Discipline Report Errata

In response to comments received on the Draft Environmental Impact Statement (EIS), a number of corrections, updates, and modifications have been made to the environmental discipline reports that accompany the main volume of the EIS as appendices. The discipline reports, as published for the Draft EIS, are included in their original form in this Final EIS.

In response to comments from Washington State Department of Transportation and U.S. Army Corps of Engineers, the City of Seattle (City) made revisions to the Cultural Resource Assessment (CRA) that was prepared for the Elliott Bay Seawall Project Draft EIS, and included as Appendix F. U.S. Army Corps of Engineers is the lead federal agency for compliance with Section 106 of the National Historic Preservation Act. A new redacted version of this assessment is included as Appendix F of the Final EIS. A general explanation of the changes is included in Table E-1 below.

For all other disciplines, the corrections, updates, and modifications in response to comments specific to the Discipline Reports are shown in Table E-1. Corresponding text changes in the Final EIS supersede original text in the Discipline Reports.

The mitigation measures shown in the appendices were used as input into the Draft EIS. The mitigation text in Chapters 4, 5, and 6 of the Final EIS and the new Chapter 8 supersede those in the appendices.

Table E-1. Corrections, Updates, and Modifications to the Discipline Report Appendices

Location	Revision
General – Appendices B through O	
	References to Washington State Ferries project at the Colman Dock Ferry Terminal should read: "Seattle Multimodal Terminal at Colman Dock Project"
	The description of project alternatives in Chapter 2 of the Final EIS supercedes Chapter 1 of the Discipline Reports.
Appendix C: Transportation Discipline Report	
Appendix C, General	The construction sequence used in the transportation analysis assumed that Central Seawall construction starts in Zone 4 (near Virginia Street) and proceeds south to Zone 1 (ending at S. Washington Street). To take advantage of the current closure of Alaskan Way for the bored tunnel south portal construction, work in Zone 1 may be done concurrently with Zone 4 during the first construction season. The temporary roadway under the Alaskan Way Viaduct would not change regardless of the construction sequencing; thus the overall transportation analysis is unchanged. The option to construct Zone 1 earlier may provide additional flexibility to accommodate traffic south of Colman Dock. SDOT will work closely with Washington State Ferries in developing and maintaining appropriate access to and from the ferry terminal during seawall construction regardless of Central Seawall construction sequencing.

Location	Revision
Appendix C, Page ES-3	In second bullet, delete: "WB-50" Replace with: "WB-67"
Appendix C, Page ES-3	Delete: footnote
Appendix C, Page ES-4	Under Alternative B heading, Traffic Operations bullet, add sub-bullet with text: "Alaskan Way/Temporary Road and S. Main Street (Phase II)"
Appendix C, ES-4	Before section Alternative B, add the following: "It should be noted that the current Alaskan Way Viaduct Replacement Project schedule includes a 5-month period in which the bored tunnel would be open and the Elliott Bay Seawall Project Phase II construction would still be occurring under Alternatives A and C. For this 5-month period, operations would be similar to the conditions described in Alternative B. The option to construct Zone 1 earlier may provide additional flexibility to accommodate traffic south of Colman Dock."
Appendix C, Page ES-5	In first paragraph, delete: "WB-50" Replace with: "WB-67"
Appendix C, Page 12	Delete: first full sentence Replace with: "Alternative A would add a permanent northbound lane between S. Washington Street and Spring Street to handle traffic in this segment headed to Colman Dock and through to other destinations."
Appendix C, Page 12	In Footnote 7, delete: "The Elliott Bay Seawall Project would build the additional lane from S. Washington Street to Madison Street." Replace with: "The Elliott Bay Seawall Project would build the additional lane from S. Washington Street to Spring Street."
Appendix C, Page 57-58	In last partial sentence continuing onto next page, delete: "If the 2012 conditions were used as the baseline, then EBSP construction would not result in a parking impact." Replace with: "If the 2012 conditions were used as the baseline, then EBSP construction would result in less of a parking impact."
Appendix C, Page 60	In third full paragraph, delete: last sentence Replace with: "At S. Jackson Street, bicycles and pedestrians can cross the original Alaskan Way alignment to join a relocated Elliott Bay trail on the west side of Alaskan Way."
Appendix C, Page 60	Delete: first full sentence Replace with: "A third lane is provided between Columbia Street and Yesler Way to facilitate vehicle staging nearby the ferry terminal."
Appendix C, Page 60	In second full paragraph, delete: last two sentences Replace with: "At Madison Street, the inner northbound lane makes a U-turn to enter the southbound ferry access lanes west of the Alaskan Way Viaduct and through traffic shifts to the original northbound Alaskan Way alignment."
Appendix C, Page 75	At the end of first full paragraph, add: "No data were available on the causes of the other two collisions that occurred during this 3-year period."
Appendix C, Page 75	In first partial paragraph, after sentence that states "One collision involved a bicyclist," add: "No data were available on the causes of the other two collisions that occurred during this 3-year period at the intersection of Alaskan Way and S. King Street."

