long-term

## **Reservoir 5 - Other Features**

### **Roadway**

The vehicle roadway has been repaved and now includes a concrete curb on the west edge. The current security project will install new wrought iron fence styled vehicle control gates in place of the existing ones.

### **Treatment Recommendations:**

**Option A.1: Preserve** – Provide ongoing maintenance to road and curbs

**Priority:** Maintenance

**Option A.2: Replace** – Research and review original paving installed at west side road; possible area for historic paving restoration

**Priority:** Long-term

### **Old House Foundation (historic)**

The cobblestone remains of a small house's foundation and root cellar (as seen in original construction photos) are located approximately 80 feet east of the northwest reservoir corner, north of the walkway.

#### **Treatment Recommendations:**

**Option A.1: Preserve** – Protect existing historic walls

**Priority:** Maintenance

**Option A.2: Preserve** – Provide historic interpretive information on the house that predated the reservoir

**Priority:** Long-term

## Tunnel

A tunnel with two riveted steel pipes connects Reservoir 5 to Reservoir 6 and other elements of the Mt. Tabor system. The tunnel is accessed from Reservoir 5 Gatehouse, and proceeds west under the loop road and embankment, and terminates at a vented manhole at the base of the embankment. From there the pipes are directly buried and diverge.



The tunnel is constructed of reinforced concrete and is circular, with an approximate diameter of 5 feet high by 6 feet wide. Board formwork is evident on the ceiling, which is painted, and the floor is concrete.

**Condition/Observations:** The concrete roof/ceiling appears to be in good condition. No evidence of leakage or serious concrete deterioration was observed. The floor was dry. The painted ceiling has peeled in some areas, and there is evidence of concrete patching. New conduit has been installed on the south wall in conjunction with Water Bureau Project No. 3366.

### Treatment Recommendations:

**Option A.1: Preserve** – Maintain concrete structure, repaint ceiling, clean moss buildup at west terminus manhole.

**Priority:** Maintenance

**Option A.2:** Provide additional documentation, inventory and photographs of existing historical mechanical equipment (piping, fixtures, etc.)

**Priority:** Long-term



## RESERVOIR 6

Contributing historic features at Reservoir 6 include the large rectangular basin, its perimeter wall system and walkway, the inlet gatehouse located at the midpoint of the east side and the outlet gatehouse directly across the reservoir on the west side. There are also assorted cast and forged grates and lids of historic interest.



## Reservoir 6 - Inlet Gatehouse 6

### Concrete Wall, Floor and Roof

The building is a poured in place concrete structure, nearly square in plan, measuring 43 feet north-south and 48 feet east-west, and is

symmetrically composed. The exterior was formed with a rusticated block pattern, while the interior shows a six-inch board form work pattern. There is a low crenellated (indented) projecting parapet with horizontal molding below and cast concrete capstones at both the merlons (solid higher portion) and the crenel (lower indent portion). The four building corners are defined with quoins formed in the concrete. Door and window openings are rectangular and have projecting surrounds in a post and lintel design. The lower water facing exterior below the water table line (floor line projection) is unpatterned and coated with cement plaster. The concrete floor deck is finished with a smooth troweled topping slab and is without other finishes. The concrete roof deck is covered with a membrane roofing; there is a bird net over the roof and a shock track mounted on the parapet to prevent birds from landing or roosting.



*Inlet Gatehouse 6*

**Conditions/Observations:** The exterior wall is mostly sound, although there are areas of spalling, primarily on the south side. Some areas have been patched in the past. There is some soiling, most notably around the parapet. Horizontal cold joints from the original construction are visible (inside and out) at roughly two-foot spacing. The capstones are weathered. The lower vent openings have spalling, especially the center one. The exterior water coating is spalled in the vicinity of the former waterline. The interior concrete topping slab has spider cracking. At the reservoir door there is substantial break up of the topping slab or a former leveling patch adjacent to the balcony. The exterior walls and parapet have an elastomeric coating on all surfaces. The roofing membrane is worn. There is ponding over half of the roof.



### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Minor cleaning of the coated concrete exterior; minor patching of spalled areas; renew coating as necessary at parapet; replace roofing to eliminate ponding; retain the wall as is below the waterline wall; provide overflow roof drains (Ref.: Pres. Brief 1, 15)

**Priority:** Short-term

**Option A.2: Replace** – Remove surface conduit as other projects allow

**Priority:** Long-term

**Option A.3: Preserve-Repair** – Remove elastomeric coating; utilize breathable water sealer (Ref: Pres. Brief 1)

**Priority:** Long-term

## **Metal Balcony**

The partial width balcony (west side) is constructed of cast iron grating with an iron framework that is diagonally braced back to the concrete wall and a pipe railing enclosure; all painted black. It was designed for reservoir valve operation. There is a fixed steel ladder for Gatehouse roof access. Other equipment includes a cable and drum measuring device (appears to be no longer used).



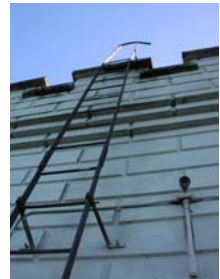
*Metal Balcony, Inlet Gatehouse 6*

**Condition/Observations:** The iron work is rusted, particularly at joints and connections to the concrete structure. The ladder is intact, but the upper portion is deformed and not anchored well.

### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Further inspection of the metal connections is required; clean and repair connections and damaged parts where structurally unstable; repaint (Ref: Pres. Brief 13, 27)

**Priority:** Long-term



## Doors

There is a single entry with inswinging paired doors at the top of seven exterior concrete steps on the east side. There is a minimal top landing and no handrails (non public use). The doors are flush steel with a hollow steel frame that are replacements of the original doors. The original wood jambs have been cut off at the transom line. The rectangular transom frame remains, but it is covered. The reservoir side door is the original single wood cross buck door with wood frame and four light transom. The door is 2¼” thick, constructed of 2x cross buck frame at the interior and 1x6 vertical board exterior cladding. It has 1½ pair ball tip, ball bearing butts, surface bolt lock and handle, remains of the former mortise latchset.

**Condition/Observations:** The non-original paired hollow metal entry doors and frame have some rusting at the base, and need repainting. This opening is not scheduled for revision under Water Bureau Project No. 3366. The balcony door’s exterior facing is weathered.

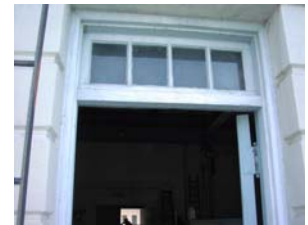
### Treatment Recommendations:

**Option A.1: Preserve and Maintain** – Repaint the doors and frames and retain as is; maintain wood door and frame, cast iron sills; patch reservoir side door landing

**Priority:** Maintenance

**Option A.2: Repair, Replace** – Replace metal doors and frame with wood units matching the original design; Repair existing wood door, frame and hardware

**Priority:** Long-term



## Windows

There are two windows each on the east and west sides, and five each on the south and north sides. Windows are typically wood double hung, 4/4 with chain suspension, some chains missing. Glass is intact but most of it appears to have been replaced over time and is not historic. Windows have been fitted with exterior security grilles. Six windows have been boarded over at the interior to allow for interior operations and equipment security. On the west side below floor level there are three small wall openings with vertical security bars.

**Condition/Observations:** The windows are generally in good to fair condition depending upon their orientation to weather. On the south and west sides the wood members are weathered and paint is missing or oxidized. A number of glass units need reputtying. The windows are only occasionally opened, and primarily just a few windows. The covered windows were not able to be reviewed. There have been a variety of previous paint colors on the windows. Water Bureau Project No. 3366 shall remove the exterior security grilles; repair the windows (no new suspensions, but to be made operable); change the glazing from glass to polycarbonate in the six windows closest to walkways, i.e. the two on the east and the eastern two on the north and south sides; and install new interior security grilles, and repaint.

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Rehabilitate windows and deteriorated frame parts; repaint; select certain openings to be operable repair their suspension and hardware; evaluate interior security grill effectiveness

**Priority:** Long-term

**Option A.2: Preserve and Repair** – Rehabilitate all windows and deteriorated frame parts; all openings to be operable and repair their suspension and hardware

**Priority:** Long-term

## **Interior Space**

The interior is devoted to control, security, piping, and hydroelectric generating equipment; some original wheeled valve and mechanical equipment is present and appears to be in use. There is no access to space below the floor level except by manhole.

**Condition/Observations:** Hydroelectric equipment and electrical equipment are operational and in good condition. No issues needing attention were observed.

### **Treatment Recommendations:**

**Option A.1: Preserve and Maintain** – Ongoing maintenance

**Priority:** Maintenance

**Option A.2:** Provide additional documentation, inventory and photographs of existing historic mechanical equipment

**Priority:** Long-term

## Entry Steps

There are six concrete steps plus the narrow upper landing that ascend from the walkway to the entry doors. The upper step is imprinted with “Reservoir 6” with “1911” on the next lower step.



**Condition/Observations:** There is spalling at the steps. It appears that the steps have been recoated in the past, or were originally poured rough and finished with a topping coat, and that this topping is breaking up.

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Clean concrete surfaces, remove loose and deteriorated material; patch tests; patch spalled areas

**Priority:** Short-term



## Reservoir 6 - Outlet Gatehouse 6



### Concrete Wall, Floor and Roof

The smaller outlet building is similar in design and construction to the inlet house. It measures 35 feet north-south and 32 feet east-west, and is symmetrically composed. It is located close to grade with only one step up to the entry door sill.

**Condition/Observations:** The exterior wall is mostly sound, although there are areas of spalling, primarily on the south side. In some cases the reinforcing bars are exposed and have corroded. Some areas have been patched in the past.

There is much more soiling than at the inlet gatehouse. Horizontal cold joints from the original construction are visible (inside and out) at roughly two-foot spacing. The capstones are weathered. The exterior water coating is spalled in the vicinity of the former waterline. There are diagonal cracks at each corner of the interior underside of the roof deck. These appear to be old cracks and may likely have occurred as a result of poor roofing conditions. The interior concrete topping slab also has spider cracking. The entry step has minor wear. The parapet has an elastomeric coating on all surfaces except the exterior elevation. The roofing membrane is worn.



### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Clean the heavily soiled concrete exterior; test for water absorption, apply a breathable sealer to the capstones, verify if needed at walls above waterline; minor patching at spalled areas; retain lower below waterline wall as is; replace roofing; provide overflow roof drains

**Priority:** Short-term

**Option A.2:** Repair; remove surface conduit as other projects allow

**Priority:** Long-term

## **Metal Balcony**

The partial width balcony (east side) is similar to that of the Inlet house but is full width. The wheeled gate valves remain but are rusted and inoperable. The fixed steel ladder for roof access remains.

**Condition/Observations:** The iron work is rusted, particularly at joints and connections to the concrete structure. The original wheel valves are rusted and inoperable.



### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Further inspection of the metal connections is required; clean and repair connections and damaged parts where structurally unstable; repaint

**Priority:** Long-term

## Doors

Like the inlet house, there is a single entry with inswinging paired doors on the west elevation. The floor level is set closer to the walkway grade requiring only one step. The doors are flush steel with a hollow steel frame that are replacements of the original doors. The original wood jambs have been cut off at the transom line. The rectangular transom frame remains, but it is covered. The reservoir side door is the original single wood cross buck door with wood frame and four light transom similar to that on the inlet house but retains its mortise latch and knobs; black finish (termed Barr Barf or “BB”).

**Condition/Observations:** The non-original paired hollow metal entry doors and frame have some rusting at the base, and need repainting. This opening is not scheduled for revision under the current work. The balcony door’s exterior facing is weathered.

### Treatment Recommendations:

**Option A.1: Preserve and Maintain** – Repaint the doors and frames and retain as is; maintain cast iron sills

**Priority:** Maintenance

**Option A.2: Repair, Replace** – Replace metal doors and frame with units matching the original design; repair existing wood door, frame and hardware

**Priority:** Long-term

## Windows

Similar to the inlet house, there are two windows each on the east and west sides, and four each on the south and north sides. Windows are typically wood double hung, 4/4 with chain suspension with some chains missing. Glass is intact but most of it appears to have been replaced over time and is not historic. Some windows have been boarded over at the interior to allow for interior operations, equipment or security.

**Condition/Observations:** The windows are generally in good to fair condition depending upon their orientation to weather. On the south and west sides the wood members are weathered and paint is missing or oxidized. A number of glass units need reputtying. The windows are only occasionally opened, and primarily just a few windows. There have been a variety of previous paint colors on the windows.

Water Bureau Project No. 3366 shall remove the exterior security grilles, repair the windows (no new suspensions, but to be made operable); change the glazing from glass to polycarbonate in the four windows closest to the walkways, i.e. the 2 on the west and the easternmost one on both north and south sides; and install new interior security grilles, and repaint.

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Rehabilitate windows and deteriorated frame parts; repaint; select certain openings to be operable repair their suspension and hardware; Evaluate interior security grill effectiveness

**Priority:** Long-term

**Option A.2: Preserve and Repair** – Rehabilitate all windows and deteriorated frame parts; all openings to be operable, repair their suspension and hardware

**Priority:** Long-term

## Interior Space

The interior has two wood framed rooms and a metal stair descending to the lower level equipment. The south room is the original office with separated toilet room. The floor is raised on 2x4 framing and covered with a 1x4 decking. This construction is also used for the ceiling enclosure. Walls are 2x4 framed and covered with 1x4 tongue and groove paneling. Doors are original panel type (five panels, 4 vertical and 1 horizontal) with one pair of plain bearing ball tip hinges and mortise latchset; all BB finish. The office has a porcelained cast iron wall hung lavatory on the east wall. The water closet has been removed. The north room is a newer construction, not historic, wood framed with plywood sheathing, but reusing a salvaged panel door. This room is used for security equipment and controls. The open space of the gate house is devoted to storage, control, security and piping equipment; some original wheeled valve and mechanical equipment is extant.

**Condition/Observations:** The north storage room is a newer addition. The south room is intact from original construction and in good condition. Interior piping and valves have been recently replaced. A wheeled gate operator located on the exterior balcony exhibits significant corrosion and the wall of the stem cover has deteriorated. The stem cover should be replaced or repaired.



