

220 Occidental Ave South, Seattle, WA 98104

March 28, 2017

Mr. David South  
Senior Engineer  
Department of Ecology, Toxics Cleanup Program  
P.O. Box 47600  
Olympia, WA 98504-7600

Dear Mr. South:

**Re: Preliminary Determination of Liability for Release of Hazardous Substances at  
Weyerhaeuser Everett Mill E Site**

Dear Mr. South:

I received and have carefully reviewed your December 8, 2016 and January 27, 2017 letters in which you propose additional work at the Weyerhaeuser Mill E Everett Site (“Site”) and propose to find the Weyerhaeuser NR Company (“Weyerhaeuser”) liable under the Model Toxics Control Act, RCW 70.105D (“MTCA”), for liability outside of the scope of the Consent Decree that Weyerhaeuser and Department of Ecology (“Ecology”) completed in 1998 for the Site. I appreciate your willingness to extend the time period for Weyerhaeuser to respond to your January 27, 2017 letter and your proposed finding of liability for the Site. This letter provides Weyerhaeuser’s response.

**I. Acceptance of Liability and PLP Status for Groundwater at the Site Outside the  
Barrier Wall**

Weyerhaeuser does not dispute that it owned property at the Site and operated a small lumber mill there, among other activities. Weyerhaeuser also leased a portion of what was its property at the Site to the predecessors of Beazer East who conducted a wood treating operation, utilizing Chromated Copper Arsenate (“CCA”) as a wood preservative. As you note in your letter, Weyerhaeuser sold the property to M.A.P. #2 LLC in 2005. We also agree that Weyerhaeuser entered into a Consent Decree in 1998 with the State of Washington through which it conducted an Ecology-approved cleanup at the Site. Weyerhaeuser acknowledges that the Consent Decree’s scope was limited in the manner you describe in your letter.<sup>1</sup> Weyerhaeuser also acknowledges that sampling data indicates elevated levels of arsenic in groundwater at the Site, outside the barrier wall.

Weyerhaeuser accepts potentially liable person (“PLP”) status with respect to the groundwater at the Site, and specifically to assess the elevated arsenic in the area of the Site outside the barrier wall and outside of the scope of the Consent Decree.<sup>2</sup> Weyerhaeuser will negotiate with Ecology

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<sup>1</sup> Paragraph 2, page 2 of the January 27, 2017 letter.

<sup>2</sup> This issue is discussed at pages 3-4 of your December 8, 2016 letter.

in good faith for an Agreed Order to evaluate elevated arsenic in groundwater at the Site outside the barrier wall.<sup>3</sup>

## **II. Weyerhaeuser is Not Liable for Discharges from Unknown Outfall LLO-07**

Weyerhaeuser does not accept, and challenges, Ecology's preliminary finding that it is liable for releases from an unknown outfall, designated as LLO-07, that discharges to the Snohomish River. Ecology has not provided credible evidence that discharges from this unknown outfall constitute releases of hazardous substances from the Site, as Ecology must do under MTCA. There are multiple lines of evidence that support Weyerhaeuser's challenge and show that Ecology's proposed finding of liability with respect to this unknown pipe are not well supported, and that the agency has provided no credible evidence that the discharges from this pipe represent a release of hazardous substances from the Site. Instead, as discussed below, there is ample credible evidence to demonstrate that the discharge from Outfall LLO-07 is not a release (or threatened release) of hazardous substances from the Mill E Site.

### **A. Ecology Has Not Provided Credible Evidence that the Discharges from the Unknown Outfall LLO-07 are Releases from the Site**

Under MTCA, parties are liable for releases of hazardous substances from a Site. RCW 70.105D.040(1), (2); .020(8). As discussed in Section I above, Weyerhaeuser accepts status as a PLP for the Site. However, for Weyerhaeuser to be liable under MTCA for releases of hazardous substances associated with Outfall LLO-07, there must be credible evidence that such release(s) are from the former Mill E Site. Ecology must provide credible evidence that this is the case. The information presented to Weyerhaeuser by Ecology in support of its proposed liability finding regarding Outfall LLO-07 is not credible evidence sufficient to support a final determination that Weyerhaeuser is liable for discharges from Outfall LLO-07.