Location	Revision
Appendix C, Page 75	Delete: text of third bullet under Section 4.2.7. Replace with: "Route 99: While this route has been since modified, in 2010, the route ran primarily along Alaskan Way connecting the Olympic Sculpture Park, Bell Street Pier Cruise Terminal, the Aquarium, and Colman Dock Ferry Terminal. At the south end of this route, Route 99 turns east and also connects with Pioneer Square and the International District. As of 2010, Route 99 was free and served as the replacement for the waterfront trolley that previously ran along Alaskan Way. Note that Figure 4-16 reflects the routing described here."
Appendix C, Page 77	In first full paragraph, delete: "Colman Dock can hold 603 vehicles in its staging area." Replace with: "Colman Dock can hold 579 vehicles in its staging area."
Appendix C, Page 77	Delete: first sentence in last paragraph Replace with: "Table 4-11 summarizes the maximum queues formed over the 9-week period from July to August 2010."
Appendix C, Page 78	Revise table title in Table 4-11 to be: "Colman Dock Maximum Vehicle Queue Lengths (In Feet), July-August 2010"
Appendix C, Page 79	Delete: first paragraph Replace with: "Argosy Cruises operates from Piers 54, 55, 56, and 57, located on Alaskan Way between Madison and Union Streets. There are nearby parking structures and loading zones for passengers. Eight boats operate from Piers 54, 55, 56, and 57. Argosy Cruises also subleases space to Let's Go Sailing, which operates two sailboats. Argosy Cruises operations run year-round and are most active from June to August with up to 15 cruises per day, from 9 a.m. to 9 p.m. The operating hours include the first boarding time of the day, which is one hour before cruise departure time, and the latest returning cruise. From April to May and September to October there are roughly seven cruises on each weekday and nine trips on weekend days. The hours of operation stretch from 9 a.m. to 9 p.m. depending on the day of week. Argosy Cruises runs the fewest cruises during the winter months (November to March), with two on weekdays, three on Sundays, and four on Saturdays. Winter operations start at noon and run until 2:30 p.m. on weekdays, 4 p.m. on Sundays, and 9 p.m. on Saturdays. Argosy also operates sailings to Tillicum Village on Blake Island."
Appendix C, Page 82	Between third and fourth bullets, add: "Alaskan Way and S. Main Street – northbound approach;"
Appendix C, Page 82	In last paragraph, delete: "The simulation model also suggests that there would be substantial northbound queues which would extend from the S. Jackson Street intersection to approximately 1,100 feet south of S. King Street." Replace with: "Due to a bottleneck south of S. Washington Street, there would be substantial northbound queues, which would extend from the S. Main Street intersection to south of S. King Street."
Appendix C, Page 83	In Table 4-12, Row 15, delete: "10/A, 21/C" Replace with: "26/C, 120/F"
Appendix C, Page 85	In first paragraph, delete: "However, transportation operations in 2020 would be different from today due to citywide development, closure of the AWV, opening of the bored tunnel, and loss of parking under the AWV." Replace with: "However, transportation operations in 2020 would be different from today due to citywide development, closure of the AWV, opening of the bored tunnel, and the potential loss of parking under the AWV."

Location	Revision
Appendix C, Page 85	Between third and fourth bullets, add: "Alaskan Way and S. Main Street – northbound approach;"
Appendix C, Page 86	In Table 4-14, Row 15, delete: "10/A, 21/C" Replace with: "26/C, 120/F"
Appendix C, Page 90-91	Between third and fourth bullets, add: "Alaskan Way and S. Main Street – northbound approach;"
Appendix C, Page 92	In Table 4-18, row 15, delete: "17/B, 26/C" Replace with: "61/E, >200/F"
Appendix C, Page 100	In Table 5-2, fourth row in Alternative B column, delete: "Bored tunnel is open; AWV is closed to traffic or demolished." Replace with: "Bored tunnel is open; AWV is closed to traffic or demolished. Traffic transitions from Temporary Roadway onto surface Alaskan Way south of EBSP construction."
Appendix C, Page 100	In Table 5-2, last row for Alternative B, delete: "PM: 4 intersections operate at LOS F." Replace with: "PM: 5 intersections operate at LOS F."
Appendix C, Pages 100-103	In Table 5-2, add: table note "c" to text in the AWVRP Status row, in the Alternatives A and C column. In notes section on page 103, add: "c. The current AWVRP schedule includes a 5-month period in which the tunnel would be open and the EBSP Phase II construction would still be occurring under Alternatives A and C. For this 5-month period, operations would be closer to the conditions described in Alternative B, Phase II. The option to construct Zone 1 earlier may provide additional flexibility to accommodate traffic south of Colman Dock."
Appendix C, Page 102	In row 2, column 3, delete: "WB-50" Replace with: "WB-67"
Appendix C, Page 105	In row 2, column 3, delete: "WB-50" Replace with: "WB-67"
Appendix C, Page 108	In second set of bullets, add: "• Freight/Overlegal Vehicles – Disrupt truck travel by rendering a facility that currently carries truck traffic (including a roadway segment, intersection, driveway, and loading zone) unable to do so. • Event Traffic – Disrupt routes used by event traffic, especially event-related pedestrian activity."
Appendix C, Page 113	In Table 5-5, add: table note"c" to text in the AWVRP Status row, in the Alternatives A and C column, Traffic Analysis Phase II Section In notes section under table, add: "c. The current AWVRP schedule includes a 5-month period in which the tunnel would be open and the EBSP Phase II construction would still be occurring under Alternatives A and C. For this 5-month period, operations would be closer to the conditions described in Alternative B, Phase II. The option to construct Zone 1 earlier may provide additional flexibility to accommodate traffic south of Colman Dock."