*Wheeled gate operator stem cover, Outlet Gatehouse 6*

### Treatment Recommendations:

**Option A.1: Preserve and Maintain** – Preserve existing wood framed office, historic light fixture, wood interior doors and trims; preserve existing metal stairway and mechanical equipment; new equipment modifications added as needed with minimal removal or replacement of historic materials

**Priority:** Maintenance

**Option A.2:** Provide additional documentation, inventory and photographs of existing historic mechanical equipment

**Priority:** Long-term

## Reservoir 6 – Site

### Reservoir Structure

The primary site feature is the dual basin reservoir oriented north-south on the relatively level site area at the base portion of Mount Tabor. The large basin measures 875 feet north to south and 600 feet east to west and is 22 feet deep. Each reinforced concrete basin is rectangular with rounded corners and is partially dug into the terrain and bermed at areas above natural grade. The two basins are separated by a reinforced concrete division wall, located at the north-south basin midpoint, which joins the two gatehouses. Additional piping connects the two gatehouses. This divider allows separate and alternating operation of the two basins. At the center of each basin is an aeration fountain. Related features include the overflow channel south of the outlet gatehouse and vehicle access ramps to each basin; for the north one the ramp descends north from the inlet gatehouse; for the south the ramp descends north from the southeast corner of the reservoir. Both basins had revisions soon after construction to deter leakage. A three-inch thick overlay of asphaltic concrete exists over the original concrete liner. Cracks in this asphalt are patched with different materials including a white sealant caulk (Vulkem manufacturer, NSF 61 potable water grade).



*Reservoir 6 structure*



**Condition/Observations:** Due to revisions to the system, excess water is not spilled from the overflow. The level is kept approximately four feet below the prior spill level. This lower level line exposes portions of the basin and gatehouse structure not normally visible. The reservoir structure is generally in good condition and likely does not need relining due to water loss. The asphalt topping appears to be problematic when it creeps down slope.

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Preserve the existing structure and liner

**Priority:** Maintain

**Option A.2: Repair-Replace** – Remove bituminous patching, new replacement liner

**Priority:** Long-term

## Site Wall (Parapet Wall) Assembly

Bordering the basin is a low concrete wall with wrought iron fence. The wall is designed with a projecting crowned and chamfered cap, an apron beneath and a projecting base. It is smooth finished concrete without pattern. The fence consists of decorated upper and lower rails, and vertical bars alternating in height, all with a spear design. Fence segments are set into the concrete cap and have a curved brace on the reservoir side. At approximately every eighth segment (approximately 90-foot spacing) there is a four-sided ornamental fence column. Alternate columns have tapered tops. Those originally were fitted with a twin-armed lamp to serve as walkway lamp posts; the other alternating column posts have a cast iron ball cap. The concrete wall projects to receive the columns. Most such posts and tops survive, though few lamp arms are intact; no lamp shades are extant. Provisions are made in the wall and fence for access to the vehicle ramps. At the gatehouses the wall curves to connect to the building corners.



Joint to outlet house  
Reservoir 6

**Condition/Observations:** The low wall has normal wear and tear associated with its age. There have been some prior patching repairs, but many other defects now are evident. There is a wide joint to the outlet house that appears to be quite old and as a result of some settlement. The fencing is in reasonably good condition and retains many upper post assemblies. Lighting was discontinued long ago, and few of the fixture arms are in place. Electrical conduit feeds for the newer lighting are surface mounted to the walkway side of the low wall and provide a junction point to feed each of the newer metal lamp posts (ca 1978, 250w High Pressure Sodium lamps, 50-foot spacing).

### Treatment Recommendations:

**Option A.1: Preserve and Repair** – Clean and provide minor degree of patching at damaged areas

**Priority:** Long-term

**Option A.2: Repair-Replace** – Replace existing non historic pole lighting at around perimeter walkway; utilize historically compatible design and products, underground wiring, remove surface mounted conduit; restore metal fencing

**Priority:** Long-term

**Option A.3: Replace-Restore** – Fence lighting; repair-restore alternate wrought iron fence post tops (many still exist); install new LED lighting using small cabling

**Priority:** Long-term



## **Walkways**

The basin wall is surrounded by a 12-foot wide concrete walkway. The walk is scored in three foot squares and has a light finish. On the east side, the toe of the hillside is at the edge of the walk. There are historic cast iron grates at the edge of the walk and a variety of cast iron lids for equipment access.

**Condition/Observations:** The walkway has many damaged areas, including broken slabs, corners, spalls, roughened surfaces and settlement. There does not appear to be much of a base remaining for the concrete slabs. Water Bureau Project No. 3366 has recently replaced much of the center squares (this line was chosen since it was the most damaged) in order to install underground conduit for power and data. This work occurred on most of the west, east and south sides. The finish of the replacement matches the light texture of the original concrete.

### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Provide minor degree of patching or replacement at damaged areas, much of the center section has recently been replaced; preserve assorted cast iron grates and lids

**Priority:** Long-term

## **Stairway**

There are two historic concrete stair flights with metal railings on the west side descending to SE 60<sup>th</sup>.

**Condition/Observations:** The concrete stairs have a few replacement areas that do not match the original surface finish; there are a few steps that have broken corners or spalls.

### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Provide minor degree of patching or replacement at damaged areas; preserve historic railing

**Priority:** Long-term

**Option A.2: Replace** – In addition to Option A.1 repairs, replace newer concrete not matching original finish with that which does

**Priority:** Long-term

## RESERVOIR 7

Reservoir 7 is located on a grassy knoll just north of the physical top of Mt. Tabor. It consists of an underground storage tank and an adjacent former pump house building that is not currently used for pumping. The reservoir serves the areas of higher elevation and neighborhoods to the north and northeast of Mt. Tabor. The tank structure and the building are for the sake of the district nomination considered separate historic structures.



## Reservoir 7 – Building

The building is located just south of the tank, and is partially dug into the hillside. It is a concrete building, rectangular in shape except for chamfered front corners. The building is approximately 14 feet wide by 11 feet long and 9 feet high, and has 10-inch thick board formed walls. The concrete roof is enclosed with a single course of rough-faced basalt and slopes to the southeast. There is a recessed drain collector box and through wall leader. The building has vent openings on each side and a single arched door on the front (north). The east vent is covered with plywood while the west vent retains its wooden louvers. Both vents have exterior security gratings. The arched door is constructed of vertical planks, has replacement hinges and a replacement surface-mounted slide bolt.



*Reservoir 7 Building*

**Condition/Observations:** The building is in fair condition. The drainage system is prone to clogging from tree debris. There is water damage evident (cracks and deposits) at the upper wall at the height of the roof deck. The stone roof curb has many deteriorated joints. The access door has non-historic hardware and intrusive security provisions. Part of the frame molding is missing. The wood louver vents are badly deteriorated.



### **Treatment Recommendations:**

**Option A.1: Preserve and Repair** – Repair wood door and frame, suitable hardware; repair wood louver vents where venting required; where not required provide protective overlay; repair stone and crack damage at roof and upper wall; remedy roof drainage

**Priority:** Short-term

**Option A.2: Preserve and Repair** – In addition to repairs described in Option A.1 above, restore louver vents on sidewalls

**Priority:** Long-term

## Reservoir 7 - Underground Tank Structure

The most visible feature of the tank is the round and slightly cone shaped, concrete cap. The cap is approximately 40 feet in diameter and 6 inches thick at the edge. There is a north chamber area with two manholes for tank access. On the south side there is a three-foot concrete cube with steel lid. The tank is a foot above the adjacent grade. Various pipes elbow out of the structure near the underside of the lid.



*Reservoir 7 Underground  
Tank Structure*

**Condition/Observations:** The tank is reported to be in good condition. A new tank top was installed in 2007.

### **Treatment Recommendations:**

**Option A.1: Maintain** – Ongoing maintenance as required

**Priority:** Maintenance

Moore-Love, Karla

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 9:09 PM  
**To:** Council Clerk – Testimony; Hales, Mayor  
**Subject:** Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project  
**Attachments:** Criminal Mischief at Reservoir # 7-1.pdf; Res7 Criminal Mischief photos 5-28-12.pdf

To: Portland City Council

**RE: Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project**

From: Floy Jones on behalf of Friends of the Reservoirs

The attached are submitted for the record and supplement comments submitted separately on  
**Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project**

Contrary to PWB statements disconnecting or demolishing Portland's open reservoirs does not make the system more safe.

- 1) Portland Water Bureau security report on 2012 covered reservoirs break-in and contamination - hydrochloric acid bottle and other debris tossed into buried tank on Mt.. Tabor- Res.7 -referenced in comments
- 2)PWB photos of 2012 buried tank security breach and contamination



INCIDENT #

**12-WB217**

OTHER AGENCY INCIDENT #

PPB 12-45565

INCIDENT DATE: **5-28-12**

PHOTO # **1**

LOCATION:

INFO:



PHOTO # **2**

LOCATION:

INFO:



PHOTO # **3**

LOCATION:

INFO:

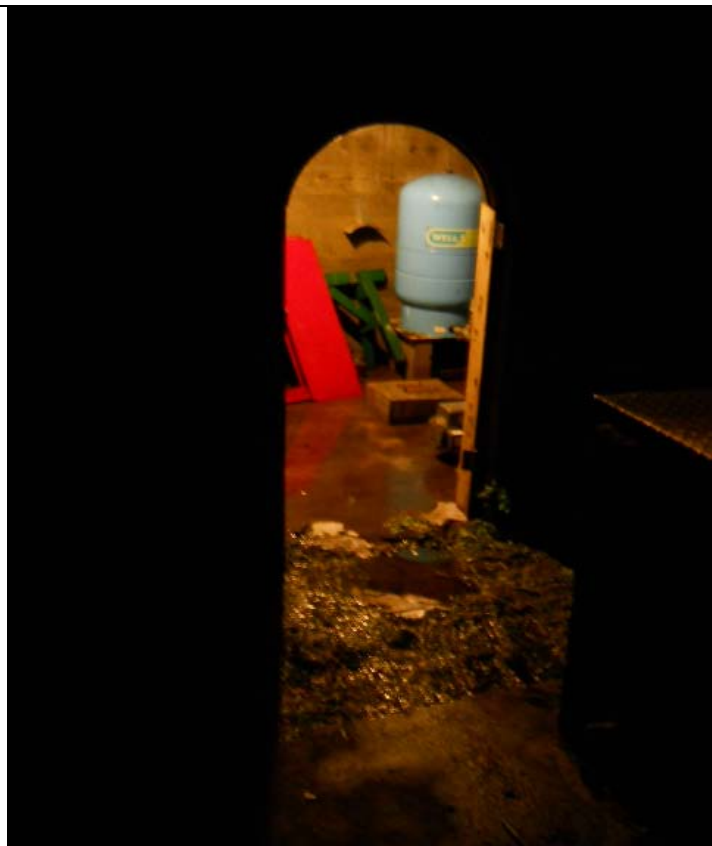


PHOTO # **4**

LOCATION:

INFO:





INCIDENT # <b>12-WB217</b>	OTHER AGENCY INCIDENT # PPB 12-45565	INCIDENT DATE: <b>5-28-12</b>
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PHOTO # <b>5</b>	LOCATION:
INFO:	



PHOTO # <b>6</b>	LOCATION:
INFO:	



PHOTO # <b>7</b>	LOCATION:
INFO:	



PHOTO # <b>8</b>	LOCATION:
INFO:	



<b>PORTLAND WATER BUREAU</b>				<b>PAGE</b>	
<b>OFFICE OF SECURITY &amp; EMERGENCY MANAGEMENT PHOTO PAGE</b>				<b>6OF8</b>	
INCIDENT # <b>12-WB217</b>		OTHER AGENCY INCIDENT # PPB 12-45565		INCIDENT DATE: 5-28-12	
PHOTO # <b>9</b>	LOCATION:			PHOTO # <b>10</b>	LOCATION:
INFO:			INFO:		


<b>PORTLAND WATER BUREAU</b>				<b>PAGE</b>	
<b>OFFICE OF SECURITY &amp; EMERGENCY MANAGEMENT PHOTO PAGE</b>				<b>7OF8</b>	
INCIDENT # <b>12-WB217</b>		OTHER AGENCY INCIDENT # PPB 12-45565		INCIDENT DATE: 5-28-12	
PHOTO # <b>13</b>	LOCATION:			PHOTO # <b>14</b>	LOCATION:
INFO:			INFO:		
					



PHOTO # **15**

LOCATION:

INFO:



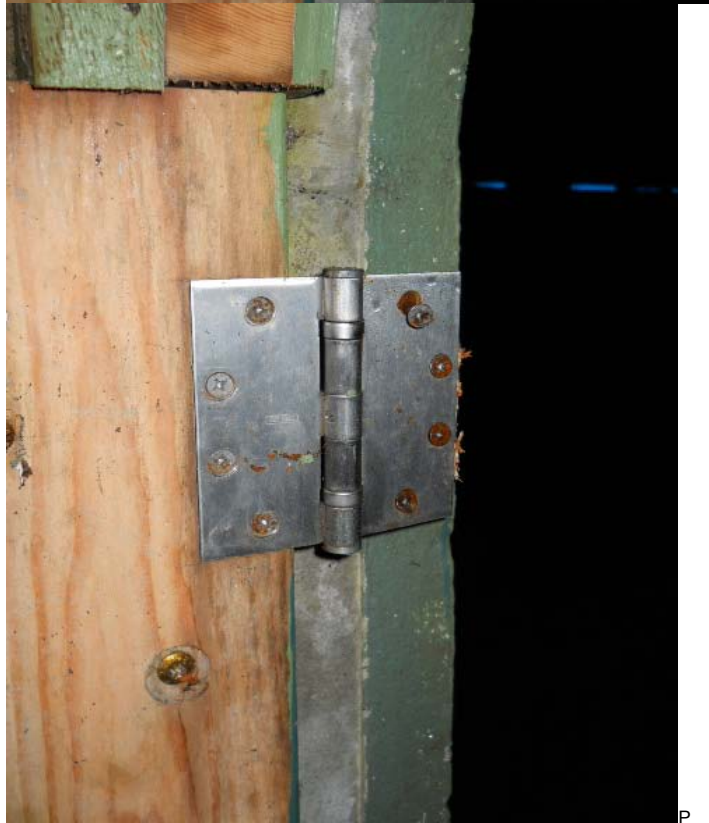


PHOTO # 11

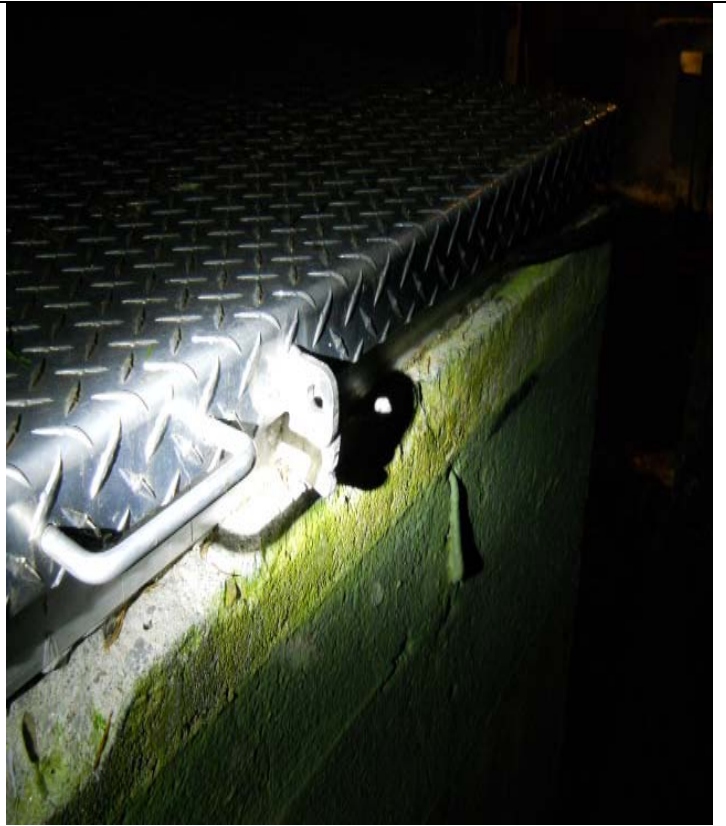
INFO:

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PHOTO # 12

LOCATION:

INFO:



PORTLAND WATER BUREAU OFFICE OF SECURITY & EMERGENCY MANAGEMENT RESPONSE REPORT							PAGE 1 OF 8							
WATER BUREAU INCIDENT # 12-WB217			OTHER AGENCY INCIDENT # PPB 12-45565			TYPE OF ACTIVITY: <input checked="" type="checkbox"/> SELF INITIATED (SI) <input type="checkbox"/> RADIO (R)								
DATE 5/28/12		RECEIVED TIME 0402		ARRIVED TIME 0402		CLEARED TIME 0600		DATE WRITTEN / SUBMITTED 5/28/12   5/28/12						
NAME OF LOCATION / SITE Mt. Tabor Park Reservoir # 7, 1199 SE Tabor Summit Drive, Portland, OR														
SPECIFIC LOCATION ON SITE Reservoir # 7 Access Hatch, Adjacent Outbuilding (Parks?), Buried Valve Box														
Summary of Incident (Summary should include incident type, action taken and disposition in one brief paragraph)														
Criminal Mischief -- violations of City Ordinance 14A.50.130 (Misuse of Reservoirs) and City Ordinance 21.24.050 (Unlawful to Damage, Alter or Tamper With Water Property). During routine patrol, noticed outbuilding door missing (evidence that padlock was pried off and door broken off the hinges), outbuilding interior flooding, water spigots turned on full blast on interior of outbuilding, Reservoir # 7 hatch padlock missing (leaving Reservoir # 7 unsecure, with evidence that the padlock had been cut using a bolt cutter), numerous items (traffic cones, conduit pipe, portion of building door) visible on the bottom of the reservoir and lodged near the inner cover opening for the reservoir), and adjacent buried valve box cover removed. Operations DRC Degner, Security DRC Hediger, WCC, and Water Bureau PIO notified and report filed with PPB. Completed an incident report complete with photographs of the damage.														
COMPLAINANT (CO)			WITNESS (WI)		BUSINESS (BU)		INJURED (IJ)		OTHER (OT)		ADDITIONAL IN NARRATIVE: <input type="checkbox"/> YES <input type="checkbox"/> NO			
CODE	NAME				SEX	RACE		DATE OF BIRTH / /						
ADDRESS				CITY	STATE		ZIP	PHONE ( ) -						
CODE	NAME				SEX	RACE		DATE OF BIRTH / /						
ADDRESS				CITY	STATE		ZIP	PHONE ( ) -						
CODE	NAME				SEX	RACE		DATE OF BIRTH / /						
ADDRESS				CITY	STATE		ZIP	PHONE ( ) -						
SUSPECT (S)			MISSING (MI)		DRUNK (DK)		DECEASED (DE)		MENTAL (ME)		OTHER (OT)		ADDITIONAL IN NARRATIVE: <input type="checkbox"/> YES <input type="checkbox"/> NO	
CODE	NAME				SEX	RACE		DATE OF BIRTH / /						
ADDITIONAL DESCRIPTION / AKA / MONIKER				HT , "	WT	HAIR		EYES		IN CUSTODY: <input type="checkbox"/> YES <input type="checkbox"/> NO				
ADDRESS				CITY	STATE		ZIP	PHONE ( ) -						
CODE	NAME				SEX	RACE		DATE OF BIRTH / /						
ADDITIONAL DESCRIPTION / AKA / MONIKER				HT , "	WT	HAIR		EYES		IN CUSTODY: <input type="checkbox"/> YES <input type="checkbox"/> NO				
ADDRESS				CITY	STATE		ZIP	PHONE ( ) -						
CODE	NAME				SEX	RACE		DATE OF BIRTH / /						
ADDITIONAL DESCRIPTION / AKA / MONIKER				HT , "	WT	HAIR		EYES		IN CUSTODY: <input type="checkbox"/> YES <input type="checkbox"/> NO				
ADDRESS				CITY	STATE		ZIP	PHONE ( ) -						
VEHICLE: STOLEN (S)			RECOVERED (R)		ABANDONED (A)		TOWED (T)		VICTIM'S (V)		SUSPECT'S (X)		ADDITIONAL IN NARRATIVE: <input type="checkbox"/> YES <input type="checkbox"/> NO	
CODE	STATE	LICENSE NO.	VEH YR	MAKE		MODEL		STYLE		COLOR				
VEHICLE IDENTIFICATION NUMBER (VIN #)				TOWED BY			TOWED TO			NAME OF REQUESTOR / AGENCY				
PROPERTY: STOLEN (S) - LOST (L) - DAMAGED (D) - FOUND (F) - SAFEKEEPING (K) - RECOVERED (R)								ADDITIONAL IN NARRATIVE: <input type="checkbox"/> YES <input type="checkbox"/> NO						
CODE	QTY	ITEM			BRAND				MODEL / STYLE					
SERIAL #					ENGRAVINGS / PECULIARITIES									
COLOR				SIZE				VALUE						

CODE	QTY	ITEM	BRAND	MODEL / STYLE
SERIAL #			ENGRAVINGS / PECULIARITIES	
COLOR		SIZE	VALUE	
REPORTING SECURITY SPECIALIST Swanson	PS ID #: 25629	SHIFT NIGHT	ASSIGNMENT ON-SITE PATROL	SUPERVISOR'S SIGNATURE
<b>PORTLAND WATER BUREAU</b>				PAGE
<b>OFFICE OF SECURITY &amp; EMERGENCY MANAGEMENT NARRATIVE PAGE</b>				<b>2 OF 8</b>
WATER BUREAU INCIDENT # 12-WB217			OTHER AGENCY INCIDENT # PPB 12-45565	
<b>NARRATIVE- THE ORDER OF APPEARANCE INFORMATION WILL BE:</b>				
<b>ITEM 1: ADDITIONAL PERSON INFO</b> - List additional people (not suspects) and identify their involvement with the appropriate code. Additional person info includes contacts.				
<b>ITEM 2: ADDITIONAL SUSPECT INFO</b> - List additional suspect info in the same fashion as reported in the suspect section. Include the identifying code.				
<b>ITEM 3: ADDITIONAL VEHICLE INFO</b> - List additional vehicles in the same fashion as reported in the vehicle section. Include the identifying code.				
<b>ITEM 4: ADDITIONAL PROPERTY INFO</b> - List additional properties in the same fashion as reported in the property section. Include the identifying code.				
<b>ITEM 5: OTHER INFO</b> - List other information not listed in the person, suspect, vehicle and property sections. Include the identifying code.				
<b>ITEM 6: NARRATIVE</b> - List in chronological order all of the relevant details of the incident and / or element of the crime.				



ITEM	NARRATIVE
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6. On 5/28/12 at 0402 hours, while on routine patrol checking Reservoir # 7, I noticed someone had removed the door to the outbuilding (which I'm told belongs to the Parks Bureau). I exited the vehicle to investigate further and noticed someone had turned on two inside water spigots full force causing the building and building entryway to flood. I turned the building interior light on and turned off the water, then notified Ranger Dispatch and the Water Control Center (WCC). The water was about ten inches deep at the entryway and inside the building before it abated. Ranger dispatch also told me he would notify the Ranger DRC (Roger Hediger, 601) and that Lead Ranger Farrell (610) and Ranger Williams (629) were enroute from Washington Park to assist as well, arriving at 0427 hours. We noticed the access hatch gasket to Reservoir # 7 had also been disturbed and was exposed on one side, then noticed the padlock (10M86) normally securing that hatch was missing, leaving the reservoir unsecure. There were fresh cut marks on the metal hasp that held the padlock in place, but we could not find that padlock anywhere. We opened the hatch and shined our flashlights into the opening, down through the water in the reservoir, and could see several items that had been thrown into the reservoir -- several traffic cones, conduit pipe, a hose and other miscellaneous items -- which we surmised had likely originally been inside the outbuilding. Near the inner hatch opening, several feet below the outer hatch lid, we noticed a chunk of turf and what we believed to be a piece of the missing door resting on the edge of that second opening. It should be noted that we were unable to find the missing door in its entirety laying anywhere on the adjacent grounds and suspected the rest of the door might have been broken in several pieces and disposed of into the reservoir as well. Once we determined that the reservoir had been violated, we recontacted the WCC so that he could notify the Operations DRC (Andrew Degner) and take the reservoir off-line. Also, just to the south of the violated outbuilding, we noticed a buried valve box was missing its cover, pried open with a tree stick laying next to the box. We contacted Portland Police Bureau (PPB) to file a report and at 0523 hours, Officer Joseph Cook (#48042) arrived on scene. We examined the evidence further and found the pried-off padlock (Z-34 Parks lock) half-buried in the mud near the outbuilding entrance and pry marks on the left door jamb. On the right door jamb were the hinges and remnants of the wood from the door hanging off some of the hinge screws. I observed two beer cans and a beer bottle lying nearby, but we deduced they probably had nothing to do with this crime since they were partially obscured by the taller grass growing next to the building and the concrete reservoir cover. Officer Cook notified police dispatch of his observations and provided me with a case number -- PPB 12-45565. Ranger dispatch further informed us that others up the chain of command were notified as well as the Water Bureau Public Information Officer (PIO) and the WCC notified us that the active reservoir would be taken offline. After concluding our investigation and securing the Reservoir # 7 hatch with a temporary padlock (3033) and placing a barricade in the doorway of the unsecure outbuilding, Rangers Farrell, Williams and I along with Officer Cook, cleared from the scene at 0600 hours. My previous check of Reservoir # 7 had been at 0111 hours, and everything in this area was secure at that time, so this crime occurred sometime between 0111 hours and 0400 hours. I informed the relief ranger about the incident and told him we would need to keep a close eye on the outbuilding until the Parks Bureau could replace the missing door.

I wish to include additional information that may relate to this incident. There were numerous individuals in the park during the morning hours. Earlier in the morning around 0200 hours, near Gatehouse # 5, I contacted an Asian male, 5-8, medium build, with shoulder-length black hair and carrying a backpack, and gave him directions out of the park. I followed up by observing the monitors, and finally, at least twenty-thirty minutes after this contact, I observed him exit on the stairs leading to Harrison St. near Reservoir # 1, so he lingered somewhere in the park after my contact with him. At 0325 hours, I headed to Reservoir # 6 for patrol in the security vehicle. While on the access roadway just above the Reservoir # 1 Screenhouse, I encountered a WM, late 20's or early 30's, short brown hair and trimmed goatee, bicycle helmet worn over a dark knit cap, about 5-10, medium build, jeans, dark-colored jacket, on the hillside next to the access road. As I approached, he jumped off the hillside bank to retrieve his bicycle which was partially laying in the roadway. I informed him that the park was closed and that he needed to have lights on his bicycle for safety. I continued on my patrol to Reservoir # 6 and completed my patrol and returned to Reservoir # 1 to patrol that reservoir on foot. When I exited the vehicle, I heard some noise from the southeast corner of the reservoir. I walked down the gravel road on the south side of the reservoir and out from the darkness, I observed that same bicyclist emerge, this time riding his bicycle approaching me on the gravel road. I made a second contact with this male (about 15-20 minutes after initial contact -- he should have been out of the park by that time) and he gave me a story that he had stashed his bicycle panniers so he could lock up his bicycle and have a secure place for his belongings and meet up with friends elsewhere in the park. The story seemed strange, but I told him he could check at our gatehouse at Reservoir # 5 in the coming days to see if anyone had turned them in. He thanked me and rode off. At the same time, below my location at Reservoir # 1, on Harrison Street, I noticed some brake lights from an automobile that had parked along the curb near our Harrison gate. Because trees below blocked my view somewhat, I was not able to get a vehicle description, but I noticed four individuals -- two white males and two white females all appearing to be of average height and weight -- were standing in the middle of the street talking and laughing. Then I noticed one of the males was rolling what appeared to be a large truck tire and it flopped on its side in the middle of the street. Next I observed him lift the tire onto its tread and roll the tire down the steps that lead to the end of 69<sup>th</sup> Ave. as the group laughed with glee. I heard the tire hit something at the bottom of the hill and, as I headed down the steps to Harrison Street, the group had already exited the area in their vehicle. I notified Ranger Dispatch to contact PPB. Once I got to Harrison Street, I looked at the bottom of the hill and saw the tire resting on its side at the bottom of the steps next to an elevated manhole cover, apparently causing no damage to person or property. Could these four individuals or the cyclist or the Asian male been associated with what happened at Reservoir # 7? I include this additional information that might be helpful in case we have future criminal activity in which suspects are apprehended.