In your December 8, 2016 letter, you cite 2013 data from the Everett Smelter Supplemental Remedial Investigation ("Everett Smelter SRI") that indicated elevated arsenic concentrations in water discharging from Outfall LLO-07, and elevated concentrations of arsenic and mercury in river sediment directly below Outfall LLO-07. Outfall LLO-07 discharges from a location on the southern portion of the Site. This data, by itself, is not credible evidence that the water discharging from Outfall LLO-07 constitutes a release of hazardous substances from the Site. This data is evidence that arsenic is discharging from Outfall LLO-07 into the Snohomish River, but provides no evidence that the arsenic has been or is being released from the Site.

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<sup>3</sup> Weyerhaeuser also accepts the need to address concerns regarding the performance of the vertical barrier wall as discussed in your December 8, 2016 letter. Weyerhaeuser understands and agrees that work associated with the barrier wall is within the scope of the Consent Decree and will be performed under the Decree and as an addendum to the Performance and Compliance Monitoring Plan.

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In your January 27, 2017 letter, you cite the following evidence to support Ecology's proposed finding that Weyerhaeuser is liable for discharges from Outfall LLO-07:

- Sediment and seep data obtained in 1992 and provided in a 1994 Draft Remedial Investigation for the Site;
- Weyerhaeuser's lessee used arsenic-containing hazardous substances at the Site; and
- The integrity and source of piping discharging at Outfall LLO-07 is unknown.

Weyerhaeuser has carefully considered this information, and directed its environmental consultants at Floyd|Snider to evaluate this information and to conduct an investigation of Outfall LLO-07, in cooperation with the current owner, Pacific Topsoils/M.A.P #2 LLC ("Pacific Topsoils").

Weyerhaeuser does not dispute that its lessee used arsenic-containing hazardous substances at the Site. However, this entire area of Everett is impacted by arsenic released from the former Everett Smelter. The Site and the Snohomish River are in the lowlands area of Everett, immediately below the former Smelter.<sup>4</sup> The Site is within the boundaries of the Everett Smelter Lowlands Site (refer to the attached Figure 1). It was Ecology's efforts to evaluate the nature and extent of the former Everett Smelter Site that caused it to obtain the water and sediment data associated with Outfall LLO-07 in 2013, not any concern about the former Mill E Site. Given the massive amount of arsenic released by the smelter, the fact that Weyerhaeuser's lessee utilized arsenic in wood treating at the Site does not provide sufficient credible evidence that the elevated arsenic measured in the discharge from Outfall LLO-07 and in sediment below Outfall LLO-07 is a release from the Site.

Nor is it credible evidence to cite the unsupported statement in the Everett Smelter SRI that these arsenic and mercury concentrations were "not identified to be the result of smelter operations."<sup>5</sup> This statement is unsupported by any data or analysis. In fact, Ecology's consultant acknowledges that the origin of the unknown outfall is not known, and they apparently did nothing to further investigate the source of the outfall.<sup>6</sup>

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<sup>4</sup> See Figure 1, attached.

<sup>5</sup> Everett Smelter SRI, Section 4.1.3.3, and Figure 9-4.

<sup>6</sup> Everett Smelter SRI, Section 4.1.3.3.

## **1. The 1992 Sediment and Seep Data do Not Support the Proposed Liability Finding**

The twenty-five-year old sediment and seep data from the Mill E Remedial Investigation (“Mill E RI”) cited in your January 27, 2017 letter is not credible evidence of a release from the Site via Outfall LLO-07 because it is not representative of current Site conditions for several reasons.

First, sedimentation in this active river is a naturally occurring process; therefore sediment samples collected in 1992 are no longer wholly representative of current sediment conditions. Furthermore, to further evaluate the elevated arsenic concentrations in sediment in 1992, Weyerhaeuser collected additional sediment data in 1995, as documented in the 1996 Results of Phase III Sediment Sampling (“Mill E Phase III”).