Location	Revision
Appendix C, Page 116	Add last sentence to paragraph in Section 5.3.1.2: "The current AWVRP schedule includes a 5-month period in which the tunnel would be open and the EBSP Phase II construction would still be occurring under Alternatives A and C. For this 5-month period, operations would be closer to the conditions described in Alternative B, Phase II. The option to construct Zone 1 earlier may provide additional flexibility to accommodate traffic south of Colman Dock."
Appendix C, Page 128	In first paragraph, delete: "These truck movements" Replace with: "Overlegal (greater than WB-67) truck movements"
Appendix C, Page 130	In last paragraph, delete: "flagger/UPO" Replace with: "UPO"
Appendix C, Page 131	Delete: second paragraph Replace with: "Another area of concern for water transit services is the intersection of Alaskan Way and Wall Street, due to the proximity of the Pier 66 cruise terminal, which is home to Norwegian Cruise Lines and Celebrity Cruises. That intersection is projected to operate at LOS A in the morning and LOS B in the afternoon peak hour under this traffic analysis phase (as it does under existing conditions). Therefore, no impacts are expected at the cruise terminal. However, it should be noted that the LOS would be worse during cruise ship loading/unloading if the current Street Use Permits are still in place allowing the Port to use two of the through lanes, reducing general purpose traffic to one lane in each direction between Wall and Lenora Streets. Construction would be suspended for the majority of the cruise season."
Appendix C, Page 133	Add last sentence to final paragraph of Section 6.5: "The current AWVRP schedule includes a 5-month period in which the tunnel would be open and the EBSP Phase II construction would still be occurring under Alternatives A and C. For this 5-month period, operations would be closer to the conditions described in Alternative B, Phase II. The option to construct Zone 1 earlier may provide additional flexibility to accommodate traffic south of Colman Dock."
Appendix C, Page 137	In first paragraph, delete: "The truck movements" Replace with: "Overlegal (greater than WB-67) truck movements"
Appendix C, Page 139	In fifth paragraph, delete: "flagger/UPO" Replace with: "UPO"
Appendix C, Page 141	In Table 5-15, South Main Street row, delete: "A/10, B/11, C/21, C/24" Replace with: "C/26, D/46, F/120, F/126"
Appendix C, Page 142	In third paragraph, second to last sentence, delete: "For the northbound lane south of S. King Street" Replace with: "For the northbound lane south of S. Main Street"
Appendix C, Page 143	In first set of bullets, add fourth bullet: "Temporary Road and S. Main Street"
Appendix C, Page 145	In first paragraph, delete: "These truck movements" Replace with: "Overlegal (greater than WB-67) truck movements"
Appendix C, Page 146	In last paragraph, delete: "The intersection of Alaskan Way and Wall Street, of concern to cruise operations at nearby Pier 66, would operate at LOS A in the morning and C in the afternoon. Therefore, no impacts are expected at the cruise terminal. It should also be noted that construction would be suspended during the summer, which comprises the majority of the cruise season."

Location	Revision
	Replace with: "The intersection of Alaskan Way and Wall Street, of concern to cruise operations at nearby Pier 66, would operate at LOS A in the morning and C in the afternoon. Therefore, no impacts are expected at the cruise terminal. However, it should be noted that the LOS would be worse during cruise ship loading/unloading if the current Street Use Permits are still in place allowing the Port to use two of the through lanes, reducing general purpose traffic to one lane in each direction between Wall and Lenora Streets. Construction would be suspended during the summer, which comprises the majority of the cruise season."
Appendix C, Page 151	In first paragraph, delete: "(those larger than WB-50, which is equivalent to a semi-trailer with a 50-foot wheel base)" Replace with: "(overlegal vehicles that are larger than WB-67)"
Appendix C, Page 157	Delete: "(larger than WB-50 which is equivalent to a semi-trailer with a 50-foot wheel base)" Replace with: "(vehicles that are larger than WB-67)"
Appendix C, Page 161	In bullet at bottom of page, delete: "truck use of this left-turn access" Replace with: "use by overlegal trucks (larger than WB-67) of this left-turn access"
Appendix C, Page 165	In fourth bullet, delete: "flagger/UPO" Replace with: "UPO"
Appendix C, Page 175	Add new bullet in Section 6.2.1.1: "Existing bus routes and stops would be restored. Similar to current conditions, no waterfront trolley would be running."
Appendix C, Page 182	In Table 6-10, row 15, under No Action columns, delete: "10/A, 21/C" Replace with: "26/C, 120/F"
Appendix C, Page 182	In first paragraph, delete: "five intersections" Replace with: "six intersections"
Appendix C, Page 183	In first line, delete: "two intersections along Alaskan Way (S. Jackson Street and S. King Street)" Replace with: "three intersections along Alaskan Way (S. Main Street, S. Jackson Street and S. King Street)"
Appendix C, Page 183	Between third and fourth bullets, add: "Alaskan Way and S. Main Street – northbound approach;"
Appendix C, Page 194	In fifth paragraph, second sentence, delete: "two intersections along Alaskan Way (S. Jackson Street and S. King Street)" Replace with: "three intersections along Alaskan Way (S. Main Street, S. Jackson Street and S. King Street)"
Appendix C, Page 195	In Table 6-14, row 15, under No Action columns, delete: "17/B, 26/C" Replace with: "E/61, F/>200"