**Moore-Love, Karla**

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 10:05 PM  
**To:** Council Clerk – Testimony; Hales, Mayor; Fritz, Amanda; Howard, Patti; Steve Novick; Saltzman, Dan; Commissioner Fish  
**Subject:** Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project

To: Portland City Council

**Re:Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project**

From: Floy Jones on behalf of Friends of the Reservoirs

One of unique public health risks associated with covered storage is cancer-causing Nitrification, a problem the PWB has begun expending public resources to address as was presented to at a wholesale customer meeting where I was present. In response to the submission of the AWWA article addressing Nitrification submitted in the Washington Park demolition LU case, the PWB misleadingly suggested that this only related to L.A. when indeed it is a problem that develops in the absence of sunlight, in covered storage, in systems that chloraminate as does Portland.

Los Angeles had to address the public health risk from Nitrification after covering its open reservoirs and as the article suggests in an attempt to address this public health risk, L.A. is experimenting with installation of UV radiation bulbs inside the covered storage tanks, creating yet another public health risk from Mercury contamination of the water supply.

[http://www.ladwpnews.com/posted/1475/Opflow\\_Nitrification.523459.pdf](http://www.ladwpnews.com/posted/1475/Opflow_Nitrification.523459.pdf) (attached under separate cover)

The above American Water Work Association article addresses experimental actions that LA undertook to address the covered storage public health issue of Nitrification.

Disconnection of the Tabor reservoirs and/or demolition of the Washington Park Reservoirs does not support protection of public health as doing so creates new and unique public health risks associated with covered storage.

## Moore-Love, Karla

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**From:** floy jones <floy21@msn.com>  
**Sent:** Wednesday, May 27, 2015 10:55 PM  
**To:** Council Clerk – Testimony; Hales, Mayor  
**Subject:** Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project  
**Attachments:** Council ltr 2015.odt; Gov Brown-Reservoir action.pdf

To: Portland City Council

Re:

**Case file # LU 14-218444 HR, Mt. Tabor Reservoirs Disconnection Project**

From: Floy Jones on behalf of Friends of the Reservoirs

Attached for the record are:

- 1) April 19, 2015 Friends of the Reservoirs letter to City Council advising the results of an Oregon Health Authority public records request that revealed the reasons for the failure of the deferral request as compared to Rochester's successful 10-year deferral of "treat or cover" reservoir projects.
- 2) March 2015 Friends of the Reservoirs letter to Governor Brown requesting her assistance as the head of the Oregon Health Authority, the agency with Primacy over the onerous LT2, in securing a deferral of Reservoir "treat or cover" projects. As reported by the Oregonian Governor Brown sent the letter on to the Oregon Health.

We all know that Governor Brown will not take any further action to support community interests without City Council taking action. This is the same response stakeholders heard from Senator Merkley. Merkley told us that City Council must first act in support of its citizenry before he can join Senator Chuck Schumer and others in pursuit of reinstatement of the "risk mitigation" reservoir option as part of the underway review and revision of the LT2 rule.

Dear Mayor Hales and Commissioners Fish, Fritz, Novick and Saltzman,

While the Portland Water Bureau has written many bad chapters over the last several decades related to their pursuit of highly controversial, costly and unnecessary reservoir and treatment plant engineering projects, there remains opportunity for City Council to write a much better end chapter—**an opportunity to positively support community interests over corporate interests**. City Council can immediately put on hold the current Mt. Tabor reservoir disconnection project and the Washington Park reservoir demolition project.

As you know, in light of Senator Chuck Schumer's success with forcing the EPA to include LT2 review and revision as part of EPA's compliance with Obama's Executive Order 13563 (requiring agencies to review, revise and repeal onerous regulations), EPA has committed to complete their LT2 review and revision by the end of 2016. We offer a multi-pronged approach such that the community can see the result of EPA's LT2 review and revision before any unnecessary "cutting and plugging" of pipes takes place at Mt. Tabor and before City Council takes any Land Use steps to support demolition of the historic and fully functional open reservoirs at Washington Park.

The first prong of this new approach would be to work with the Oregon Health Authority (OHA) to approve a "temporary" disconnection of the Mt. Tabor reservoirs, thus meeting the Water Bureau's self-imposed December 2015 Tabor compliance deadline, and avoiding the unsupported and degrading "cutting and plugging" of pipes throughout Mt. Tabor park. The OHA has already approved (5 years ago) a "temporary" disconnection of a Tabor reservoir, allowing the Water Bureau to keep Tabor's Reservoir 6 offline since September 2010. A similar "temporary" disconnection of all of the reservoirs at Mt. Tabor would not only avoid all of the "cutting and plugging" of pipes throughout the park but would also provide opportunity for Oregon's Congressional delegation to join forces with Senator Schumer and others to reinstate the "risk mitigation" reservoir compliance option included in the draft EPA rule but inexplicably removed from the "onerous" final EPA rule. Senator Merkley has advised community stakeholders many times that he would join forces with

Senator Schumer and others, if Portland City Council secured a deferral or other such alternative.

Concurrently, Portland would collaborate with the Oregon Health Authority to secure a deferral of the Water Bureau's self-imposed timeline of compliance with LT2. As confirmed by the Oregonian, our new Governor has asked the Oregon Health Authority to review the community request for a deferral, but as we know, there will be no further supportive action without the active support of the Portland City Council.

A Friends of the Reservoirs public records request of OHA's documents and communications related to Commissioner Novick's 2013 reservoir deferral request revealed that:

1. David Leland confirmed in an internal e-mail that there is no limit to the number of times a request for deferral can be made.
2. The Portland Water Bureau failed to provide necessary supportive documents to back up that deferral request.
3. The Portland Water Bureau used a surrogate to send the message to OHA that the Water Bureau wanted to proceed with build projects. Dave Leland stated, "... now we know what the Water Bureau wants." (This messenger is the same person Mayor Katz publicly chastized at the 2004 Reservoir Panel Council meeting when that person admitted to anonymously contacting the Urban League member at the end of the 3 months of panel work.)

There was no collaboration between the City of Portland and OHA, as was the case between the Rochester water department and their health authority when Rochester successfully secured a 10-year deferral of their low-cost plan to install UV bulbs in their 1876 open reservoirs which are also set in city parks. Portland failed to engage in any follow-up advocacy or lobbying to secure a deferral. Portland did not request meetings, submit subsequent e-mails or make phone calls advocating for approval of the deferral.

1. David Leland confirmed in an internal e-mail that there is no limit to the number of times a request for a deferral can be made.

3. The Portland Water Bureau used a surrogate to send the message to OHA that they wanted to proceed with build projects. Dave Leland stated, "... now we know what the Water Bureau wants." (This messenger is the same person Mayor Katz publicly chastised at the 2004 Reservoir Panel Council meeting when that person admitted to anonymously contacting the Urban League member at the end of the 3 months of panel work.)

4. There was no proactive collaboration between the City of Portland and OHA, as was the case between the Rochester water department and their health authority when Rochester successfully secured a 10-year deferral of their low-cost compliance plan for their 1876 open reservoirs, which are also set in city parks. Portland failed to engage in any follow-up advocacy or lobbying to secure a deferral such as Rochester's. A relevant aside to this point is that even if the EPA fails to revise the onerous unsupported requirements, Rochester plans on retaining their historic open reservoirs as functional open reservoirs spending but \$22 million to add UV bulbs, which makes clear that lower costs options exist if the utility works in service of community interests.

We request that the Portland City Council direct the Portland Water Bureau to prepare a deferral request that will succeed. The City must then collaborate with OHA, engaging the support of our Governor such that the decision is not made by low level OHA bureaucrats. OHA internal communications revealed that then Director Goldberg was supportive of finding alternatives to enforcing the fast-track compliance schedule, but Dave Leland, who led the decision-making process was not. With a deferral the Congressional delegation can then join forces with others to ensure that the revised EPA rule reinstates the "risk mitigation" option and that Cryptosporidium sampling distinguishes the majority harmless species from the few harmful species.

With regard to the demolition of the Washington Park reservoirs, the current process has not fulfilled the Demolition Land Use requirement "...*that there is an opportunity for the community to fully consider alternatives to demolition.*" The community has never been afforded a meaningful opportunity to fully consider the multiple alternatives to demolition of the Washington Park reservoirs, a project that is scheduled to last four years. Further, Council Resolution No. 36237 requires that stakeholders be brought together utilizing the *City's adopted Principles of Good Public Involvement* in any action related to the open reservoirs. The Water Bureau explicitly defied this Council ordinance. At the Historic



Landmark Commission (HLC) meeting the PWB lead engineer on this project refused to respond to a member's question as to why the unneeded storage wasn't being built elsewhere. As explained by the Water Bureau to the HLC, the current project will result in four years of zero water storage at Washington Park. This HLC member expressed that clearly, there is no reason to demolish these significant historic assets.

LT2 compliance can be achieved in alternate ways. A new *Independent* Reservoir Panel should be convened, one that does not exclude stakeholders such as Friends of the Reservoirs, to fully consider the many alternatives to demolition. Fully preserving the well functioning and irreplaceable reservoirs at Washington Park preserves Portland's heritage, beautifies the city, enhances civic identity, and supports economic vitality by recognizing and maintaining the significant investments made at the reservoirs since 2002 and avoiding the waste of \$80 million associated with demolition and construction.

We implore the City Council to support and take immediate action on our request to put these two massive projects on hold and pursue these recommendations so that there will be a better ending to this decades long struggle between our City administrators and the citizens and ratepayers of Portland. Portland's ratepayers would also fully appreciate a reprieve or even stabilization of our unsustainable water rates.

Dear Mayor Hales and Commissioners Fish, Fritz, Novick and Saltzman,

While the Portland Water Bureau has written many bad chapters over the last several decades related to their pursuit of highly controversial, costly and unnecessary reservoir and treatment plant engineering projects, there remains opportunity for City Council to write a much better end chapter, an opportunity to actively support community interests over corporate interests. City Council can put on hold the current Mt. Tabor reservoir disconnection project and the Washington Park reservoir demolition project.

As you know, in light of Senator Chuck Schumer's success in forcing the EPA to include LT2 review and revision as part of EPA's compliance with Obama's Executive Order

13563 (requiring agencies to review, revise and repeal onerous regulations), EPA has committed to complete their LT2 review and revision by the end of 2016. We offer a multi-pronged approach such that the community can see the result of EPA's LT2 review and revision before any unnecessary "cutting and plugging" of pipes takes place at Mt. Tabor and before City Council takes any Land Use step to support demolition of the historic and fully functional open reservoirs at Washington Park.

One new way to approach the problem would be to work with the Oregon Health Authority (OHA) to approve a "temporary" disconnection of the Mt. Tabor reservoirs, thus meeting the Water Bureau's self-imposed December 2015 Tabor compliance deadline, while avoiding the unsupported and degrading "cutting and plugging" of pipes throughout Mt. Tabor park. The OHA has already approved a "temporary" disconnection of a Tabor reservoir, one that has gone on for 5 years, allowing the Water Bureau to keep Tabor's Reservoir 6 offline since September 2010 . A similar "temporary" disconnection of all of the reservoirs at Mt. Tabor not only would avoid all of the "cutting and plugging" of pipes throughout the park but provide opportunity for Oregon's Congressional delegation to join forces with Senator Schumer and others to reinstate the "risk mitigation" reservoir compliance option included in the draft rule but inexplicably removed from the "onerous" final. Senator Merkley has often advised community stakeholders that he would join forces with Senator Schumer and others, if Portland City Council secured a deferral or other such alternative.

With regard to the demolition of the Washington Park reservoirs, the current process has not fulfilled the Demolition Land Use requirement "*...that there is an opportunity for the community to fully consider alternatives to demolition.*" The community has never been afforded opportunity to fully consider alternatives (and there are many) to demolition of the Washington Park reservoirs, a project that is scheduled to go on for four years. Further, Council Resolution No. 36237 requires that stakeholders be brought together utilizing the *City's adopted Principles of Good Public Involvement* in any action related to the open reservoirs. The Water Bureau explicitly defied that Council ordinance and at the Historic Landmark Commission meeting on \_\_\_\_\_ refusing to respond to a members question as to why the unneeded new storage tank isn't being built elsewhere thus avoiding demolition of the most significant historical elements of the reservoirs. In that the current plan as

explained by the Water Bureau to the Historic Landmark Commission will result in four years of zero water storage at Washington Park, as was expressed by the Historic Landmark Commission member, there is clearly no reason to demolish these significant assets. LT2 compliance can be achieved in alternate ways. A new *Independent* Reservoir Panel should be convened, one that does not exclude stakeholders such as Friends of the Reservoirs (as was the intent of Council Resolution 36337, to fully consider the many alternatives to demolition. Fully preserving the well functioning and irreplaceable reservoirs at Washington Park preserves Portland's heritage, beautifies the city, enhances civic identity, and supports economic vitality by preserving the significant investments made at the reservoirs since 2002, and avoiding the waste of \$80 million associated with demolition and construction.

Concurrently, Portland must collaborate with the Oregon Health Authority to secure a deferral of the self-imposed compliance timeline. As confirmed by the Oregonian, our new Governor has asked the Oregon Health Authority to review the community request for a deferral, but as we know, there will be no further supportive action without the active support of the Portland City Council.

A Friends of the Reservoirs public records request of OHA's documents and communications related to Commissioner Novick's 2013 reservoir deferral request revealed the following including:

4. David Leland confirmed in an internal e-mail that there is no limit to the number of times a request for deferral can be made.
5. The Portland Water Bureau failed to provide necessary supportive documents to back up that deferral request.
6. The Portland Water Bureau used a surrogate to send the message to OHA that the Water Bureau wanted to proceed with build projects. Dave Leland stated, "... now we know what the Water Bureau wants." (This messenger is the same person Mayor Katz publicly chastized at the 2004 Reservoir Panel Council meeting when that person admitted to anonymously contacting the Urban League member at the end of the 3 months of panel work.)
7. There was no collaboration between the City of Portland and OHA, as was the case between the Rochester water department and their health authority when Rochester

successfully secured a 10– year deferral of their low–cost plan to install UV bulbs in their 1876 open reservoirs which are also set in city parks. Portland failed to engage in any follow–up advocacy or lobbying to secure a deferral. Portland did not request meetings, submit subsequent e–mails or make phone calls advocating for approval of the deferral.

We request that the Portland City Council direct the Portland Water Bureau to to prepare a deferral request that will succeed. The city must then collaborate with OHA, engaging the support of our Governor such that the decision is not made by low level OHA bureaucrats. OHA internal communications revealed that then Director Goldberg was supportive of finding alternatives to enforcing the fast–track compliance schedule, but Dave Leland who led the decision–making process was not. With a deferral the Congressional delegation can join forces with others to assure that the revised regulation reinstates the "risk mitigation" option and that Cryptosporidium sampling distinguishes the majority harmless species from the few harmful species.