Second, the installation of the Ecology-approved remedy, the asphalt-capped barrier wall, cut off the sources of arsenic contamination to the river when completed in 1999. Since that time, the remedy prevents river water from coming into contact with arsenic-contaminated soil during high tide, prevents precipitation from infiltrating into the contained area, reduces the migration of contaminants to the lower aquifer, and effectively cuts off contaminated seeps and groundwater from entering the river. The Mill E RI data was collected years before the remedy went into effect and is therefore also not representative of sediment conditions post-remedy.

Third, sediment data collected during the Mill E RI showed levels of arsenic mostly below the Sediment Management Standards (“SMS”) criteria, with a few exceptions at SR-01, SR-02, and SR-05.<sup>7</sup> Location SR-05 is the only location immediately adjacent to the Site,<sup>8</sup> and the only location cited in your January 27, 2017 letter. The Mill E RI noted there was a 6-inch pipe through the bulkhead at location SR-05.<sup>9</sup> SR-05 sediment data showed 253 ppm arsenic at 0.1 foot depth, 426 ppm at one foot depth, and 239 ppm at 1.9 foot depth.<sup>10</sup> In 1995, Weyerhaeuser collected additional sediment data as part of Phase III sediment sampling that was post-RI follow up sampling.<sup>11</sup> Samples were collected at the same or similar locations as collected during Phase I and II, as presented in the Mill E RI, including a station approximately ten feet from location SR-05; each station consisted of three samples. Data from the three samples collected near location SR-05 showed one exceedance of the Sediment Quality Standards (“SQS”) under the SMS, at 84.5 ppm.<sup>12</sup> This concentration was below the SMS cleanup screening level (“CSL”). The average of the three 1995 samples at station SR-05 was below both SQS and CSL levels. These results are obviously significantly lower than just three years earlier. SR-05 is located in

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<sup>7</sup> Mill E RI, Section 3.6.1.

<sup>8</sup> SR-01 and SR-02 are far to the south of the Site. See Figure 2.

<sup>9</sup> Mill E RI, Sections 2.3.2 and 5.2.4.

<sup>10</sup> Mill E RI, Appendix G, Table G-22.

<sup>11</sup> Mill E Phase III, Section 1.0.

<sup>12</sup> Mill E Phase III, Table 6.



close proximity to, and south of outfall LLO-07 (refer to attached Figure 2). All other sediment samples collected in the 1995 Phase III work along the boundary of the Site, including those in closer proximity to the former Mill E/Koppers Facility source area, were less than SQS and CSL levels.<sup>13</sup> The 2013 Everett Smelter SRI data is significantly higher than both the 1992 Mill E RI data and the 1995 Phase III data at SR-05 (both pre-remedy), which further indicates the Site is not likely the source of the elevated arsenic in the sediments near LLO-07, as there appears to be an on-going source via discharge from the outfall that is unrelated to contamination associated with the former Mill E/Koppers Facility.

As noted in your January 27, 2017 letter, seep data was also collected in 1992 as part of the Mill E RI. The sources of seep water were not conclusively determined in the 1992 Mill E RI, but were assumed to be a combination of groundwater flow from the Site and river water contacting contaminated soil at the Site during high tide and dewatering during ebb tide.<sup>14</sup> After the parties completed the Consent Decree and Weyerhaeuser installed the barrier wall, groundwater discharge and transport of river water through contaminated soil at the Site were effectively cut off. The 1992 seep data is thus not representative of current Site conditions. Regardless, the highest arsenic concentration in a seep was detected in 1992 at location SR-07 adjacent to the current barrier wall, and the associated sediment samples in that area contained arsenic at concentrations less than SMS criteria in both 1992 and 1995.

The Mill E RI sediment and seep data do not support Ecology's proposed finding of liability regarding discharges from Outfall LLO-07. This twenty-five year old data is no longer representative of Site conditions and not relevant with respect to on-going discharges from Outfall LLO-07. The 1995 Phase III sediment data shows very different conditions just three years later. Weyerhaeuser implemented the Ecology-selected remedy as directed by the Consent Decree in 1999. That remedy included hot spot excavation, construction of the barrier wall which cut off the pathway for arsenic-contaminated soil and groundwater to come into contact with the river, installation of an asphalt cap to prevent infiltration of stormwater through contaminated soil, and installation of a soil cap in areas with low-level contamination. It is expected that the Ecology-approved remedy has further reduce levels of arsenic in sediment adjacent to the former Mill E Site.