Location	Revision
Appendix C, Page 197	In fourth paragraph, delete: "To fit in the additional northbound lane on Alaskan Way, it is possible that some on-street parking between S. Jackson Street and S. Main Street may be eliminated. One option for restoring parking is converting the existing right-of-way used by the former waterfront trolley. Thus, there is a potentially significant impact to parking under Alternatives A and C." Replace with: "To fit in the additional northbound lane on Alaskan Way, it is possible that some on-street parking between S. Jackson Street and S. Main Street may be eliminated. Seven on-street parking spaces on the east side of Alaskan Way could be lost if the roadway was shifted to accommodate the new lane. One option for restoring parking is converting the existing right-of-way used by the former waterfront trolley. Thus, there is a potentially significant impact to parking under Alternatives A and C."
Appendix C, Page 202	In second sentence of first paragraph, Section 6.5.2, delete: "Roy Street" Replace with: "Harrison Street"
Appendix C, Page 203	Add new Section: "**6.5.3 Navigational Analysis** The existing navigational uses along the seawall have been examined alongside the proposed habitat features. The following presents a zone-by-zone analysis. <u>Zone 1</u> Existing navigational opportunities in Zone 1 are limited due to the active ferry terminal to the north (Pier 52: Colman Dock), a Washington State Department of Transportation (WSDOT)-owned maintenance dock to the south (Pier 48), and an absence of launch and landing capabilities. As such, the planned habitat enhancement in this area is not expected to cause adverse effects to typical navigational use patterns. The habitat enhancement under Alternatives B and C will extend approximately 300 feet from the seawall and will measure approximately 250 feet at the widest point. Water depths will be reduced by approximately 15 to 25 feet from current conditions as a result of the placed aquatic materials. Note that no habitat enhancements are proposed under Alternative A in this zone and, therefore, there would be no effect on navigation. Under Alternative C, a 200-foot buffer will be maintained between the habitat feature and the existing ferry terminal and vessel routes to the north and the WSDOT-owned maintenance dock to the south. Ferries navigating to and from Colman Dock, maintenance boats accessing the Pier 48, and occasional use by hand-carried vessels (e.g., kayaks) will not be disrupted by the proposed habitat feature, and waterborne access and use of this area will be maintained. Therefore, impacts to typical navigational use patterns in Zone 1 will be negligible for Alternative C. The short-stay boat moorage under Alternative B would likely increase recreational boat traffic in the vicinity of the ferry terminal and Port of Seattle facilities, potentially affecting typical navigational use patterns in Zone 1. <u>Zone 2</u> The intertidal habitat bench planned for Zone 2 will be located entirely behind and beneath the existing pier structures, within the City of Seattle (City) right-of-way (ROW) along the seawall face; therefore, navigation within this section of the harbor area will not be affected.

Location	Revision

Zone 3

The majority of the intertidal habitat bench included within Zone 3 will be located behind the existing pier structures, within the City ROW. Two enhanced habitat benches are planned to extend from the new seawall face in Zone 3, one at Spring Street between Piers 54 and 55, and another at University Street between Piers 56 and 57.

Let's Go Sailing is a seasonal operation that utilizes available moorage space at the outer end of Pier 54. The charter vessel does not typically navigate within close proximity to the seawall. The enhanced habitat in this area will extend approximately 25 feet from the new seawall face. The existing grade will be increased by placing a 2-foot layer of modified loose substrate on top of a 3- to 5-foot base layer of loose substrate. Due to the close proximity to the seawall, it is anticipated that impacts to navigation in this area will be negligible.

Larger vessels from Argosy Cruises occasionally utilitize the space between Piers 56 and 57 in the vicinity of the second enhanced habitat area planned in Zone 3. This enhanced habitat area will extend approximately 35 feet from the new seawall face. Similar to the habitat bench at Spring Street, a 5- to 10-foot layer of modified and loose substrate will be placed to create the intertidal habitat bench.

Impacts to existing navigation in this ROW are not expected because moorage typically occurs away from the seawall face, outside of the planned improvement area to reduce potential impacts or damage from wave action and close proximity of the seawall. Additionally, moorage and space for loading and unloading will remain along the piers and waterward of the planned habitat areas. With the continued availability of moorage space and navigable water, impacts to water-dependent businesses and public access are anticipated to be negligible.

Zone 4

The majority of the intertidal habitat bench included within Zone 4 will be behind the existing pier structures, within City ROW. The largest of the three enhanced habitat benches planned for Zone 4 will be located to the north of Pier 60, between the Seattle Aquarium and Pier 62/63. This habitat bench will extend approximately 85 feet from the new seawall face, increasing elevation by approximately 6 feet. Existing bathymetry in this area is relatively shallow, and the area is not commonly used for recreational or commercial navigation; therefore, impacts to navigation in this area will be negligible.

New substrate will also be placed in an enclosed area between Piers 59 and 60. The planned substrate enhancement has been designed to avoid impacts to navigation by consisting of no more than a 2-foot-thick layer of aquatic materials. Additionally, this particular area is surrounded by existing structures and is not accessible to public watercraft; therefore, no navigational impacts are anticipated.

The third enhanced habitat area in Zone 4 will be located to the west of Waterfront Park. This subtidal substrate enhancement area will consist of pea gravel and shell hash, placed at a thickness of approximately 1 to 2 feet. This habitat improvement is not expected to interfere with the public's ability to move through the area due to its design, which only results in a minor change in elevation within its footprint of approximately 30 feet. Therefore, impacts to navigation in this area will be negligible.

The wall pullback proposed under Alternative B (Land Plaza or Water Plaza options) would not result in any change in the location of the habitat enhancements in Zone 4; therefore, the navigation effects would be the same as for the other build alternatives.

