Completion Summary for City of Portland Outfall Basin 14

1 Summary

The City of Portland (City) has been addressing source control concerns related to the City conveyance systems for more than four decades, and several City programs have evolved to meet changing regulatory requirements and watershed health objectives. Following the 2000 listing of Portland Harbor on the National Priorities List, the City initiated a new partnership with the Oregon Department of Environmental Quality (DEQ) Cleanup Program to identify specific sources of contaminants to City stormwater conveyance systems in the harbor that were not being adequately controlled. This report summarizes the results of this collaborative effort in Outfall Basin 14.

This Completion Summary includes a weight-of-evidence evaluation to demonstrate that source evaluation is complete and there are no current (or anticipated future) major sources of contaminants to the Willamette River.

Basin 14 is located on the west side of the river just north of the Pearl District near downtown Portland. This area was formerly industrial, but portions have begun to transition to mixed residential and commercial uses, influenced by the redevelopment changes in the Pearl District. The area within Basin 14 now consists of new residential development, warehouses, an office park, a railroad corridor, and paved rights-of-way.

No known or suspected major contaminant sources to the Basin 14 stormwater conveyance system have been identified, and river sediment in the vicinity of the outfall does not contain elevated concentrations of any contaminants (i.e., the U.S. Environmental Protection Agency [EPA] has not identified the potential need for sediment remediation). For these reasons, the City concludes that no source investigation is warranted in this basin and that the existing programmatic source control measures (SCM) in the basin are sufficient for ensuring discharges from Outfall 14 are protective of the river. Therefore, the City has met the remedial investigation (RI)/SCM objectives for Basin 14.

2 Introduction

This Completion Summary presents a weight-of-evidence evaluation of whether further source investigation is needed in Basin 14, and the rationale for concluding that current and future discharges from the basin are not likely to be significant sources of contaminants to river sediment. The purpose of this report is to demonstrate that, for Basin 14, the City has met the joint RI/SCM objectives of the August 13, 2003, intergovernmental agreement (IGA) between the City and DEQ.

This report is included in Appendix A of the *Municipal Stormwater Source Control Report for Portland Harbor* (Municipal Report), which provides additional background and detail regarding the City's harborwide source control efforts, including regulatory and non-regulatory programs to address current and future sources and to minimize recontamination potential.

3 Outfall and Basin Setting

3.1 Basin Location and Configuration

Outfall 14 discharges to the west side of the Willamette River near River Mile 10.8. The Basin 14 stormwater conveyance system drains a 17.9-acre area, located at the north end of the Pearl District. Figure 1 shows the location of the outfall and drainage basin boundary and provides an overview of the associated stormwater conveyance system. As shown in Figure 1, the basin includes a sedimentation manhole on a storm line between NW Riverscape Street and the main line leading to the outfall. This stormwater treatment device and affiliated storm lines were installed by a private party during redevelopment of the former Port of Portland Terminal 1 South property to meet requirements of the City's Stormwater Management Manual (SWMM). The sedimentation manhole reduces total suspended solids loading to Outfall 14 from the condominium properties and associated roadways in the portion of the basin that is on the east side of NW Front Avenue. City programs that result in these types of stormwater improvements are described in the Municipal Report.

3.2 Land Use and Potential Upland Sources

Basin 14 includes areas zoned for heavy industrial, light industrial, and residential (multi-unit) use. Approximately one half of the basin is new residential development and affiliated rights-of-way. Three developed properties, a railroad corridor, and paved rights-of-way comprise the other half of the basin. Although zoning in the non-residential area is industrial, current land use is primarily commercial in nature and includes a moving supply company, document storage facility, and office complex.

No current pollutant sources have been identified in Basin 14. Historical land use within and adjacent to the current basin boundary was industrial and included operations associated with the Port of Portland's former Terminal 1 South, which is a DEQ Cleanup Program site (Environmental Cleanup Site Information [ECSI] # 2642). The former terminal site was remediated in 2002 and received a No Further Action determination from DEQ (DEQ, 2003). Historically, Terminal 1 South did not discharge to the river through Outfall 14, but discharged directly to site outfalls. During redevelopment for residential use in 2006 under the SWMM, a portion of the remediated site was connected to Outfall 14.

No other DEQ Cleanup Program sites are located in Basin 14. Operations at properties in the portion of the basin that is currently zoned for industrial use do not have extensive outdoor activities where industrial stormwater exposures may occur. Accordingly, no sites in the basin currently hold, or historically had, National Pollutant Discharge Elimination System (NPDES) permits to discharge to the Basin 14 conveyance system. Note that the City has an NPDES Municipal Separate Stormwater Sewer System (MS4) stormwater permit that covers basin drainage areas.