## **2. Ecology's Lack of Evidence about Outfall LLO-07 Does Not Support the Proposed Liability Finding**

The only other rationale in your letter to support Ecology's proposed finding of liability associated with Outfall LLO-07 is stating that the origin and integrity of Outfall LLO-07 is unknown. This statement is not credible evidence that the discharge from the outfall is a release from the Site. Ecology's policy 500A regarding the identification of PLPs provides a list of

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<sup>13</sup> Mill E Phase III, Section 4.4 and Table 6.

<sup>14</sup> Mill E RI, Section 3.5.2.

examples of credible evidence.<sup>15</sup> These are all examples of actual, positive evidence demonstrating a release or threatened release of hazardous substances from a Site has occurred. Your statement instead points out Ecology's lack of evidence regarding Outfall LLO-07 and it does not support the agency's proposed finding and does not comport with its own policy. The absence of evidence cannot be credible evidence.

**B. Credible Evidence Demonstrates that Discharges from the Unknown Outfall LLO-07 are Not Releases from the Site**

In addition to carefully evaluating the information provided in your letters as the basis for Ecology's proposed liability finding, Weyerhaeuser, in cooperation with Pacific Topsoils, conducted an investigation of Outfall LLO-07 within the time available to respond to your letter. Weyerhaeuser's investigation included multiple evaluations of Outfall LLO-07's path, history, origin, integrity and reviewed all available and relevant data. Weyerhaeuser researched and evaluated all likely sources of information about Outfall LLO-07. Weyerhaeuser assessed existing information about the Site's layout and uses, including past and current stormwater conveyance at the Site. Our investigation sought to address the question posed by your January 27, 2017 letter and its proposed finding—whether the elevated arsenic in water discharging from Outfall LLO-07 and adjacent sediment reported in the Everett Smelter SRI are the result of a release from the former Mill E Site. Weyerhaeuser's investigation demonstrates the answer is no.

**1. Outfall LLO-07 Very Likely Does Not Originate on the Site**

In February and March 2017, Floyd|Snider, Weyerhaeuser's environmental consultants for the Site, performed fieldwork to investigate and assess Outfall LLO-07 and its associated conveyance piping. Floyd|Snider, along with their subcontractor Applied Professional Services ("APS"), first investigated the Outfall LLO-07 pipe with a video camera mounted on a crawler device that was inserted into Outfall LLO-07. Floyd|Snider obtained a video record of the inside of the pipe to about thirty-three (33) feet in a northwesterly direction from the outfall. The crawler could not proceed further because the pipe was obstructed by large, woody debris. In early March, Floyd|Snider and APS further investigated the pipe using sonde technology. A sonde is an electronic probe on a cable that can be inserted into a pipe to transmit information to a receiver on the surface regarding the pipe location and approximate depth below ground surface. With the sonde, Floyd|Snider and APS were able to trace the pipe two hundred and ninety (290) feet from where it discharges at Outfall LLO-07, at which point there was an obstruction in the pipe that could not be bypassed with the sonde. This point is within forty (40) feet of the property and Site boundary. Thus, Floyd|Snider was able to trace ninety percent (90%) of the length of the pipe at the Site.<sup>16</sup> The pipe direction and location as verified by the

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<sup>15</sup> Ecology Policy 500A, Section 8.a.

<sup>16</sup> Additional information regarding the field surveys is available upon request.

field surveys are shown on Figure 3 and the approximate pipe depths along the alignment together with representative photographs are shown on Figure 4.

Floyd|Snider also collaborated with staff from Pacific Topsoils in visually inspecting the outfall during these investigations. These inspections included descending to the outfall using a ladder lowered from the edge of the Site (bulkhead) adjacent to the river and closely examining the outfall. Outfall LLO-07 is only accessible and visible at a tide of approximately four feet MLLW or lower; it is fully submerged when the river is higher than that. The team visually observed river water and debris freely flow into and out of Outfall LLO-07 during tide cycles. The 12-inch diameter steel outfall is not screened and there is visible sediment and large woody debris buildup in the pipe. Based on these observations, Floyd|Snider concluded that the obstructions in the pipe, including the final obstruction at the 290 foot mark from the end of Outfall LLO-07 are likely caused by a buildup of sediment and woody debris (and possible other debris) brought into the pipe through tidal activity. Pacific Topsoils' close visual inspection of the outfall revealed that while the end of the outfall appeared to be steel, the pipe appeared to transition to concrete after several feet.