Location	Revision
	Zone 5 In Zone 5, a riprap revetment extends out from the face of the existing seawall in the vicinity of the Bell Harbor Marina. To avoid potential impacts to this Port of Seattle improvement, the habitat features planned for this zone are minimial. The upper portion of the riprap will be removed to create a more natural transition and quarry spalls will be placed as a stabilizing underlayer along the reshaped riprap slope. This habitat improvement will increase depth compared to existing conditions, potentially resulting in a minor benefit for the navigability of recreational vessels along the seawall face. Zone 6 In Zone 6, the intertidal habitat bench will primarily be located behind the existing pier structures, within City ROW. The enhanced habitat bench located to the north of Pier 66 will extend approximately 100 feet from the new seawall face. A layer of loose substrate and modified loose substrate will extend for approximately 60 feet from the new seawall face. A confining rock sill will be placed at the toe of this substrate enhancement. This section of the inner harbor is predominantly used by cruise ships, which do not navigate or moor between piers, and instead utilize moorage areas along the outer edge of the Bell Harbor Marina. Smaller vessels occasionally use this area for moorage, but moorage is typically offset from the wall face, outside of the planned improvement area. The enhanced habitat bench is not planned within an area typically used for moorage; therefore, it is not expected to affect water-dependent business or navigational ability through this part of the inner harbor. The second enhanced habitat bench planned within Zone 6 is located to the south of Pier 69. Clipper Navigation currently occupies three moorage spaces to the south of this pier; however, the moorage is separated from the existing seawall by a gangway that runs perpendicularly from Pier 69. The enhanced habitat area will be located between the gangway and the seawall, and will extend approximately 125 feet from the new seawall face. Intertidal habitat would be created within 35 feet of the seawall with the placement of up to 5 feet of loose and modified loose substrate. A confining rock sill would then slope down to existing grade, over a width of approximately 40 feet. Waterward of this rock sill, the habitat materials will extend another 50 to 55 feet, through the placement of a layer of pea gravel and shell hash. Because this enhanced habitat bench is separated from vessel traffic by a gangway, impacts to navigation will be negligible. The third habitat enhancement in Zone 6 will be located to the north of Port of Seattle headquarters at Pier 69. Commercial moorage is available for lease to the north of this pier. In this area, substrate enhancement will extend approximately 125 feet from the new seawall face. To achieve the optimal intertidal habitat, the existing grade will be raised by 10 to 20 feet. A rock sill will be constructed to help confine the modified and loose substrate. The City will continue to coordinate with the Port of Seattle to ensure that habitat enhancements will not impact navigation and moorage.”
Appendix C, Figures 4-2, 4-3	Revise figures to show Marion Street pedestrian bridge only extending to First Avenue from Colman Dock.
Appendix C, Figures 4-17, 4-20, 6-6	Revise figures to show PM Peak Level of Service F at Alaskan Way and S. Main Street.

Location	Revision
Appendix C, Figures 4-18, 4-22, 5-9, 5-11, 5-13, 5-15, 5-16, 5-18, 5-19, 6-5, 6-7, 6-9	Revise figures to add note at S. Royal Brougham Way: "The AWVSP will construct an overpass of the railroad tracks at this location with connections to S. Atlantic Street."
Appendix C, Figures 4-21, 6-10	Revise figures to show Level of Service F at Alaskan Way and S. Main Street.
Appendix C, Figure 5-12	Revise figure to note that AM Peak Level of Service at Temporary Road and Main Street is D, while PM level of service is F.
Appendix D: Economics Discipline Report	
Appendix D, Page 51	Add the following as a new second sentence in the second paragraph of Section 4.2.2: "The Seattle Historic Waterfront Association estimates that waterfront businesses alone provide approximately 1,500 jobs and generate about $70 million in annual revenue."
Appendix E: Noise and Vibration Discipline Report	
Appendix E, Page 44	In Section 4.1.2, delete the sentence: "Thirty-five vessels access the Seattle ferry terminal at Colman Dock (Pier 52) during spring weekdays."
Appendix F: Cultural Resources Assessment	
Appendix F, Sections 5.1 and 5.2	Sections 5.1 and 5.2 of the CRA have been revised to provide additional discussion of the eligibility of properties with the potential to be affected by the undertaking. The revised text includes discussion of the National Register criteria as applied to these properties.
Appendix F, Chapter 6	Chapter 6 of the CRA has been updated and reorganized to specifically discuss each property that will be potentially affected by the project with details on how those potential effects would occur.
Appendix I: Land Use, Shorelines, and Parks and Recreation Discipline Report	
Appendix I, Page 39	Section 4.1.1.1. The reference to Washington State Ferries (Colman Dock, Pier 52) is expanded to read: "Washington State Ferries and various retail businesses (Colman Dock, Pier 52)"
Appendix I, Page 42	The second sentence in the paragraph under "4.1.2 Recent and Planned Development" is revised to read: "Under consideration are potential changes to Terminal 46 involving terminal improvements and upgrades consistent with current operations of a container terminal, along with improvements proposed as part of the Seattle Multimodal Terminal at Colman Dock Project."
Appendix I, Page 50	Add an additional bullet point at end of bullet list: "Container Port Element"
Appendix I, Page 59	The second sentence in Section 5.2.1.4 is revised to read: "Public access at Colman Dock includes the upper level walkways around the terminal building, the eastern half of Slip 1 overhead loading walkway, and the terminal building itself. These areas of the facility are accessible without paying a fare and offer Elliott Bay, Port, City and territorial views."
Appendix I, Page 98	The first paragraph under 7.1.2.1.1 Seattle Shoreline Master Plan is replaced with: "The discussion of the applicability of the Seattle Shoreline Master Program is based on an analysis of the program as of August 2012. At this time, the Elliott Bay Seawall Project is expected to be vested under this code. The City of Seattle is updating their Shoreline Master Program (SMP). In January 2013, the City of Seattle Council passed an ordinance recommending approval of the SMP. Currently the SMP update is under review by Ecology and will likely be approved mid- to late-2013."