3.3 Outfall Setting

Outfall 14 is located about 0.25 mile downstream of the Fremont Bridge. The outfall is not located within or adjacent to any reach identified by the EPA as an area of potential concern (AOPC) for contaminant concentrations in river sediment (EPA, 2010).

4 Basin Screening and Source Investigations

Basin screening consisted of an evaluation of current and past land use, as described in Section 3. Based on this evaluation, the City concluded that Basin 14 was unlikely to contain major sources of contaminants to the City conveyance system and no source investigations were needed in Basin 14.

5 Completion of Source Identification

The lines of evidence evaluated to confirm that source evaluation objectives have been met with regard to Basin 14 include (1) inriver sediment concentrations near the outfall, (2) information on potential sources of contaminants, and (3) drainage basin characteristics and land use. Findings from this evaluation are summarized below:

- *Inriver Sediment Concentrations.* River sediment in the vicinity of Outfall 14 does not contain elevated concentrations of any contaminants (i.e., the outfall does not discharge to an AOPC).
- *No Upland Sources:* Basin 14 contains no known or suspected major sources of contaminants to the City stormwater conveyance system (e.g., no active DEQ Cleanup Program sites or NPDES-permitted facilities). The only DEQ Cleanup Program site in the basin was not connected to the City's conveyance system until after site investigation and remediation was completed under DEQ oversight, and the site had been redeveloped for residential use.
- *Drainage Basin Characteristics and Land Use.* Basin 14 is relatively small (17.9 acres) and mostly consists of condominiums, warehouses, and an office park. Stormwater from the residential development is treated before discharging to the City system. Current uses of the warehouses in the basin include a document storage facility and a moving supply company. Most of the land use at these sites consists of parking areas and warehouse uses with minimal industrial exposures to stormwater. Current and future industrial activities exposed to stormwater at these sites will be addressed by the DEQ Water Quality NPDES program, and non-industrial activities are not a known or suspected major source of contaminants to the City stormwater conveyance system.

The weight-of-evidence evaluation summarized above indicates that the Basin 14 source evaluation is complete and no additional source tracing is warranted.

6 Basin Source Controls

Because no known or suspected major sources of contaminants were identified in Basin 14, additional coordination between DEQ and the City to identify control mechanisms was not needed in this basin. Terminal 1 South, the only DEQ Cleanup Program site in Basin 14, was investigated and remediated under DEQ oversight before any part of it was in Basin 14. Redevelopment of the portion of this site that is now within Basin 14 changed the land use from heavy industrial to residential, and all of the redevelopment included stormwater controls under the SWMM. Figure 2 displays the spatial extent of the Terminal 1 South upland site investigation and other programmatic site source controls in and around the basin (see key to

figures provided at beginning of this Appendix). Future anticipated redevelopment in the basin also will be subject to stormwater controls as required under the SWMM.

In addition, programmatic source controls are ongoing in the basin. One type of programmatic source control is elimination of stormwater exposures to industrial activities. The City Industrial Stormwater Program works with site operators to reduce potential stormwater exposure to site industrial activities, by conducting site visits, providing technical assistance, and monitoring. Sites that are subject to NPDES regulations due to the nature of industrial operations, but which meet specific criteria, can qualify for a No Exposure Certification (NEC). One site in Basin 14 has a stormwater NEC under the NPDES program (see Figures 1 and 2).[1]

Other municipal programs (e.g., periodic inspection of and technical assistance to non-NPDES sites, illicit discharge monitoring, street sweeping, etc.) likely provide additional source control benefits in the basin and will help to address minor sources for which specific control measures have not been required. City programs that control current and future contaminant discharges to the conveyance system are described in the Municipal Report.

7 Conclusion

Based on the information summarized above, there are no major pollutant sources in Basin 14. Therefore, future discharges from Outfall 14 are unlikely to represent a significant source of contaminants to the river. The City concludes that it has met the RI/SCM objectives of the IGA and requests a source control decision from DEQ for Basin 14.

8 References

DEQ. 2003. DEQ Site Summary Full Report – Details for ECSI Site ID 2642, Port of Portland - Terminal 1 South. DEQ Environmental Cleanup Site Information Database (ECSI), updated June 9, 2003; accessed September 29, 2011. http://www.deq.state.or.us/lq/ECSI/ecsidetailfull.asp?seqnbr=2642