Floyd|Snider and Pacific Topsoils staff also observed that Outfall LLO-07 is twelve inches in diameter (not eighteen as reported by GeoEngineers in 2013) and flow from the outfall was between five and ten gallons per minute ("gpm"). Based on Floyd|Snider's extensive experience at many other industrial sites with complex stormwater conveyance systems, this amount of flow indicates a large drainage area—certainly larger than the soil cap area of the Site. In addition, the depth, alignment, and pitch of the pipe strongly indicate that the pipe extends beyond the Site and property boundary. Based on visual observations made by Floyd|Snider and Pacific Topsoils staff, the depth of Outfall LLO-07 as it daylights is approximately nine feet below ground surface ("bgs"). Data from the video crawler and the sonde show that as the pipe traverses from the outfall in a northwesterly direction. Based on the length and approximate bgs depth of the pipe that Floyd|Snider was able to explore with the sonde, the pipe raises to six feet at the point forty feet from the Site and property boundary (see Figure 4). This indicates a gradual, relatively small downward pitch (0.1 inch per foot) from the source of the pipe to the discharge point at Outfall LLO-07 in order to gravity drain the pipe. Extrapolating from this pitch data, the pipe may originate as much as nine hundred feet upstream from the outfall and six hundred feet beyond the property/Site boundary.

Stormwater in the soil cap area infiltrates into the subsurface. There are no stormwater features in the soil cap area (such as catch basins or storm drains) to indicate any drainage to the pipe or any other evidence that the pipe serves as a stormwater discharge for the Site. In fact, prior to remedy installation, the stormwater discharge for the Site was primarily via infiltration, with localized discharge at LLO-05.<sup>17</sup> This stormwater outfall (arbitrarily named LLO-05 as part of

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<sup>17</sup> Mill E Phase III, Section 2 and Mill E Construction Report, Section 2.5.

the Everett Smelter SRI investigations) was updated by Weyerhaeuser in 1995 to include a tide gate. These connections were documented and surveyed in the 1999 Construction Report for the former Mill E, Koppers Site Remediation (“Mill E Construction Report”) and As-Built drawings associated with remedy installation. And, after the remedy was installed, site drainage was reviewed and asphalt berms were installed on the east and south sides of the asphalt cap, as documented in the Mill E Construction Report.<sup>18</sup>

Thus, our field work examined the pipe to the extent possible using all reasonable methods of in-pipe technology. The results all strongly indicate that the pipe continues on for the final forty feet to the Site and property boundary and beyond. Further, reasonable inferences from known data (pipe depth, pitch and discharge flow) all strongly and mutually support the conclusion that the pipe originates well beyond the Site and property boundary and that the pipe drains a much larger area than the soil cap area of the Site. And, there are no features of any kind observed at the Site, including any stormwater features, to indicate that this pipe drains any portion of the Site.

Finally, Weyerhaeuser and Floyd|Snider investigated every likely source of documents that might provide information about the pipe and Outfall LLO-07. Weyerhaeuser reviewed its own property records, and Floyd|Snider reviewed documents from the City of Everett, Snohomish County, Washington state archives and Sanborn maps. No record of this pipe and Outfall LLO-07 were found. The documentary record thus provides no credible evidence that the pipe and Outfall LLO-07 originate on the Site or that its purpose is to drain the Site. Stormwater features on the Site and in the immediate vicinity are shown on Figure 3 for reference.

## **2. Outfall LLO-07 and its Associated Pipe Appear to be Fully Intact on the Site**

As discussed above, Floyd|Snider explored Outfall LLO-07 and its pipe alignment across 90% of the soil cap and to within 40 feet of the Site boundary and property line. These inside-the-pipe investigations, along with field observations along the alignment of the pipe, did not indicate any damage or loss of integrity to the pipe. During the field survey work, the Floyd|Snider and Pacific Topsoils team observed no surface indications that the pipe has lost integrity, such as excessive ponding, depressions or sinkholes. There is no evidence that indicates the pipe is not fully intact as it traverses the Site.