Location	Revision
Appendix I, Page 98	A new sentence is added after the third sentence in the third paragraph in Section 7.1.2.1.1 as follows: "The new Seattle Shoreline Code (SMC 23.60A.065) also allows for this."
Appendix I, Pages 100-101	Sections 7.1.2.5.1 (Shoreline Use Goals and Policies) and 7.1.2.5.2 (Shoreline Access Goals and Policies) refer to the SMP code as of August 2012. Under the updated code, approved by the Seattle City Council in January 2013 and now under review by Ecology, the text of several of the goals are updated. At this time, however, the EBSP is expected to be vested under the existing shoreline code.
Appendix I, Page 100	The following text replaces Section 7.1.2.5.1, Shoreline Use Goals and Policies, in its entirety: "The following goal is from the existing SMP as of August 2012: • LUG43: Protect those areas of shoreline that are geologically dangerous or fragile, or biologically fragile. The following goal is from the proposed SMP as of January 2013: • LUG42 (renumbered): Protect ecological function of those areas of shoreline that are biologically significant or that are geologically fragile. The City and its contractors would use BMPs during construction to protect geologically and biologically fragile areas. The habitat elements of the three build alternatives are also designed to enhance the biological conditions along the downtown Seattle waterfront for fish migration and ecosystem productivity. All of these elements are consistent with goals and policies of the Seattle Comprehensive Plan. "
Appendix I, Page 100	The following sentence is added directly below the heading in Section 7.1.2.5.1, Shoreline Access Goals and Policies: "The following are the applicable goals and policies from the SMP as of August 2012:"
Appendix I, Page 100	The following text is added at the bottom of the page after bullet 6: "The following are the applicable goals and policies from the SMP update recommended by the Seattle City Council in January 2013 and currently under review by Ecology. At this time, the EBSP is expected to be vested under the existing shoreline code. The following information is provided for information purposes only. • LUG44 Maximize public access — both physical and visual — to Seattle's shorelines. • LUG45 Preserve and enhance views of the shoreline and water from upland areas, where appropriate. • LU235 Enable opportunities for substantial numbers of people to enjoy the shorelines by requiring access to public property located on the water and by allowing uses that are not water-dependent to locate on waterfront lots when those uses provide additional public access to the shoreline and are located in waterfront areas less suited for water-dependent uses. • LU236 Promote public enjoyment of the shorelines through public access standards that require improvements to be safe, well designed, and with adequate access to the water. • LU238 Maintain standards and criteria for providing public access, except for lots developed for single-family residences, to achieve the following: ▪ Linkages between shoreline public facilities via trails, paths, etc., that connect boating and other recreational facilities. ▪ Visible signage at all publicly owned or controlled shorelines and all required public access on private property. ▪ Development of bonuses or incentives for the development of public access on private property, if appropriate.

Location	Revision
	▪ Provision of public access opportunities by public agencies such as the City, Port of Seattle, King County and the State at new shoreline facilities and encourage these agencies to provide similar opportunities in existing facilities. ▪ View and visual access from upland and waterfront lots. ▪ Prioritize the operating requirements of water-dependent uses over preservation of views. ▪ Protection and enhancement of views by limiting view blockage caused by off-premise signs and other signs.
Appendix J: Public Services and Utilities Discipline Report	
Appendix J, Page 50	Replace Section 4.2.6 Natural Gas with the following text: "PSE provides natural gas service to the project area, including Alaskan Way. PSE's system consists of supply lines (distribution lines that operate at over 60 psig), distribution lines, pressure-reducing facilities, service lines and meters. The study area contains at least one example of each of these types of facilities. A 12-inch high-pressure supply line is located between Blanchard and S. Main Streets within the Alaskan Way right -of-way. This pipeline is an important component in the supply system that feeds the western part of PSE's service territory. In addition it provides direct high pressure service to Seattle Steam and feeds other lower pressure distribution systems that serve businesses along Alaskan Way. Two pressure reducing facilities, known as "district regulators" are located in vaults within the project area: one at Spring Street east of Alaskan Way, and the other at Pike Street on Alaskan Way. The majority of local service connections between Broad and Pike Streets are supplied by a 4-inch and a 2-inch intermediate pressure gas line located in Alaskan Way. Feed for this line is provided by the district regulator located at Pike Street, and it extends beyond the project area to serve other areas. The services between University and Marion Streets are supplied by another 2-inch intermediate pressure gas line located in Alaskan Way. Feed for this line is provided from a line that extends down Madison from northeast of the project area."
Appendix J, Page 51	In the second to last line on the page, delete "Level 3" from the list of telecoms in the study area.
Appendix J, Page 59	The last sentence in the first paragraph is modified as follows: "Relocations would be performed according to agency regulations and permits, including design and safety requirements, utility provider requirements, and proper BMPs."
Appendix J, Page 66	Table 5-9 has been changed to differentiate between the 12-inch high-pressure main and intermediate-pressure pipe, with 1,000 linear feet of 12-inch main and 2,500 linear feet of intermediate-pressure pipe affected by Alternatives B and C in the Central Seawall and 2,500 linear feet of intermediate-pressure pipe affected by Alternative A.
Appendix J, Page 66	The following sentence will be added as between sentences 2 and 3 under the first paragraph of Section 5.2.2.2: "The gas main may require protection in place or would need to be relocated to provide continuous service."
Appendix J, Page 68	Replace the first sentence of Section 5.2.3 with the following sentence: "The project would comply with all federal, state, and local utility design and safety standards and criteria."