## Should I End it Here?

In recent months New Jersey's strong interest in new open reservoir compliance options made the news. Their delegation joined NYC in calling for regulatory changes to the onerous regulation. Rochester NY is not pushing forward with projects, they are not spending a dime on "treating or covering" their older historic open reservoirs. Even if the EPA fails to revise the onerous unsupported requirements Rochester plans on retaining their historic open reservoirs as functional open reservoirs spending but \$22 million to add UV bulbs, which makes clear that lower costs options exist if the utility works in service of community interests.

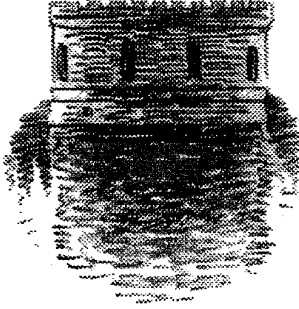
Most of the utilities around the nation were blindsided by this onerous reservoir requirement. Not the Portland Water Bureau as they were the only utility in the nation that was involved, secretly involved in crafting the universally criticized EPA LT2 Cryptosporidium regulation, bringing with them to the table the very consultant whose associated global engineering firms, MWH Global and CH2MHill, have been the beneficiaries of the regulation. Contrary to the recent false statement by the Portland Water Bureau, it is the corporation associated with the 20–year revolving–door consultant

Joe Glicker, CH2MHill, that is responsible for designing the new \$127 million Powell Butte II tank that has 3200 cracks and was leaking 280,000 gallons per day.

Council must consider that in addition to all of the other burdens associated with proceeding with the unsupported reservoir dismantling and demolishing projects, eliminating Portland's open reservoirs will create new and unique cancer-causing public health risks. In EPA papers associated with the Total Coliform rule EPA admits that in promulgating the LT2 reservoir requirements they failed to address Nitrification, a cancer-causing problem that develops in the absence of sunlight- in covered storage tanks. In Portland high Radon levels are found not just in the ground but in Portland's backup ground water source, the Columbia South Shore Wellfield. While Radon entering homes from the ground can be vented Radon entering through drinking water cannot. The vents at the buried Powell Butte tanks are inadequate for venting Radon. Radon will enter homes whenever wellfield water is used for washing dishes, washing clothes, showering, cleaning, and will remain, thus increasing the risk of cancer. These issues are further discussed in Scott Fernandez's scientific report written in support of retaining Portland's open reservoirs.

Please take this opportunity to

[file ends here, clerk note sp]



# FRIENDS *of the* RESERVOIRS

*Citizens joining to protect Portland's historic reservoirs and water system*

3534 S.E. Main Street, Portland, OR 97214      [www.friendsofreservoirs.org](http://www.friendsofreservoirs.org)

[www.lists.pdx.edu/mttabor](http://www.lists.pdx.edu/mttabor)

March 2, 2015  
Sent by e-mail 3/3/15

Governor Brown  
State Capital Building  
900 Court Street NE  
Salem, OR 97301

Dear Governor Kate Brown,

Welcome to your new position as Oregon's 38th Governor. We applaud your efforts to improve government transparency, reform public records laws, and address conflicts of interest. [Conflicts of interest](#), [revolving-door consultants](#), cronyism, and stonewalling release of public records are problems that have long led to a lack of public trust in the Portland Water Bureau. We write as we are at the precipice: at stake is the imminent dismantling and demolition of Portland's historic open reservoirs to "save" the public from a public health threat (infection from *Cryptosporidium*) that does not exist in Portland's water.

As head of the Oregon Health Authority (OHA) you have the power to intervene on behalf of the citizens of Portland directing OHA administrators to approve a [City of Portland deferral](#) of the Mt. Tabor disconnection and Washington Park demolition projects. Taking such action will provide opportunity for members of Oregon's Congressional delegation to join forces with New York, New Jersey and others to lobby EPA to revise the unsupported "treat or cover" requirement of the onerous Long-Term2 Enhanced Surface Water (LT2) regulation. Senator Merkley and Congressman Blumenauer both have asked OHA to support a deferral. Thanks to New York's Senator Schumer EPA included LT2 as part of **President Obama's Executive Order 13563** ([Link here](#)) to review, revise, and repeal onerous regulations. EPA has committed to completing its LT2 review and revision by the end of 2016, but the Portland Water Bureau's negotiated 2009 compliance plan has the Mt. Tabor reservoirs disconnected by December 2015 with work on the costly demolition of the Washington Park reservoirs proceeding ahead of schedule.

The community's preferred course of action is for you, Governor Brown, to direct the Oregon Health Authority to adjust compliance deadlines in line with those of Rochester, NY as proposed by the City of Portland or better yet in line with New York's DEP's deferral until 2034. Alternatively, a new way to approach the problem would be to direct the Oregon Health Authority to approve a "temporary" disconnection of the Mt. Tabor reservoirs. In this manner, Portland could stop serving drinking water from the Tabor reservoirs by December 2015, the current negotiated deadline, but avoid the aggressive digging, cutting and plugging of pipes before we are able to review EPA's revision of the LT2 regulation. As we have seen at Mt. Tabor's Reservoir 6, the Oregon Health Authority has allowed a "temporary" disconnection to be employed, without cutting and plugging of pipes, to go on for 5 years, since September 2010. This approach would provide opportunity for Oregon's Congressional delegation to actively work on revision of the regulation's reservoir requirements.

In 2012 a broad coalition of community stakeholders wrote to Governor Kitzhaber asking for his help (letter attached). Governor Kitzhaber failed to respond. Had he intervened Portland

ratepayers could have saved over \$160 million short-term and hundreds of millions more long-term. A secured delay could afford ratepayers savings well beyond the \$70 million pricetag associated with the Tabor disconnect and Washington Park demoliton.

The city of Portland has made significant investments in functional open reservoir upgrades closing out a \$23 million contract in late 2011. One of the tasks assigned a consultant studying the open reservoirs over a 9-year period was to outline [projects](#) necessary to keep the open reservoirs safely operating for another 50 years. The overwhelming majority of these projects were completed over the last 11 years under 4 contracts totaling \$40 million, financed by 25-year revenue bonds. Is it judicious to first pay to upgrade the reservoirs only then to pay to disconnect, demolish and replace them?

EPA never gathered any national data on reservoirs, covered or uncovered, to support the LT2 rule. Data collected at Portland's open reservoirs as part of the scientific #3021 study by the Water Research Foundation (WRF, formerly the American Water Association Research Foundation) demonstrates that Portland's system has zero detections of *Cryptosporidium* in our open-air reservoirs. (See [City of Portland](#) and [Water Research Foundation](#) attachments.) The WRF #3021 study concluded that all participating utilities already meet the goal of the rule based on statistically significant sampling. There is zero evidence of water-borne disease derived from the Bull Run system in the community it serves.

As we advised Governor Kitzhaber Rochester, New York has two historic open reservoirs set in city parks and as noted in Portland's last deferral application Rochester secured a deferral of reservoir projects until 2022. In his letter to the EPA , the Mayor of Rochester stated, "people rightly demand that public funds be judiciously spent" arguing that spending money to "treat or cover" open reservoirs was not a good use of public funds, given the lack of measurable public health benefit. Rochester has no plans to build underground tanks or cover their historic open reservoirs even if the EPA fails to revise the onerous reservoir requirement. Instead, Rochester would install UV bulbs, spending less than 10% of what Portland is spending, less than what Portland recently spent on open reservoir upgrades. The City of New York has secured a deferral extended to 2034 and would very likely seek further delay if EPA fails to revise the onerous reservoir requirement. New York's DEP submitted substantial and [detailed comments](#) responsive to Obama's Executive Order 13563, including a section on the need to reform the LT2 rule specific to open reservoirs (pp.8-10). NYC supports, as we do, reinstatement of a "risk mitigation" option included in the 2003 draft rule, but inexplicably removed from the regulation promulgated in 2006.

Portland's Bull Run water system delivers excellent and safe drinking water to residents of Portland and many other communities and has done so for over 100 years. See [letter](#) to Commissioner Randy Leonard from [infectious disease expert Thomas T. Ward, M.D.](#) Also, read the scientific [report](#) by Scott Fernandez.

We appeal to you as the highest authority in the state of Oregon. We trust that you will take action to restore trust in government by bringing rationality and sound science to a public health mandate and stopping the waste of precious public resources. We stand prepared to help you with this effort in any way possible. Thank you so much for your attention to this critical matter.

Sincerely,

Floy Jones on behalf of the Friends of the Reservoirs

Attachments (2)



**Parsons, Susan**

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**From:** Mark Wheeler <mark@rootsrealty.com>  
**Sent:** Tuesday, May 26, 2015 10:48 AM  
**To:** Adam, Hillary; Council Clerk – Testimony  
**Subject:** Land Use Hearing re Disconnection of Mt Tabor Reservoirs - TABLE THE ISSUE UNTIL THE EPA LT2 REPORTS COMPLETED, 2016.

Please follow the recommendations of the Mt Tabor Neighborhood Association & Friends of Reservoirs. We need not rush to dismantle a perfectly functional system. Thanks.

Mark Wheeler  
Mt Tabor  
Portland Voter

**Parsons, Susan**

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**From:** Shemuel Harding <harding@deca-inc.com>  
**Sent:** Friday, May 22, 2015 9:46 AM  
**To:** Council Clerk – Testimony  
**Subject:** LU 14-21844: mt tabor reservoirs - comment letter  
**Attachments:** 2015-04-15\_tabor reservoirs comment letter.pdf

Please see attached comment letter from the South Tabor Neighborhood Association regarding this land use case.

Thanks,

Shem Harding  
Land Use Chair, South Tabor Neighborhood Association



## South Tabor Neighborhood Association

April 15, 2015

To: Portland City Council  
Council Clerk  
1121 SW 4<sup>th</sup> Ave, room 140  
Portland, OR 97204

CC: cctestimony@portlandoregon.gov

From: South Tabor Neighborhood Association  
Sandra Hay Magdaleno, President  
Shem Harding, Local Land Use Chair

RE: Case File LU 14-218444 HREN – Mt. Tabor Reservoirs Disconnection

Dear Members of Council,

We are writing to express our opposition to disconnecting the Mt. Tabor Reservoirs from the public drinking water system at Mt. Tabor Park and to state our support for the appeal filed by the Mt. Tabor Neighborhood Association.

The Mt. Tabor Reservoirs are a vital neighborhood amenity and an important piece of Portland History. In addition to providing a wonderful natural recreation area for residents to enjoy, they also help store and cleanse Bull Run Watershed drinking water for the city. Removing the drinking water storage functionality to meet the federal LT2 rule seems wasteful and shortsighted.

As a valued community resource, we feel this reservoir system should be preserved in the long term for the residents of Portland to enjoy and benefit from. Other cities have sought and gained relief from the requirements of the LT2 rule, and we would encourage the City of Portland to do the same.

Because we value this resource, we are joining MTNA in opposing the decision to approve the disconnection. Please give careful consideration to this issue knowing that the long term future of this wonderful public resource is at stake

Sincerely,

South Tabor Neighborhood Association

Sandra Hay Magdaleno, STNA President

Shem Harding, STNA Local Land Use Chair

## Parsons, Susan

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**From:** Stephanie Stewart <stewartstclair@gmail.com>  
**Sent:** Wednesday, May 20, 2015 9:12 AM  
**To:** Council Clerk – Testimony  
**Subject:** case file #LU 14-218444 HREN

### Comments for the Record, case file number LU 14-218444 HREN SHPO responds to Applicant's appeal

**Summary:** The Oregon State Historic Preservation Office (SHPO) responded to Portland Water Bureau's appeal of the Feb 9, 2015 Decision by the Historic Landmarks Commission. Sent via email to Tom Carter (Water Bureau staff), Nicholas Starin (City staff) and the Mt. Tabor Neighborhood Association. Below:

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**From:** ALLEN Jason \* OPRD <[Jason.Allen@oregon.gov](mailto:Jason.Allen@oregon.gov)>  
**Date:** Friday, March 20, 2015 at 1:46 PM  
**To:** Stephanie Stewart <[stewartstclair@gmail.com](mailto:stewartstclair@gmail.com)>  
**Cc:** "Starin, Nicholas" <[Nicholas.Starin@portlandoregon.gov](mailto:Nicholas.Starin@portlandoregon.gov)>, "Carter, Tom" <[Tom.Carter@portlandoregon.gov](mailto:Tom.Carter@portlandoregon.gov)>  
**Subject:** RE: response to appeal? SHPO# 14-0107

Hello Stephanie,

Thank you for attaching the appeal language. I appreciate your questions. The questions you pose below are relevant to all parties involved, and I have received similar questions from others. In order to provide the same information to all those involved, I have copied this email to Nicholas Starin from the Portland City Preservation Planner and Tom Carter from the City of Portland Water Bureau. Any one receiving this email should feel free to forward it to whomever may be interested.

First, to address the question of the parallel reviews, ours under state law, and PLC's under local ordinance. These two regulations and the regulatory bodies that are empowered by them (SHPO by the state law, and HLC by the local ordinance) are entirely different. It is almost universally the case that local regulation is more restrictive than state law, with more powers to intervene, regardless of the city or state we are discussing. In reality, the reviews should be different, otherwise they would be duplicative and a waste of time. If one accepts the theory that democracy is best served when the most specific laws are decided at the most local level possible, with state and federal laws being more general in their application, it follows that local preservation regulation would be more specific (and even more restrictive) than state law.

We would also point out that the City of Portland is a Certified Local Government, which is a federal program designed to encourage local oversight of historic preservation issues. To be a CLG, a city must have local preservation ordinances that are enforceable, have a historic landmarks committee that meets certain qualifications. The State's role in the CLG program is limited to providing funding pass-through funding and providing technical assistance and general support. We do not get involved in questions of application of, or results of local review. We also do not get involved in questions that are outside of our professional qualifications, such as local land use law. Because Portland is a CLG, we expect the HLC to reach decisions based on application of local ordinance, and not to be influenced by SHPO review of the same project under entirely different laws. It is expected that in some cases, SHPO review of a project may result in a finding of no adverse effect, while local review of the same project under local ordinance reaches a different conclusion. To suggest that State review should in any way impact, or trumps local review outcomes, is simply incorrect, and not supported by law or historic preservation best practice. They are two separate processes that should be allowed to play out independently.