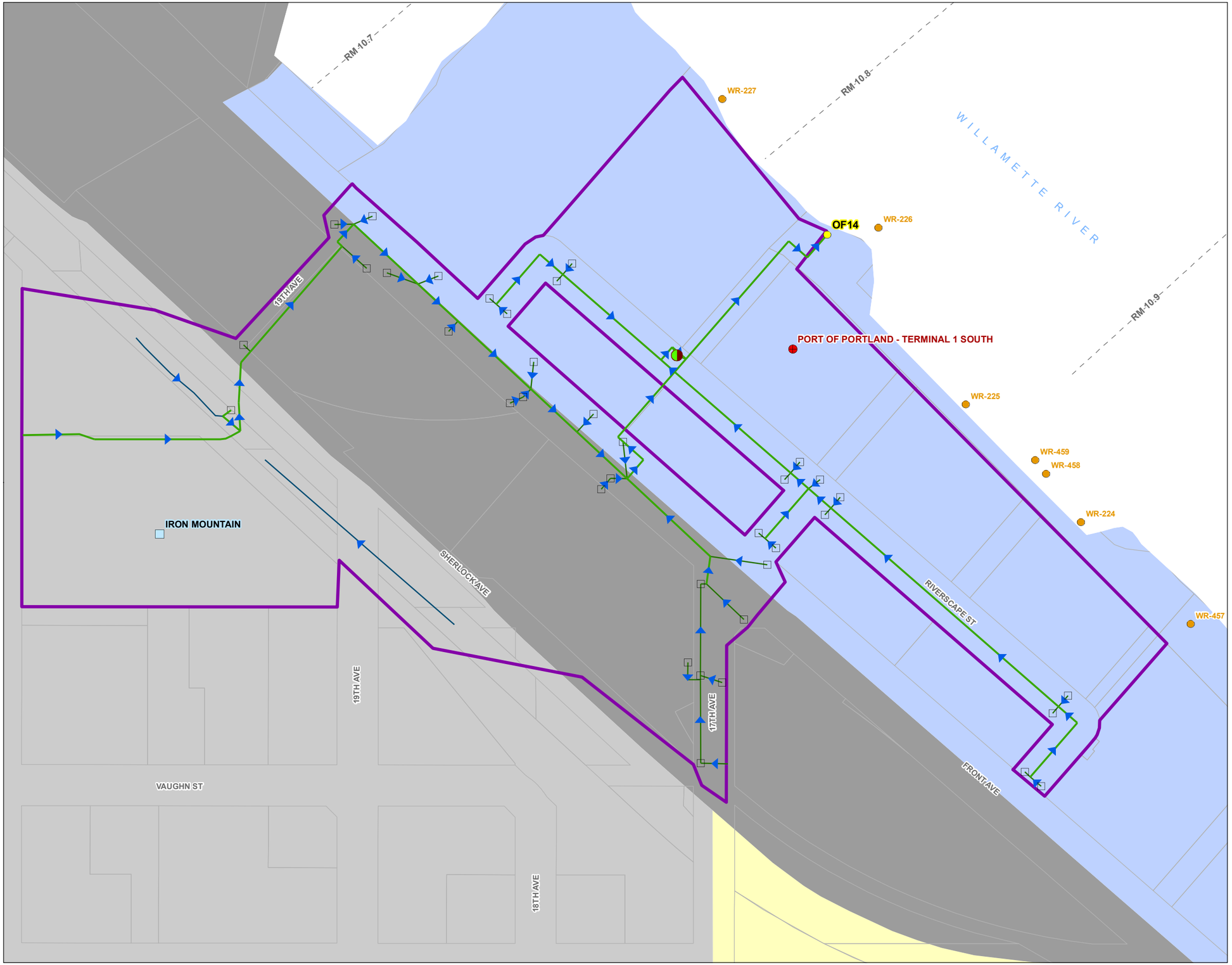
EPA. 2010. Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240. Portland Harbor Feasibility Study Source Tables. Letter from EPA to Mr. Bob Wyatt, Chairman, Lower Willamette Group. November 23, 2010.

List of Figures

[1] Iron Mountain paper storage facility at 2116 NW Front; this site has had an NEC from 2004 to the present.

FIGURE 1

Basin 14
Overview and Conveyance System Source Controls



- Basin 14
- DEQ ECSI Site
- NPDES No Exposure Certification

Conveyance System

- Storm Line
- Ditch
- Catch Basin
- Sediment Removal Structure
- City Outfall
- Non-City Outfall

Land Use/Zoning

- Heavy Industrial
- Light Industrial
- General Employment
- Residential

All Other Data

- River Mile (RM)
- Tax Lot
- Discharges to City Outfall
- Portland Harbor Hydroboundary

N

0 70 140 210
Feet

MAP NOTES:
Date: November 31, 2013
Data Sources: BES, METRO

ENVIRONMENTAL SERVICES
CITY OF PORTLAND
1120 SW Fifth Avenue, Room 1000
Portland Oregon, 97204 - 1912