Location	Revision
Appendix J, Page 68	Add the following text to the end of the fourth paragraph of Section 5.2.3, "Additionally, any other nearby facilities sensitive to steam pipes, such as plastic (polyethylene) lines, may require insulation."
Appendix J, Page 68	The following final sentence will be added to the last paragraph in Section 5.2.3: "SDOT will continue to work closely with private utilities and stakeholders as design and construction plans move forward to accomplish shared objectives in a timely manner."
Appendix L: Fish, Wildlife, and Vegetation Discipline Report	
Appendix L, Page ES-1	Change the last sentence of second paragraph to read: "The primary goals of the ecosystem restoration measures proposed are to (1) create a functional migratory corridor for juvenile salmonids and (2) improve ecosystem productivity through enhancing ecosystem functions and processes "
Appendix L, Page ES-1	Change fourth paragraph to read: "The EBSP build alternatives contain several typical elements of construction that would impact biological resources. These typical elements of construction include upland excavation and wall pull-back areas; new wall construction techniques; near-shore habitat improvements; outfall reconstruction and use of in-water construction equipment; and demolition of existing structures and relocation of utilities. Effects from construction include disturbance from construction activities, redistribution of contaminated sediments in the nearshore, and some mortality of sessile wildlife due directly to construction activities."
Appendix L, Page ES-1	Change last paragraph to read: "Mitigation measures and Best Management Practices (BMPs) are proposed that would be used to avoid and minimize adverse impacts that could occur as well as any unanticipated construction effects. Short-term and moderate construction effects are anticipated under the No Action Alternative due to emergency construction that may be required to fix wall failures. If a substantial failure of the wall were to occur, substantial construction effects could result due to the need to provide immediate emergency repairs to contain upland soils, stabilize infrastructure, and reconnect piers."
Appendix L, Page ES-1	Change second bullet to read: "Alternative B utilizes a braced soldier pile (BSP) seawall structure, coupled with more ambitious habitat and public-amenity creation. These habitat and public amenity features are achieved with significant wall pull-back distances (i.e., the distance the proposed seawall will be moved to the upland relative to the existing seawall), wider habitat bench areas (i.e., rocky habitat features proposed to be placed in the nearshore to provide improved habitat conditions), and enhanced aquatic substrates."
Appendix L, Page 44	Change last paragraph in Section 4.3 (Current Conditions) to read: "Background noise in the project area, in general, has been shown to be generally loud. In-air and in-water noise generated by urban activities such as vehicle traffic, use of machinery, container shipping, and ferry and other boat traffic radiates into and through all environments. In-air noise is likely partly responsible for the lack of native upland wildlife present in the greater project area. Measured ambient in-water noise in the marine environment in the vicinity of the EBSP has been recorded to be 126 dBRMS (Laughlin 2011); a value substantially higher than natural conditions. Thus, high levels of human caused background noise are currently present throughout the entire action area in both marine and upland environments."
Appendix L, Page 48	Change sentence mid-paragraph to read: "A popular fishery exists for these species with most of the fishing occurring off of Pier 86, or also known as Elliott Bay Park (recently changed to Centennial Park) fishing pier; although, all piers in the study area are used for angling at times (USACE 2008)."
Appendix L, Page 64	In Table 4-2, under "Potential of Occurrence" for Steller sea lion, delete "Unlikely" and replace with "Likely"

Location	Revision
Appendix L, Page 73	Change last sentence in the last paragraph in Section 4.3.7.10 from: "…habitat suggest their presences to be rare."to "…habitat suggest their presences to be seasonal."
Appendix L, Page 87	Change the second paragraph in Section 5.3.2 to read: "Following the initiation of excavation behind the temporary containment wall, it is assumed that water would move into the work area from various sources including rain, groundwater, tidal fluctuations, and construction sources, and mix with and mobilize contaminated sediments. The temporary containment wall is intended to restrict this construction water to the work area. Although jet grouting, the major method of construction for anchored soil seawall structure, has the potential for uncured concrete materials to enter nearshore waters and raise pH, it is intended to be fully contained and prevented from impacting surrounding areas (see Wang et al. 1998; Jankaite and Vasareviccaroniusa 2005). Once solidified, grout has similar properties to that of cement and is designed as a non-liquefiable and stable block of soil. During soil improvement activities, when grout is being pumped into the existing substrate, its relatively thick composition would prevent it from passing through substrate and into Elliott Bay. Grout may find voids or holes and could enter the water if any are present, but efforts would be made to fill and block these prior to commencing soil improvement activities. The construction water would be managed and prevented from moving into the nearshore where it could have the potential to adversely impact aquatic communities including algae, invertebrates, fish, marine mammals, and birds by temporarily exceeding water quality standards. This would likely keep adverse effects moderate and short term. However, if construction water is not managed properly upland of the temporary containment wall and allowed to move into the nearshore, it could result in a large, short-term adverse effect on the local environment."
Appendix L, Page 103	Change the tenth bullet to read: "Employing noise attenuation techniques would reduce sound energy from pile-related activities to some extent. Potential constraints of the project area may prevent bubble curtains and the dewatering of in-water construction areas from being used. Contaminated sediments could likely be resuspended by bubble curtains and tidal actions and limits of hardware and techniques would make dewatering the area behind a coffer dam and within a containment sleeve difficult. Use of bubble curtains and the dewatering of areas where pile manipulations would take place have shown to be the most effective noise attenuating methods. Further study will be used to determine whether employing these techniques would be feasible. Employing the remaining methods, such as using cushion blocks for all impact pile installation and installing in-water piles within watered steel casings (i.e., behind a wet containment wall or within a submerged containment sleeve), would provide minor attenuation."
Appendix M: Water Resources Discipline Report	
Appendix M, Page ES-i	Third paragraph, delete last sentence: "Water quality degradation occurs in nearshore areas of Elliott Bay due to episodic CSOs during larger storm events." Replace with: "Water quality degradation in the nearshore areas of Elliott Bay results from inputs associated with multiple sources including CSOs, stormwater runoff, and boat discharges."
Appendix M, Page ES-iii	In second full paragraph, first sentence, delete: "and stormwater" In second sentence, delete: "stormwater outfalls and"
Appendix M, Page 44	Last paragraph. Clarification of information presented in Figure 4-1 is provided via the following: In the middle of paragraph before the sentence that begins with "Figure B-1," add: "Figure 4-1 distinguishes between drainage areas labeled as "combined," "separated," and "low-flow diversion." These types of drainage areas, and associated outfalls along the Elliott Bay shoreline, are described in Section 4.2.2."