Regarding the SHPO's position about water levels in the Reservoirs, our concurrence with a finding of No Adverse Effect was clearly contingent upon the project proponent following through with the scope of work provided to our office for

review. Among those were the proposal (from PWB) that the reservoirs be maintained with water in them at normal operating depth, draining them only for routine maintenance and cleaning. This is reflected in my email to Eileen Brady, who also contacted our office with the same question. Here is a brief excerpt of my response:

Our office found no adverse effect based on the latest proposal from Water Bureau, which includes the retention of water in the reservoirs as a condition of approval. If the project does not result in the retention of water in the reservoirs, we would be able to re-open the case and find an adverse effect at that point. This has been made clear to Water Bureau, and is implicit in our finding.

With that having been said, if the HLC wishes to place further conditions on this to ensure that it is done, such as a limit on the number of calendar days in a year that the reservoirs can be empty, as has been proposed, that is their prerogative. With a fuller understanding of local issues, we trust the local review authority to make informed and appropriate decisions based on the authority granted them by local ordinance. The same is true with regard to PWB official acceptance of the 2009 report. If HLC feels it is important that this happen, our office trusts that decision.

Finally, I would like to be very clear that our office supports all processes, regulations, or projects that result in positive outcomes for the preservation of historic resources. While our role in influencing outcomes is limited by the regulations that empower our office, we would support any plan to restore, maintain, and preserve in perpetuity historic resources, regardless of our regulatory authority.

Cheers,  
-Jason

Jason M. Allen, M.A.  
Historic Preservation Specialist  
Oregon State Historic Preservation Office  
725 Summer St. NE Ste C  
Salem, OR 97301  
503.986.0579  
[Jason.allen@oregon.gov](mailto:Jason.allen@oregon.gov)

\*\*\*\*My email address has changed! Please note the new email address in your email contacts list\*\*\*\*  
.....

Stephanie Stewart  
MTNA land use  
1121 SE 50th Ave; Portland, OR 97215

**Parsons, Susan**

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**From:** a west <agentsassysquirrel@hotmail.com>  
**Sent:** Wednesday, May 13, 2015 5:43 PM  
**To:** Council Clerk – Testimony  
**Subject:** Preserve Mt Tabor Reservoirs

To whom it may concern,

I am writing to ask that our beautiful functional historic reservoirs and the park they live in be preserved for today and future generations.

Thank you.

Sincerely,  
Alice West  
1237 SE 53rd Ave  
Portland OR 97215  
971-219-5931

## Moore-Love, Karla

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**From:** Christine Yun <cpypdx@gmail.com>  
**Sent:** Thursday, April 30, 2015 1:12 PM  
**To:** Moore-Love, Karla; Hales, Mayor; Commissioner Fritz; Commissioner Fish; Commissioner Saltzman; Commissioner Novick  
**Subject:** DO NOT dismantle the Mt. Tabor Reservoirs

Dear Ms. Moore,

Please enter the following comments into the record.

Dear City Council:

While I do not know all the official language regarding regulations for making these reservoirs compliant with EPA regulations, I do know that the City has not done everything it could to file for extensions or to contest the regulations as the City of New York and other municipalities have done.

In the interest of preserving our good-tasting water and going with a low-tech water delivery system that will require fewer maintenance dollars down the road, the City would be acting in the best interest of its treasury, its citizens and its historic cultural resources. The current path is NOT acting in the best interest of finances nor residents nor preserving our historic resources.

It is not too late to change your minds and reverse all the damage that has been done. No amount of dollars already spent can serve as justification for moving forward with an ill-conceived project that will cause further problems and expense down the road and destroys an integral part of Portland historic culture.

Yours sincerely,

Christine Yun  
1915 SE Alder St.  
Portland, OR 97214



**Moore-Love, Karla**

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**From:** Carol <carolmcc@amerimailbox.com>  
**Sent:** Thursday, April 30, 2015 1:05 PM  
**To:** Moore-Love, Karla  
**Subject:** Do Not Disconnect the Reservoirs

Dear Karla,

I am writing as a private citizen to request that the the open reservoirs at Mt. Tabor and Washington Park remain connected to our water supply system. Both the Multnomah Neighborhood and SWNI have requested that the City keep the reservoirs connected.

In my opinion this Goal 9 has not been met. The general public would be city wide since this park belongs to the public and the water delivery system concerns mentioned are of city wide public interest. Meetings in Mt. Tabor and Arlington are not adequate for these major changes, our drinking water and parks. East Portland, North Portland, SW and all those who drink Bull Run Water are stakeholders and should have been notified and had meetings to discuss alternatives and that their drinking water and public health is at stake.

The Federal Safe Drinking Water Act indicates that residents need to know of any change in their water.

The EPA LT2 drinking water regulations is being reviewed into 2016 so there is time to stop the destruction and disconnecting our open reservoirs. New York City and other utilities in New York, along with New Jersey are now in discussion with EPA. Furthermore, the City of Portland has received scientific evidence to support an EPA LT2 wavier.

It is worth pointing out once again that the City does not need to rush to complete this project. In a letter to MTNA Chair Stephanie Stewart from Eric Winiecki, Drinking Water Enforcement Coordinator of the EPA, he reiterated that there is NO federal deadline to disconnect the reservoirs. The City can submit a new timeline to the OHA, containing a more responsible and community-approved mitigation plan.

And, like Mt Tabor Park, there are significant land ownership laws that are being brushed aside in the haste to get these corporate contracts underway. Both Mt Tabor and Washington Park consist of numerous different lots owned by either Portland Water Bureau (Ratepayers) or Portland Parks and Recreation (Taxpayers). Both projects have PWB doing work and building infrastructure on land owned by PPR. Yet, no transfers of deeds, consolidations, easements, or anything has been obtained or recorded. If PWB ratepayers intend to build projects on land owned by city taxpayers, it needs to compensate the public. This has been repeatedly brought to the attention of all parties by PWB's engineering surveyors, and the

city's own legal council, but these facts seem to be ignored. To proceed with either project would be, in a word, ILLEGAL. It would be like digging a well on your neighbor's property. Therefore, on this basis alone, this application should be outright denied until these land ownership and deed issues are resolved.

Please add this to the record.

Thank you,  
Carol McCarthy  
4311 SW Freeman St.  
Portland, OR 97219



This email has been checked for viruses by Avast antivirus software.  
[www.avast.com](http://www.avast.com)

## Moore-Love, Karla

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**From:** joan simko <pdxjoan@yahoo.com>  
**Sent:** Sunday, April 19, 2015 7:33 PM  
**To:** Council Clerk – Testimony  
**Subject:** Reservoirs

I firmly believe waiting until the 2016 ruling makes financial and Historic and health sense. Please slow this process down and don't start this awful tear out, expensive and possibly illegal project.  
Joan Simko ( Mt. Tabor resident.)

## Moore-Love, Karla

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**From:** Ning Fu <fun@kiporpowerequipment.com>  
**Sent:** Thursday, April 16, 2015 2:06 PM  
**To:** Council Clerk – Testimony  
**Subject:** LU 14-218444 HREN, Mt. Tabor Reservoirs Disconnection

City Officers,

If you can hear me: Please pursue alternate LT2 compliance strategies and keep our irreplaceable reservoirs in use!

Ning Fu, Esq.  
Corporate Counsel  
**KIPOR POWER EQUIPMENT, INC.**  
13009 SE Jennifer Street, Suite 105  
Clackamas, OR 97015  
Tel: 503 445 0197  
[www.kiporpowerequipment.com](http://www.kiporpowerequipment.com)



## Parsons, Susan

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**From:** Council Clerk – Testimony  
**Sent:** Thursday, April 16, 2015 10:01 AM  
**To:** Beaumont, Kathryn; Crail, Tim; Grumm, Matt; Moore-Love, Karla; Nebel, Erika; Rees, Linly; Robinson, Matthew; Schmanski, Sonia; Adam, Hillary; Heron, Tim  
**Subject:** FW: Land use case number LU 14-218444 HREN = Mt. Tabor

Susan Parsons  
Assistant Council Clerk  
City of Portland  
susan.parsons@portlandoregon.gov  
503.823.4085

-----Original Message-----

**From:** Mark Wheeler [mailto:mark@rootsrealty.com]  
**Sent:** Wednesday, April 15, 2015 5:15 PM  
**To:** Council Clerk – Testimony; Hales, Mayor; noah.siegel@portlandoregon.gov; Commissioner Fish; Schmanski, Sonia; Commissioner Fritz; Howard, Patti; Commissioner Novick; Warner, Chris  
**Subject:** Land use case number LU 14-218444 HREN

Hello,

I am strongly opposed to the dismantling of our functioning reservoir system. However, since it appears money for contractors trumps common sense in this debacle, please:

1. Deny PWB's challenge to conditions B & E.
2. Correct the "scrivener's error" in condition B which states the historic fill levels to be 50-75%, replace with the correct figures of 65-85% and to revise the language to read "the normal historic operation range producing iconic views."
3. Limit the timeline of Condition E's preservation work so as to be concurrent with the timeline of the other construction projects at Mt Tabor, thus minimizing the disruption to park users and the surrounding neighborhoods.
4. Strengthen the HLC's efforts to protect the Mt Tabor assets by requiring PWB to, within 1 year, craft a written, long-range preservation plan (including budget) in concert with SHPO and under a Design Advice Review with the HLC, to be formally adopted by Council.
5. Direct PWB to file for a Conditional Use Review before proceeding further.

Thank you.

Mark Wheeler  
Mt Tabor Citizen, Voter

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:21 PM  
**To:** Jackie Engel  
**Subject:** RE: Mount Tabor Reservoirs

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** Jackie Engel [mailto:jacqengel@yahoo.com]  
**Sent:** Monday, February 23, 2015 12:38 PM  
**To:** Commissioner Fish  
**Subject:** Mount Tabor Reservoirs

Hi Nick,

I am writing to request that you direct the Portland Water Bureau to accept the Landmarks Commission decision from February 9th regarding protection of the Mt Tabor Reservoirs. We need a Commissioner who will stand up and fight for our historic areas and natural parks. The park is a golden treasure to the SE neighborhood. One of the things that makes it so special are the beautiful, water-filled reservoirs. We need to protect the reservoirs, as well as the natural habitat of the park, which is home to numerous different birds, and other animals.

Environmental and wildlife concerns are on the top of my list when choosing and voting for candidates. I think many others in Portland feel the same way. Please be the advocate that we believed you were when we voted you into office.

Sincerely,  
Jacqueline Engel, Naturopathic Doctor



**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:21 PM  
**To:** Jacque Rodriguez  
**Subject:** RE: Reservoirs

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** Jacque Rodriguez [mailto:jacquer777@hotmail.com]  
**Sent:** Monday, February 23, 2015 10:48 AM  
**To:** Commissioner Fish  
**Subject:** Reservoirs

Hello Mr. Fish,

Please direct the Portland Water Bureau to accept the Landmarks Commission decision from February 9th – "Do not appeal!"

**Sincerely,**  
**Jacque Rodriguez**

Portland State University student

SSLC (Student Sustainability Leadership Council)

Secretary  
Surfrider Foundation Portland Chapter

Facebook Fan Page Admin  
Surfrider Foundation & Snowrider Foundation- Portland Chapter

Beach Captain (Devils Punchbowl since 2010)  
Spring and Fall Beach Cleanups  
SOLVE

Volunteer/Advocate  
Clean Water Portland

**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:20 PM  
**To:** Rhys Thomas  
**Subject:** RE: Howdy - water bureau issue

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** Rhys Thomas [mailto:jugglemania@me.com]  
**Sent:** Monday, February 23, 2015 9:41 AM  
**To:** Commissioner Fish  
**Subject:** Howdy - water bureau issue

Howdy,  
Please represent my concerns by directing the Water Bureau to NOT appeal the Landmarks Commission decision of Feb. 9.  
Please do what you can to preserve the reservoirs in all their historic beauty.  
Thank You,

Rhys Thomas  
6647 NE Going St.

Portland, OR 97218

**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:20 PM  
**To:** Chris Berrie  
**Subject:** RE: Preserve the Reservoirs

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

Jennifer Kalez  
Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish

-----Original Message-----

**From:** Chris Berrie [mailto:keeks54@gmail.com]  
**Sent:** Sunday, February 22, 2015 7:50 PM  
**To:** Commissioner Fish  
**Subject:** Preserve the Reservoirs

Please direct the PWB to accept and not appeal the Landmarks Commission decision from February 9. Preserve and protect Portland's historic resources. Honor the will of your constituents.

**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:20 PM  
**To:** malangoc  
**Subject:** RE: reservoirs, accept the Historic Landmark's decision

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

Jennifer Kalez  
Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish

-----Original Message-----

**From:** malangoc [mailto:luckyus\_5@msn.com]  
**Sent:** Saturday, February 21, 2015 11:31 PM  
**To:** Commissioner Fish  
**Subject:** reservoirs, accept the Historic Landmark's decision

Dear Nick Fish,

I am writing to urge you to direct the Portland Water Bureau to accept the Historic Landmark's Commission's decision of 2/9/15 regarding the Mt Tabor reservoirs. Do not appeal this decision, please. I believe it is the best thing for Mt Tabor Park and for the neighborhood.

Christina Malango  
2316 SE 52nd Ave  
Portland, OR 97215  
503-267-6385

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:20 PM  
**To:** Anya Kroth  
**Subject:** RE: Accept the Feb 9th Landmarks Commission decision

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** Anya Kroth [mailto:anya4yoga@yahoo.com]  
**Sent:** Saturday, February 21, 2015 11:21 AM  
**To:** Commissioner Fish  
**Subject:** Accept the Feb 9th Landmarks Commission decision

Dear Mr. Nick Fish,

I saw a documentary last year, Y Lluvia También (Even the rain) about the efforts of US corporations to privatize water in Bolivia. Privatize even the rain!!! People of Bolivia fought for their water and they won.



Please don't turn Portland into a city in a third world country. Don't turn Portland, one of the most progressive cities, into a most retrograde cities. Portland is the country's leader in many admirable causes. Let us continue to look up to you.

Please, stop the Portland Water Bureau from taking backward steps, and waste the good money spent for a great cause. "consultant reports indicate that the upgrades would keep the reservoirs safely operating for 50 years."