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<sup>18</sup> Mill E Construction Report, Section 2.5

### **3. Site Data and Property Information Indicates Outfall LLO-07 is Not Associated with the Site**

Existing Site data in the area of the pipe alignment demonstrates that the Site is not the source of the elevated arsenic in discharge water or sediment GeoEngineers reported in 2013. The soil cap portion of the Site that the pipe traverses through has low levels of arsenic in soil and groundwater. Arsenic concentrations in soil in the soil cap area are generally less than fifty ppm.<sup>19</sup> Groundwater concentrations in the upper sand aquifer (the portion of the subsurface that would be in contact with the pipe) are generally less than one hundred ppb.<sup>20</sup> These soil and groundwater concentrations are significantly lower than the arsenic concentrations detected in sediment (837 ppm) and in the water discharging from Outfall LLO-07 (636 ppb) as part of the Everett Smelter SRI in 2013.<sup>21</sup> There is no possibility that the levels of arsenic detected in 2013 can originate from the Site, even assuming, contrary to the available evidence, that the pipe does not have full integrity. The observed levels of arsenic in soil and groundwater in the soil cap area of the Site are simply much too low to produce the levels in the discharge and in the sediment obtained in 2013 as part of the Everett Smelter SRI.

### **III. Summary**

Weyerhaeuser takes Ecology's proposed finding of liability for the former Mill E Site very seriously. Where Ecology has presented credible evidence that Weyerhaeuser is liable for the Site beyond the scope of the Consent Decree, Weyerhaeuser accepts that liability and stands ready to complete a new Agreed Order to assess the groundwater issues outside the barrier wall raised in your December 8, 2016 and January 27, 2017 letters. And, Weyerhaeuser stands ready to do additional work within the Consent Decree's scope. However, Weyerhaeuser does not accept Ecology's proposed finding of liability with respect to the unknown outfall referred to as LLO-07 and its associated discharges to the Snohomish River. As discussed above, Ecology has provided no credible evidence that hazardous substances in the discharge from Outfall LLO-07 and in the sediments below and adjacent to Outfall LLO-07 are the result of releases from the former Mill E Site. And, Weyerhaeuser has come forward with multiple lines of credible evidence that show Outfall LLO-07 does not originate on the Site, cannot be the source of arsenic in the discharge and in the sediment, does not drain the Site, and appears to be intact as it traverses the Site. Weyerhaeuser therefore rejects Ecology's proposed finding of liability as it relates to discharges from Outfall LLO-07 and associated contaminated sediment and it reserves its rights to challenge any further Ecology finding of liability for Outfall LLO-07 as provided by MTCA.

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<sup>19</sup> Mill E RI, Figure 3-7 and Everett Smelter SRI, Figure 6-3B.

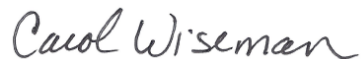
<sup>20</sup> Everett Smelter SRI, Figures 6-8, 6-9, 6-10, and 6-11

<sup>21</sup> Everett Smelter SRI, Appendix A, 2013 Snohomish River Sediment, Seep, and Outfall Sampling Technical Memorandum, Figure 3.

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Please do not hesitate to contact me if you have any questions or would like to discuss further. I look forward to working with you on those aspects of the Site for which Weyerhaeuser has liability under MTCA.

Very truly yours,

A handwritten signature in cursive script that reads "Carol Wiseman".