Location	Revision
Appendix M, Page 47	Fourth paragraph: Delete first two sentences: "Water quality in Elliott Bay is generally good and meets state standards. There has been episodic degradation resulting from CSO discharges (discussed in Section 4.2.3) and several Section 303(d) listings discussed below." Replace with: "Water quality in Elliott Bay is good and generally meets water quality standards, although the Washington State Department of Ecology has identified several Clean Water Act Section 303(d) listings in the bay associated with degraded water quality. Multiple sources, including CSO discharges (discussed in Section 4.2.3), stormwater discharges (discussed in Section 4.2.2) and others result in water quality degradation that mostly affects nearshore areas of Elliott Bay. These are described further in Section 4.2.1.2 below."
Appendix M, Page 48	First full paragraph, delete: "Once approved, the 2010 Water Quality Assessment will replace the current 2008 Water Quality Assessment of impaired water bodies in Washington State." Replace with: "In December 2012, the USEPA approved the 2010 Assessment, effectively making the Second 303(d) listings resulting from it the current listings that Ecology uses for regulatory purposes."
Appendix M, Page 48	In second paragraph, first sentence, delete: "proposed"
Appendix M, Page 48	In second paragraph, delete: "No listings have been moved to Category 3 relative to the 2008 Assessment."
Appendix M, Page 52	In Figure 4-4, the location of the 24-inch-diameter King County CSO outfall at south end of project area is shown at northeast corner of Pier 48, near S. Washington Street, not near King Street.
Appendix M, Page 53	In last paragraph, first sentence, delete: "PSD main" Replace with: "outfall of unknown ownership"
Appendix M, Page 54	In third paragraph in Section 4.2.2.2, clarification of information presented in Figure 4-4 is provided via the following: Add: "The owner of a particular stormwater or CSO outfall is responsible for the water quality of associated discharges under applicable regulatory requirements. While the City has responsibility for nearly all of the outfalls within the project limits, any privately owned outfalls that may be rebuilt or modified as part of seawall replacement will remain the responsibility of the existing owner."
Appendix M, Page 55	In first paragraph, delete: "King County operates a CSO outfall at the western terminus of King Street just outside of (south of) the project limits." Replace with: "King County operates a CSO outfall at Pier 48 near the western terminus of S. Washington Street."
Appendix M, Page 66	In last full paragraph, before the sentence beginning with "Dewatering treatment and discharge systems generally consist of…" Add: "Re-injection of water into the ground would require registration under Ecology's Underground Injection Control (UIC) program, and compliance with associated groundwater quality protection requirements."

Location	Revision
Appendix M, Page 66	After last full paragraph, add: "In addition to satisfying regulatory requirements for groundwater quality protection, re-injection of water into the ground would need to be done carefully to prevent adverse effects on groundwater levels, as could affect nearby structures, and to prevent unintended releases of pressurized groundwater into Elliott Bay. This would require a thorough plan for the timing, rates, and equipment to be used for re-injection, and monitoring of injection rates and resultant groundwater levels in the immediate area. Coordination with Ecology through the Underground Injection Control program would also be required."
Appendix M, Page 67	Add a new sentence to the paragraph at top of page (the paragraph that begins on previous page): "This monitoring would include several pollutants that may be present in dewatering discharges, not just turbidity and pH that are routinely monitored per NPDES construction stormwater permit requirements."
Appendix M, Page 67	In first full paragraph, beginning of second sentence, delete: "In addition,"
Appendix M, Page 67	At the end of the last paragraph, add: "Uncured jet grout could also potentially contaminate shallow groundwater or surface runoff that pools in below-grade excavations. If that water is pumped to the storm drain system, the associated contaminants could reach Elliott Bay."
Appendix M, Page 68	In first paragraph, before sentence beginning with "Typical upland…" Add: "The SWPPP/CSECP would also focus on prevention of contact between jet grout batching materials and stormwater runoff, and containment of runoff and water pooled in below-grade excavations that comes in contact with those materials to enable suitable treatment before discharge to Elliott Bay via the local storm drain system."