Please direct the Portland Water Bureau to accept the Landmarks Commission decision from February 9<sup>th</sup>. Also, please direct the Water Bureau to avoid their plan to cut and plug pipes throughout Mt. Tabor park. Reservoir 6 on 60th has been "offline" (not delivering drinking water) without any "cutting and plugging" of pipes- since the 2011 completion of \$25 million in upgrades, upgrades that consultant reports indicate would keep the reservoirs safely operating for 50 years.

Sincerely and hopefully,

Anya Motalygo Kroth

Sent from my iPad

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:20 PM  
**To:** A Halbrook  
**Subject:** RE: mt Tabor Reservoirs

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

**From:** A Halbrook [mailto:a.halbrook@gmail.com]  
**Sent:** Saturday, February 21, 2015 9:19 AM  
**To:** Commissioner Fish  
**Subject:** mt Tabor Reservoirs

Please direct the Portland Water Bureau to accept the Landmarks Commission's decision from February 9th. Your support for the preservation and proper maintenance of this historic landmark is important !

Annemieke Halbrook  
2314 SE 55th Ave  
Portland OR 97215

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:20 PM  
**To:** Sally Swan  
**Subject:** RE: Mount tabor reservoirs

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

Jennifer Kalez  
Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish

-----Original Message-----

**From:** Sally Swan [mailto:salemac@comcast.net]  
**Sent:** Friday, February 20, 2015 10:29 PM  
**To:** Commissioner Fish  
**Subject:** Mount tabor reservoirs

Please vote to keep the historic reservoirs operational. I live in south tabor and I'm very happy to have our reservoirs here. They are beautiful, historic, and healthy. We love them! help us keep them!

Sent from my iPad

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:19 PM  
**To:** Erin Matthiessen  
**Subject:** RE: Mt Tabor reservoirs

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**

*Constituent Relations Coordinator*

*Arts & Culture Liaison*

*Office of Commissioner Nick Fish*

---

**From:** Erin Matthiessen [mailto:erin.matt@comcast.net]  
**Sent:** Friday, February 20, 2015 5:15 PM  
**To:** Commissioner Fish  
**Subject:** Mt Tabor reservoirs

We need to protect the historic landmark reservoirs in Mt Tabor park. Please do not appeal the Landmarks Commission decision of February 9th, mandating preservation of the existing reservoirs. I am a Mt Tabor neighborhood resident and a voter in city elections. I have been amazed at the ruthlessness of the push to disconnect the reservoirs without any concern for what would happen to them afterwards. There is no going back now, of course, on the decision to disconnect, but there is no reason not to preserve the historic jewels of Mt Tabor park.

Erin Matthiessen  
42 SE 53rd Ave  
Portland OR 97215

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:19 PM  
**To:** David Raphael  
**Subject:** RE: [Approved Sender] Landmarks Commission decisions

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** David Raphael [mailto:draphael@comcast.net]  
**Sent:** Friday, February 20, 2015 4:36 PM  
**To:** Commissioner Fish  
**Cc:** Commissioner Fritz  
**Subject:** [Approved Sender] Landmarks Commission decisions

Nick:

I am writing you to urge you to instruct the Water Bureau to accept the recent decisions by the Landmarks Commission with respect to the decommissioning of the Mt. Tabor reservoirs. They should not be allowed to appeal those decisions. It is also important that the Water Bureau's factual errors be corrected. You and Amanda need to do this. Thanks for your cooperation. David

David Raphael  
SE 58th Avenue  
503.235.7840

David Raphael  
503.235.7840

Sent from my iPad

Begin forwarded message:

**From:** Stephanie Stewart <[stewartstclair@gmail.com](mailto:stewartstclair@gmail.com)>  
**Date:** February 20, 2015 at 10:05:19 AM PST  
**To:** "Mt. Tabor Google Group" <[mt\\_tabor@googlegroups.com](mailto:mt_tabor@googlegroups.com)>, listserv <[mttaborpdx@lists.riseup.net](mailto:mttaborpdx@lists.riseup.net)>  
**Subject:** [Mt Tabor Neighbors] Reservoir update - decisions and appeals

## The Decision

At the fourth and final hearing before the Historic Landmarks Commission February 9<sup>th</sup>, the volunteer Commissioners continued to push for protections for Tabor's historic resources. A revised Staff Report was presented by BDS, with a new Approval Condition to mandate historic-preservation work for the reservoir structures. While the language of this Approval Condition was not as specific (and therefore, not as easily enforceable) as we'd like it to be, its inclusion was a *significant win*.

A seventh commissioner joined the proceedings for the first time, and as it was immediately clear she would break the tie-vote in favor of an approval, the no-voters worked to strengthen the proposed Approval Conditions so as to afford the best protections available within this approval. The Commission approved the Water Bureau application with significant Approval Conditions, you can see that decision here: <http://www.portlandoregon.gov/bds/article/519041> (the Approval Conditions are summarized on pages 30-31).

While we have won significant improvements to this construction plan, the Approval Conditions in this decision do have two significant flaws.

1) **A massive factual error, caused by BDS.** As the Commissioners tried to pen stronger Approval Conditions on the fly at the hearing, they asked BDS employee Hillary Adam to clarify what the record stated were the historic fill levels for these reservoirs. Without referencing the actual case record, Adam incorrectly and inappropriately answered from memory that fill levels were between 50% and 75%. In fact, the December 23, 2014 letter from Portland Water Bureau to the Historic Landmarks Commission specifically answers this question, it is Exhibit H-51 in the case record, and on page 3 this letter states the historic fill levels are between 65% and 85%.

As the Historic Landmarks Commissioners clearly intended to include accurate historic fill-levels in their Approval Condition, and as the record provides the accurate data point, MTNA immediately raised this mistake with the Hearings Clerk at the hearing, citing the exhibit number. The Hearings Clerk carried the error to the BDS employee running the hearing, Tim Heron, and he refused to bring the mistake forward to the floor. MTNA again addressed the mistake with these BDS employees at the close of the hearing, and again in writing within a few hours of the hearing. MTNA also alerted the Landmarks Commissioners to this mistake, and the Chair initially responded with confidence that the error could be corrected because their intention to quote accurate historic fill levels was clear. Yet, the official decision was published 4 days later with the significant fill-level error. This error should have, and could have been corrected by now.

2) **It's missing quantifiable metrics.** The language in the Approval Criteria could be more specific, such that compliance was easy to verify. We are concerned that the existing language will lead to future compliance and enforcement disputes.

## Is it over yet?

Nope. Your water bureau, funded by you, in service to your community, directed by a Commissioner you elected, opposes mandates to care for Tabor's historic resources, even those mandates set forth by Portland's respected Historic Landmarks Commissioners. We are disheartened to report that there is a high likelihood the Portland Water Bureau will file an appeal to have those mandates overturned. BUT, the decision to appeal is one the Water Bureau will make in concert with the

Commissioner in charge = Nick Fish. And Commissioners are politicians, and politicians notice when the community calls in -- especially if the number of calls is something approaching the margins of error for elections and ballot measures.

## You can help NOW!

We need 1,000 phone calls or emails to Nick Fish's office between now and February 27th. Have everyone in your house make a separate call! Tell Nick Fish to direct the Portland Water Bureau to accept the Landmarks Commission decision from February 9<sup>th</sup> -- "Do not appeal!" Spread the word widely about this call campaign, and track progress by logging your calls here: [https://docs.google.com/forms/d/15LHA5bxdIU0ghx2LxDKPjXOyHutMt0oPbwSbl53vjMM/viewform?usp=send\\_form](https://docs.google.com/forms/d/15LHA5bxdIU0ghx2LxDKPjXOyHutMt0oPbwSbl53vjMM/viewform?usp=send_form)

Nick Fish's office: 503-823-3589  
[nick@portlandoregon.gov](mailto:nick@portlandoregon.gov)

And while you are at it, call Amanda Fritz's office and urge her staff to fix the mistake BDS staff Hillary Adam made at the hearing on February 9<sup>th</sup>, which resulted in a factual error in the Approval Condition, regarding historic fill levels. "Fix the fill numbers!"

Amanda Fritz's office: 503-823-3008

## The reservoirs need your financial support!

While the volunteers at MTNA would prefer not to litigate this case through an appeal, we are committed to doing what is necessary to protect water as an essential feature for the Tabor site, and to secure preservation work and planning for Tabor's historic resources. If Portland Water Bureau continues to reject their duties as stewards of the public's historic resources, and they appeal the HLC decision, we will enter an expensive appeal process. Additionally, if we can't get corrected through less-litigious means, that significant error BDS staffers made in the Approval Condition language (regarding the historic fill-levels of Tabor's reservoirs), then we may have to litigate the point. And, it is likely that the community will have to litigate to get any of the mandates enforced going forward. It is time to prepare a war chest. Send a check of any size, it's tax-deductible!

## Make checks payable to "SE Uplift" and include "MTNA-reservoirs" in the memo line .

Mail checks to:

SE Uplift  
3534 SE Main St.  
Portland, OR 97214

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You received this message because you are subscribed to the Google Group "Mt Tabor Neighbors."

Please invite your Mt Tabor neighbors to join!

To post to this group, send email to [mt\\_tabor@googlegroups.com](mailto:mt_tabor@googlegroups.com)

To unsubscribe from this group, send email to [mt\\_tabor+unsubscribe@googlegroups.com](mailto:mt_tabor+unsubscribe@googlegroups.com)

For more options, visit this group at

[http://groups.google.com/group/mt\\_tabor?hl=en?hl=en](http://groups.google.com/group/mt_tabor?hl=en?hl=en)

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You received this message because you are subscribed to the Google Groups "Mt Tabor Neighbors" group.

To unsubscribe from this group and stop receiving emails from it, send an email to [mt\\_tabor+unsubscribe@googlegroups.com](mailto:mt_tabor+unsubscribe@googlegroups.com).

For more options, visit <https://groups.google.com/d/optout>.



**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:19 PM  
**To:** Josh Baudhuin  
**Subject:** RE: Please honor Landmarks Commission decision

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**

*Constituent Relations Coordinator*

*Arts & Culture Liaison*

*Office of Commissioner Nick Fish*

**From:** Josh Baudhuin [mailto:josh.baudhuin@gmail.com]

**Sent:** Friday, February 20, 2015 3:12 PM

**To:** Commissioner Fish

**Subject:** Please honor Landmarks Commission decision

Hi, Nick

I'm writing to add my voice to those who are begging you not to deprecate and degrade an authentic Portland treasure: the reserveroir system in general, but Mt. Tabor in particular.

Since moving to the area in 2007, I've been delighted to have this mix of man and nature available nearby. I haven't heard any serious, argument that the reservoirs are truly sustainably safer when capped, and the implementation of making that a sad reality has been plagued with errors and missteps that undermine the credibility of all who are involved in making it happen: a leaky covered reservoir to be sure, but missteps also in

not paying attention to what people really want and need. You may feel like people are giving you the same feedback, like a broken record. In my life I've found that sometimes when someone is repeating the same thing over and over to me, it may be because I'm not listening to them. Sometimes it helps to do a respectful retake. The people you serve deserve a respectful retake from you.

My understanding is that the Landmarks Commission made specific recommendations as regards water levels to remain in the reservoirs, and the board is disregarding these (or at least key components thereof) based on factual errors proffered by functionaries at the Bureau of Development Services. I urge you to honor their findings and recommendations in the interest of preserving this Portland gem.

Keep Portland Livable! Don't let places like Mt Tabor get dismantled on your watch!

Sincerely,

Joshua Baudhuin  
SE 58th Ave  
Portland

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:19 PM  
**To:** Miriam Poston  
**Subject:** RE: Protect Mt. Tabor's historic resources

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

Jennifer Kalez  
Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish

-----Original Message-----

**From:** Miriam Poston [mailto:miriamposton@yahoo.com]  
**Sent:** Friday, February 20, 2015 2:30 PM  
**To:** Commissioner Fish  
**Subject:** Protect Mt. Tabor's historic resources

Support the people's mandate now by directing Portland Water Bureau to accept the Historic Landmark Commissions decision of 2/9/2015. DO NOT APPEAL!

Thank you for your service to the greater good of our city.  
Miriam Poston



**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:18 PM  
**To:** Caroline Koehler  
**Subject:** RE: Do Not Appeal Landmark Commission decision

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**

*Constituent Relations Coordinator*

*Arts & Culture Liaison*

*Office of Commissioner Nick Fish*

**From:** Caroline Koehler [mailto:carolineskoehler@gmail.com]  
**Sent:** Friday, February 20, 2015 2:21 PM  
**To:** Commissioner Fish  
**Subject:** Do Not Appeal Landmark Commission decision

Dear Nick Fish,

Please instruct our water bureau, funded by voters, in service to our community, directed by you, an elected official, to NOT oppose mandates set forth by the respected and thoughtful Historic Landmarks Commission to care for Mt. Tabor's amazing historic resources. Please accept the Landmark Commission decision from February 9th and DO NOT APPEAL!

Please represent both your people and quality of life in Portland.

Thank you.  
Caroline Koehler  
1411 SE 55th ave

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:18 PM  
**To:** Van Sisseren, Sheilah  
**Subject:** RE: Portlands water

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** Van Sisseren, Sheilah [mailto:Sheilah.VanSisseren@nike.com]  
**Sent:** Friday, February 20, 2015 2:16 PM  
**To:** Commissioner Fish  
**Subject:** Portlands water

Hello,

I am a resident and drinker of water in SW Portland area. Please direct the Portland water Bureau to accept the Landmarks Commission decision from February 9th on my behalf. Additionally, ask them to avoid their plan to cut and plug the pipes throughout Mt Tabor Park.

Thank you kindly,  
Sheilah Van Sisseren

1810 SW Logan St  
Portland OR 97219



**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:18 PM  
**To:** Mark Wheeler  
**Subject:** RE: Save the Reservoirs

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

Jennifer Kalez  
Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish

-----Original Message-----

From: Mark Wheeler [mailto:mark@rootsrealty.com]  
Sent: Friday, February 20, 2015 1:18 PM  
To: Commissioner Fish  
Subject: Save the Reservoirs

Hello,

Please direct the Portland Water Bureau to accept the Landmarks Commission decision from February 9th – And additionally direct the Water Bureau to avoid their plan to cut and plug pipes throughout Mt. Tabor park. Reservoir 6 on 60th has been "offline" (not delivering drinking water) without any "cutting and plugging" of pipes- since the 2011 completion of \$25 million in upgrades, upgrades that consultant reports indicate would keep the reservoirs safely operating for 50 years.