Carol Wiseman  
Remediation Project Manager  
Weyerhaeuser Company

cc: Sandy Foreman, Pacific Topsoils/M.A.P. #2 LLC  
Michael Dunning, Perkins Coie  
Lynn Grochala, Floyd|Snider

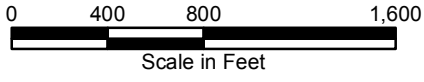


**Legend**

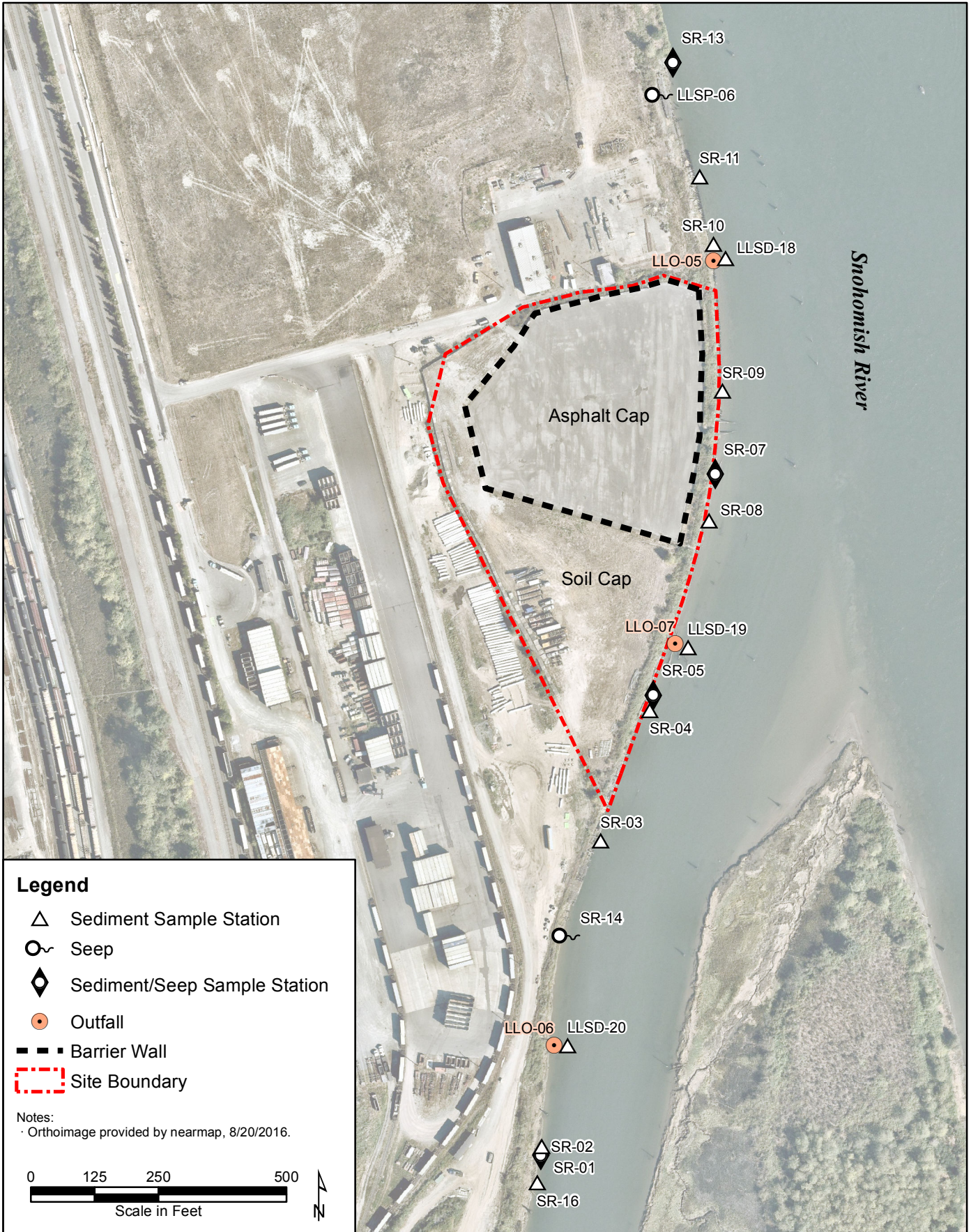
- Site Boundary
- Former Everett Smelter Facility Boundary
- Everett Smelter Lowland Area
- Everett Smelter Uplands Area