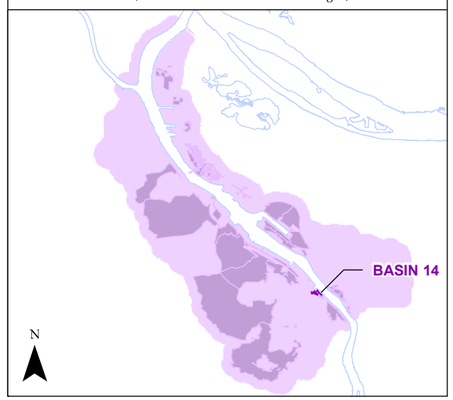
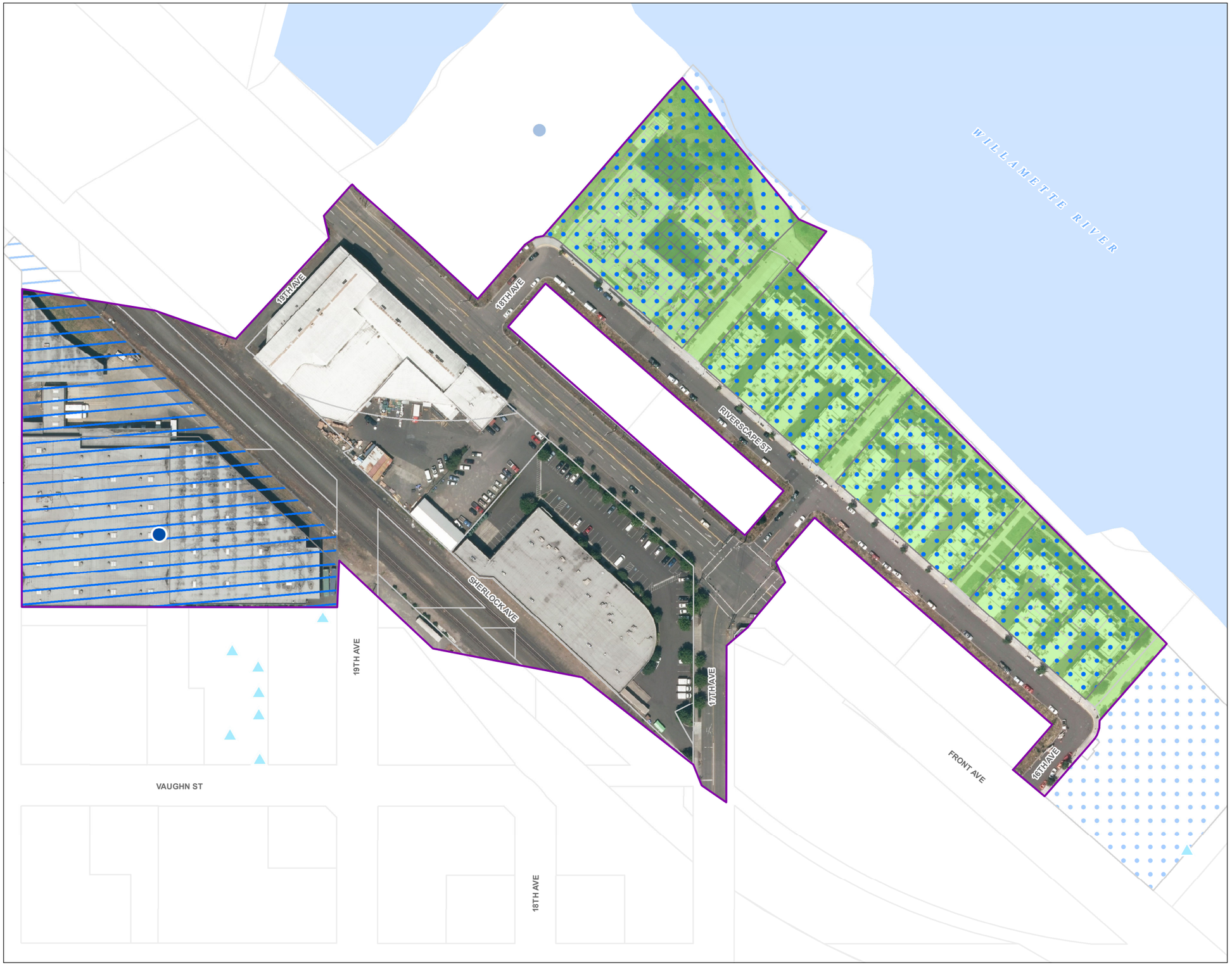


FIGURE 2

Basin 14
Upland Site Source Controls



Basin 14

Tax Lot

DEQ Stormwater SCE

SCE implemented or pending

All Other Features

NPDES No Exposure Certification

>50% of Site Area Redeveloped Under City SWMM

Stormwater Treatment Facility

Site Inspection - BES Industrial Stormwater Program

Discharges to City Outfall

Portland Harbor Hydroboundary

N

0 70 140 210

Feet

MAP NOTES:

Date: January 13, 2014

Data Sources: BES, METRO, Aerial Photo Taken 2012

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