Thank you.

Mark Wheeler  
Mt Tabor  
Citizen & Voter

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:17 PM  
**To:** Glenda Jenson  
**Subject:** RE: Mt Tabor Reservoirs - Landmark's Commission decision of Feb 9, 2015

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

Jennifer Kalez  
Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish

-----Original Message-----

**From:** Glenda Jenson [mailto:gjensonwheeler@comcast.net]  
**Sent:** Friday, February 20, 2015 12:05 PM  
**To:** Commissioner Fish  
**Subject:** Mt Tabor Reservoirs - Landmark's Commission decision of Feb 9, 2015

As a concerned citizen valuing the preservation of the Historic Mt. Tabor Reservoirs, I am requesting that Commissioner Nick Fish direct the PWB to accept the Landmark's Commission decision from Feb 9th - Do Not Appeal.  
Thank you.

**Moore-Love, Karla**

---

**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:17 PM  
**To:** Peter Koehler  
**Subject:** RE: Mt. Tabor

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

**From:** Peter Koehler [mailto:pmkoehler@gmail.com]  
**Sent:** Friday, February 20, 2015 10:40 AM  
**To:** Commissioner Fish  
**Subject:** Mt. Tabor

Commissioner Fish,

Please instruct our water bureau to NOT oppose mandates set forth by the Historic Landmarks Commission to care for Mt. Tabor's amazing historic resources.

Please accept the Landmark Commission decision from February 9th.

Thank you.

Peter Koehler  
6304 N. Curtis  
Portland OR

**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Monday, February 23, 2015 4:17 PM  
**To:** Jinx Faulkner  
**Subject:** RE: Do Not Appeal Landmark Commission decision

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

Commissioner Fish delegated to Water Bureau Director David Shaff the authority to decide whether to appeal the HLC decision. He has asked Director Shaff to use his best judgment as steward of our water system in making that determination.

We will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**

*Constituent Relations Coordinator*

*Arts & Culture Liaison*

*Office of Commissioner Nick Fish*

**From:** Jinx Faulkner [mailto:jxfaulkner@gmail.com]  
**Sent:** Friday, February 20, 2015 10:23 AM  
**To:** Commissioner Fish  
**Subject:** Do Not Appeal Landmark Commission decision

Dear Nick Fish,

Please instruct our water bureau, funded by voters, in service to our community, directed by you, an elected official, to NOT oppose mandates set forth by the respected and thoughtful Historic Landmarks Commission to care for Mt. Tabor's amazing historic resources. Please accept the Landmark Commission decision from February 9th and DO NOT APPEAL!

Please represent both your people and quality of life in Portland.

Thank you.

Jinx Faulkner  
1411 SE 55th Ave

**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Tuesday, February 17, 2015 4:43 PM  
**To:** grishapdx@comcast.net  
**Cc:** Council Clerk – Testimony  
**Subject:** RE: reservoirs

Dear Greg,

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

However, we will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** grishapdx@comcast.net [mailto:grishapdx@comcast.net]  
**Sent:** Friday, February 13, 2015 3:34 PM  
**To:** Commissioner Fish  
**Subject:** reservoirs

Dear Commissioner Fish,

I am writing about our reservoirs and what to do about them. I don't have anything to do with it except to convey to you my thoughts and

beliefs about what I know about the reservoirs. However, you do have the power to take action and decide their fate.

Correct me if I am wrong on all of the following statements:

The EPA did not ban open air reservoirs, but stated that water from them must be treated (if needed) so that it is safe for use.

The reservoirs in Portland have been serving Portland very well, with no problems, since they were first built over a hundred years ago.

The newly built covered reservoir on Powell Butte is already leaking and compared to the city's existing reservoirs ( which have provided this service for over a hundred years without any problems that I am aware of) already has an abysmal performance record, not to mention that it cost Portlanders more than a million dollars to construct and it's still not a sure thing that it won't continue to be affecting people living around it with problems created by it even after corrective measures may be taken to try to fix it.

With open air reservoirs, you do not have to pump them full of chemicals to the same extent that you have to do so with covered reservoirs

to ensure the safety of the water from them.

There has been much discussion of what to do with the city's 5 open air reservoirs, including demolishing them, disconnecting them, preserving them as places of historical interest, and discarding and replacing them with a different water delivery infrastructure.

(This last statement, if true, is very troubling to me because what it proposes is to replace a perfectly well-functioning system with one that could be hugely costly to Portlanders and which could be plagued by many problems and which would necessitate putting more chemicals in water which would be mostly in an underground system. This would degrade and foul the pristine system that we have thus far enjoyed.)

If any of the above statements are untrue, please, if you would be so kind, correct my understanding. If the above statements are true, then why can't a very simple solution be found? One that is imminently easy, and far less costly than all the other options that have so far been expressed. Plus, it would conserve what many in Portland think of as an important asset to the city, it's reservoirs, and even make them better by helping them be more safely regulated than they ever have been.

I say, "If it ain't broke, don't 'fix' it." I think the VAST MAJORITY of Portlanders LOVE their open air reservoirs and don't want them to go away. Not just the folks up on Mt. Tabor.

Why not, instead of demolishing them, or disconnecting them, or preserving their beauty as structures of historical importance, or building another costly infrastructure that is potentially plagued with problems and extremely costly to Portlanders, why don't you do what you can to save them as they are and have been for the last 100 years and help maintain the great service they have always provided?

It seems that, instead of doing any of above, if instead the city hired a few technicians to oversee a regularly scheduled testing of the water system at the reservoirs, the outlet, to make sure that corrective action, if any is ever needed, can take place to make sure that the water is safe for us?

It would cost the city the cost of hiring a few additional personnel and the lab testing that they would be doing as their job and it would keep the water system safe. It would also allow the city to preserve and to continue using the reservoir system that we Portlanders have always been so proud of and



loved. It would not cost the city nearly as much to employ a few more people than any of the other proposals that have been put forward so far.

Please, Mr. Fish, consider the cost effectiveness and practicality of this suggestion. It would help calm down a lot of people who fear losing something they dearly love about this place we call home, Portland. And it would help the city maintain it's pristine water supply intact and continue to be a source of pride for us and give us the clean, clear water we love and thrive on from Bull Run. The city can easily comply with the requirements of the EPA that wants to make sure that our drinking water is safe if it has the personnel to ensure that this is done. We also want that for ourselves. You don't have to scrap the system as it is and has been for a very long time. Let's make it better, safer, and bring the regulations up to modern standards with regular testing at the outlets.

Thank you for your attention in this matter. I do not see it as being a big problem. I see it as being very easily resolved. What I see is that a whole bunch of people have turned it into a big side-show when there was never any need to do so. I hope you end up doing what makes sense and is practical, cost saving and will make the system better. Portlanders would love you for it and be very proud to have you as one of their commissioners.

Sincerely,  
Greg Snyder  
[grishapdx@comcast.net](mailto:grishapdx@comcast.net)  
34 NE 16th Ave  
Portland, OR 97232

## Moore-Love, Karla

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**From:** Christine Yun <cpypdx@gmail.com>  
**Sent:** Sunday, February 08, 2015 3:28 PM  
**To:** Moore-Love, Karla  
**Subject:** Mt. Tabor Reservoirs

Dear Ms. Moore-Love,

Please forward the following message to all City Commissioners and put it in the record for tomorrow's hearing on the Mt. Tabor Reservoirs.

Thanks,  
Christine Yun  
1915 SE Alder St.  
Portland, OR 97214

Please delay the pipe cutting! I am shocked at the complete disregard for this National Register property. The City of Portland has a responsibility to set a good example for the correct treatment and respect for properties on the National Register. Acceptable alterations are to preserve the character and other relevant conditions written into the National Register nomination. The city is changing fast and without preservation protections in place, we will lose places in the city that have meaning and give the city its special character. The city above all, needs to show this kind of care toward these properties, not blatantly disregard preservation standards.

—  
Sent from [Mailbox](#)



**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Tuesday, February 03, 2015 11:48 AM  
**To:** susan.boyl@mcsso.us  
**Subject:** RE: Maximize Water Options

Dear Susan,

Thanks for your email regarding LT2 and the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

However, we will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**

*Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish*

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**From:** BOYL Susan L [mailto:susan.boyl@mcsso.us]  
**Sent:** Friday, January 30, 2015 2:08 PM  
**To:** Commissioner Fish  
**Subject:** Maximize Water Options

Dear Commissioner Fish

We need to request a deferral like the state of New York to see how the EPA rewrites it's rules for water use in 2016.

Please don't engage in expensive, bad government by making unnecessary premature decisions about our water that could go down in history as a huge waste.

***Susan Boyl***



**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Tuesday, February 03, 2015 11:48 AM  
**To:** xansilk@yahoo.com  
**Subject:** RE: Mt. Tabor Reservoirs

Dear Sue,

Thanks for your email regarding the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

However, we will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**

*Constituent Relations Coordinator*

*Arts & Culture Liaison*

*Office of Commissioner Nick Fish*

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**From:** xansilk@yahoo.com [mailto:xansilk@yahoo.com]

**Sent:** Wednesday, January 28, 2015 8:11 PM

**To:** Commissioner Fish; Commissioner Fritz; Hales, Mayor; Commissioner Novick; Commissioner Saltzman; letters@oregonian.com

**Subject:** Mt. Tabor Reservoirs

Dear Portland City Council and Water Bureau staff;

I don't know how many of you have had the good fortune to meet my dad, Al Staehli, FAIA, who pursued historic preservation in Portland for many decades, with persistence and boyish charm. When he made his career-changing move, studying in Italy for a year to learn from their centuries of experience, people laughed, because America was too young to have anything worth preserving! I think he, and his colleagues, have proved the scoffers to be wrong.

So now, Portlanders and our Water Bureau are at a crossroads with the Mt Tabor reservoirs, a beloved project of his last years. The infrastructure is crumbling, and people are starting to think it is a Parks Bureau problem. But no! The reservoirs are very much Water Bureau property.

The issue dearest to my own heart is to protect access to that pristine Bull Run water, adding as few chemicals as humanly possible, and retaining the cleansing effects of sunlight and fresh air. But my dad would have stood firmly in opposition to anything that would allow the historic structures to be compromised in their character and beauty.

Here's what I know: If you allow the Mt. Tabor reservoirs to degrade past repair, my dad will haunt you. And the history books will haunt your children and your grandchildren. And if, in decommissioning the reservoirs, you do not preserve their potential to be used by future generations for the simple and beautiful and inexpensive delivery of water, your actions will plague those future generations, who may not have the energy and chemical resources we so glibly plan to rely on in 21st century Portland - and I will haunt you.

Please consider carefully, and make all the decisions in your power with 7 future generations in mind.  
Yours sincerely,

Sue Staehli  
4477 SW 94 Ave  
Portland, OR 97225  
503-395-0022

Please do not publish my address or phone number.

**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Tuesday, February 03, 2015 11:46 AM  
**To:** susan tompkins  
**Subject:** RE: mt tabor

Dear Susan,

Thanks for your email regarding the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

However, we will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

**Jennifer Kalez**  
*Constituent Relations Coordinator*  
*Arts & Culture Liaison*  
*Office of Commissioner Nick Fish*

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**From:** susan tompkins [mailto:odessapdx@gmail.com]  
**Sent:** Tuesday, January 27, 2015 11:35 AM  
**To:** Commissioner Fish  
**Subject:** Fwd: mt tabor

Begin forwarded message:

**From:** susan tompkins <odessapdx@gmail.com>  
**Subject:** mt tabor  
**Date:** January 27, 2015 at 11:27:24 AM PST

Hello,



The Water Bureau of Portland is pushing very hard to disconnect the open water reservoirs at Mt. Tabor. They have appealed to City Council and Portland residents by stating that they will maintain the park and its reservoirs even after they are taken off-line.

But what I learned yesterday at the Historic Landmarks meeting was that they have no plan to maintain the reservoirs, once disconnected, because there is no way to maintain them, and there is no public money to maintain them as it is very expensive and they will fall into disrepair. This is what happened to the 4th reservoir on the corner of Division many years ago, and eventually the land was sold to developers and a hideous retirement complex was built. This is also why Portland residents on the SE side do not have a convenient entrance to the park.

The fate of Portland's drinking water and Mt. Tabor Park is in its 11th hour. To learn more about these well engineered reservoirs and what will be lost forever, please visit the link below:

<http://www.saveportlandwater.com>

Thank you! and please pass the word on.

S

Susan Tompkins



410 SW 13th Ave.  
Portland, OR 97205  
503 223 1998  
[odessaportland.com](http://odessaportland.com)

Susan Tompkins



410 SW 13th Ave.  
Portland, OR 97205  
503 223 1998  
[odessaportland.com](http://odessaportland.com)

**Moore-Love, Karla**

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**From:** Kalez, Jennifer  
**Sent:** Tuesday, February 03, 2015 11:45 AM  
**To:** Aaron Johanson  
**Subject:** RE: Portland open-air reservoirs

Dear Aaron,

Thanks for your email regarding the reservoirs at Mt. Tabor. I am following up for Commissioner Fish.

Because this project has moved forward as a quasi-judicial land use review, and any appeal of the Landmarks Commission's decision will be heard by City Council, Commissioner Fish is not allowed to comment on the content of your letter outside of the public hearing process. This is known as an ex parte contact.

However, we will forward your email to the Council Clerk so your comments are entered into the record for this matter.

Thanks again for reaching out to our office.

Sincerely,

Jenny

Jennifer Kalez  
Constituent Relations Coordinator  
Arts & Culture Liaison  
Office of Commissioner Nick Fish

-----Original Message-----

**From:** Aaron Johanson [mailto:[aaron@ajohanson.com](mailto:aaron@ajohanson.com)]  
**Sent:** Tuesday, January 27, 2015 10:33 AM  
**To:** Commissioner Fish  
**Subject:** Portland open-air reservoirs

Dear Commissioner Fish,

I am writing to voice my support for postponing work on creating underground reservoirs.

Please consider asking for a deferral about the timeline for complying with the LT2 rule until the EPA has issued its upcoming ruling.

I feel that the current system of BullRun water delivery is not only superior but even with upgrade will be less expensive to the proposed underground holding system.

If this is not possible, then please do maximize the reversibility of a disconnect should the above-ground reservoirs ever be put to use again.

Thank you for your consideration.

Aaron Johanson  
2303 SW Market St Drive,  
Portland, OR 97201