**Notes:**

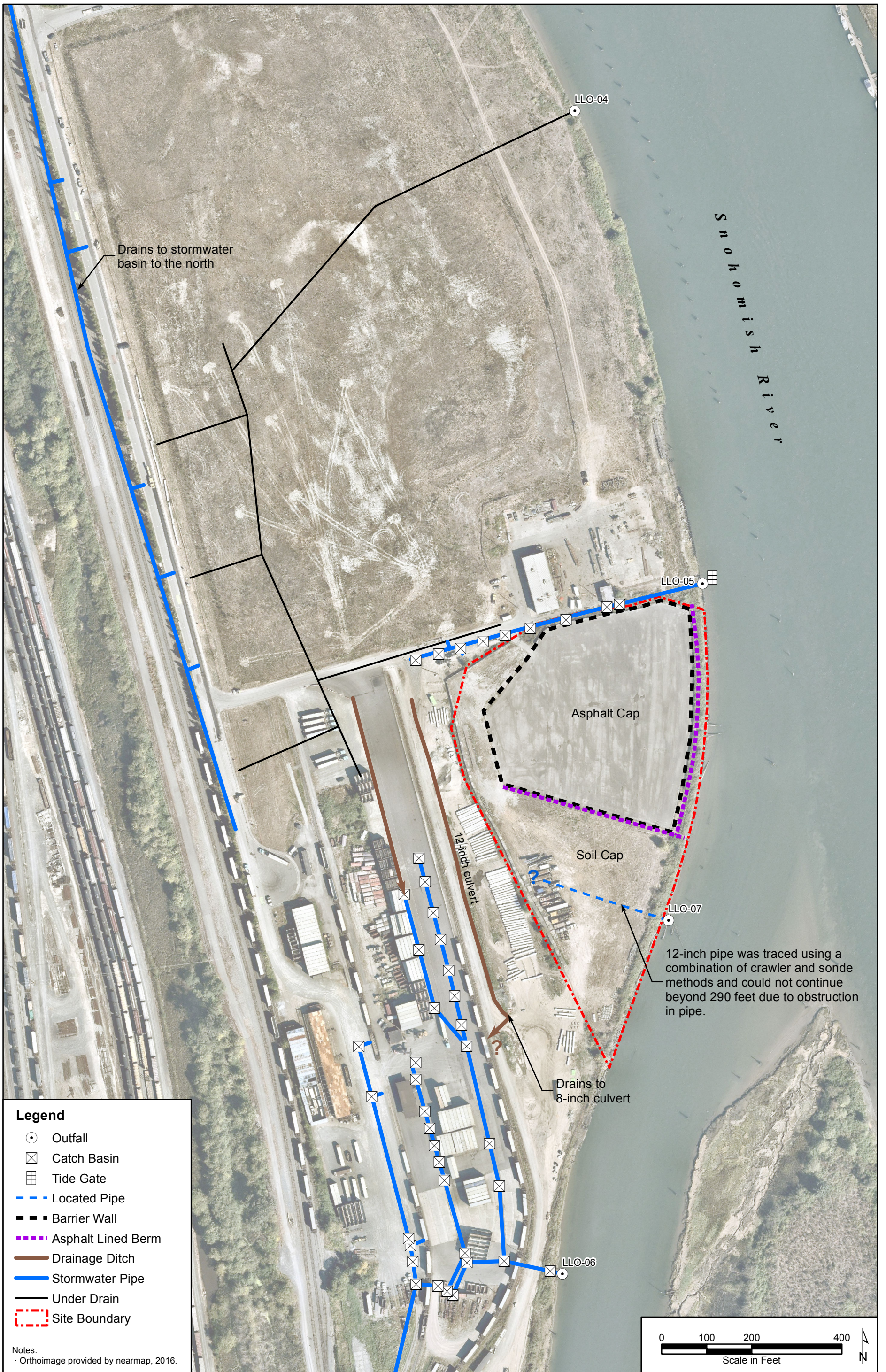
· Orthoimage provided by nearmap, 8/20/2016.















**Legend**

- Outfall
- - - Located Pipe
- - - Site Boundary
- 6'7" Approximate Depth to Pipe

**Notes:**

- Orthophoto provided by nearmap, 8/20/2016.
- Measurements indicated along the pipe are depths measured during the sonde survey.
- 12-inch pipe was traced using a combination of crawler and sonde methods and could not continue beyond 290 feet due to obstruction in pipe.

