

**Viewpoints for Aesthetics, Light, and Glare Analysis**

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## Viewpoints for Aesthetics, Light, and Glare Analysis

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This appendix provides viewpoint descriptions and associated figures for the key viewpoints identified in Chapter 3, Section 3.3, *Aesthetics, Light, and Glare*, in Volume I of this Final Environmental Impact Statement (Final EIS). It describes the viewer sensitivity and associated key viewpoints for urban and industrial views, rural and residential views, and natural views. Eleven key viewpoints from which views of the project area could be affected, were identified. Viewpoints are described individually and grouped by view type.

### Urban and Industrial Views

The typical viewers in this area are assumed to be industrial workers and commuters traveling on Industrial Way. Visual sensitivity in the industrial use area along the Columbia River is expected to be low because of the existing industrial character of the landscape. Existing industrial facilities appear large in scale and clearly dominate the landscape character. Major visual lines are defined by buildings and structures, and thus are vertical, horizontal, and diagonal. The colors of the existing structures vary but are primarily neutral, including brown, gray, and white surfaces. Movement is an integral part of views of this area, resulting from vehicular traffic, personnel, and industrial emissions (plumes). Artificial lighting is common throughout the industrial area and clearly defines the extent of the heavy industrial area at night. Although most facilities lack extensive windows or other highly reflective surfaces, glare from light-colored building surfaces can be common on bright days. The concentration of similar facilities and land uses can make changes in nighttime lighting difficult to discern.

### Key Urban and Industrial Viewpoints

- **Viewpoint 1, Industrial Way (1,620 feet southeast of the project area).** This viewpoint represents views of the project area from nearby industrial areas. Views are from approximately the same elevation and are dominated by the numerous large-scale industrial facilities, transmission lines, and substations that occupy most of the land in this area. Industrial Way parallels the project area, limiting views to those obtained on approach to the project area, or at an approximate 90-degree angle as the viewer passes the project area (Figure G-1).
- **Viewpoint 2, 38th Avenue (2,050 feet northeast of the project area).** From 38th Avenue, the project area is directly in front of the viewer on the approach to Industrial Way (Figure G-2). Industrial facilities, transmission lines, and substations—all in the immediate foreground (within 1 mile) of the view—dominate the existing views.
- **Viewpoint 3, Mint Farm Industrial Area (2,680 feet northeast of the project area).** This viewpoint provides another view of the project area from a nearby industrial area. Existing facilities on the project area and transmission lines are partially visible through vegetation. The visual sensitivity of viewers at this location is low. The industrial character of the area is consistent with the historical industrial use of the Port and this area of Longview (Figure G-3).

## Rural and Residential Views

The typical viewers in this area are presumed to be residents of the city neighborhoods or of surrounding low-density unincorporated residential properties, including areas south of the river in Oregon. Some travelers on local and state transportation corridors, such as U.S. Route 30 (US 30) from the rural south side of the Columbia River, also have views of the project area.

The general landscape of the rural and residential area consists of natural and human-made features and patterns, often the result of an altered landscape that now supports rural farming or forestry development. The more intensely developed large-scale industrial facilities, high-voltage electrical transmission lines, electrical substations, and plumes of industrial emissions may or may not be clearly discernible.

As with similar land uses, longer distances make individual sites and uses difficult to discern within the surrounding industrial landscape. For example, a viewer at the Hillside Residential viewpoint (Viewpoint 5) is located approximately 3 miles northeast of the project area, making it difficult to identify specific changes to the existing area. Industrial emission plumes and artificial lighting are common throughout the industrial area along the Columbia River. Moreover, the concentration of emissions and light sources at similar facilities and land uses in this industrial area reduces the visual distinction of any single site or facility.

### Key Rural and Residential Viewpoints

- **Viewpoint 4, Barlow Point Neighborhood (7,500 feet northwest of the project area).** This viewpoint represents the views of the project area from the Barlow Point neighborhood, located adjacent to the northwest terminus of the project area. The general character of the area is agricultural. Large tracts of flat farm and open space, with dispersed housing (including a row of houses on Barlow Point Road) are accessed by narrow rural roads approximately 20 to 30 feet in width. The view of the project area is obscured from most of the Barlow Point neighborhood by the approximately 75-foot-tall, 47-acre Mount Solo landfill (EMCON Northwest 1992), a broad row of trees, and the levee along the Columbia River. Residents would not have direct views of the project area (Figure G-4). Most foreground views feature open space but large utility transmission towers and emission plumes are visible in distant views. Although no direct sources of light from the project area or industrial facilities can be seen, ambient light originating from industrial uses, including the project area, is visible.
- **Viewpoint 5, Hillside Residential (14,875 feet northeast of the project area).** This residential area is situated in the hills north of the floodplain and has sweeping views of the floodplain and river, which may include the industrial area. Residents of dispersed locations on the eastern hillsides may have views of the project area. Although private lots could not be accessed, viewpoint photographs were available from an undeveloped lot on Alexia Court (Figure G-5). These areas are generally characterized by contiguous neighborhoods on winding hillside streets. Views from western residential areas are blocked partially or completely by Mount Solo (elevation 610 feet), which lies between the residential areas and the project area. Views of industrial areas are further obstructed by existing vegetation.

Views from this area vary depending on location, but residential viewers could have high sensitivity to changes to the project area. Nighttime views from residential areas include the residential and commercial lighting of Longview and beyond. Lighting associated with the

industrial facilities south of Industrial Way is also visible; however, no single facility dominates the existing views.

- **Viewpoints 6 and 7, US 30 Viewpoints (13,390 to 14,980 feet south of the project area).** The US 30 corridor on the south side of the Columbia River extends 2 miles west from the Lewis and Clark Bridge. The corridor includes two scenic pullouts, both with scenic views of Mount St. Helens, Mount Rainier, the Columbia River, and surrounding hillsides. The prominent natural features are the primary focal points but views include rural farmland on both sides of the Columbia River and the Longview/Kelso urban and industrial areas (1 to 5 miles away). Although individual facilities can be discerned from both viewpoints, these facilities are located in an industrial context. Furthermore, most viewers do not linger at road pullouts, and views are presumed to be short in duration (Figures G-6 and G-7).

Sources of light and glare at the viewpoints include moving vehicles. The ambient glow of the industrial use area along the Columbia River, including Port and Weyerhaeuser facilities, is also visible in the distance. Lighting from the individual facilities can be discerned; however, no facility or light source dominates views and light sources blend into the visual context of the industrial area's nighttime condition.

Viewer sensitivity to changes in the study area is assumed to be moderate from Viewpoints 6 and 7 due to the scenic nature of the views; however, views are transient and already include an existing industrial landscape along the Columbia River.

- **Viewpoint 8, Alston-Mayger Road (10,930 feet southwest of the project area).** The road is located on a high bluff south of the Columbia River in Oregon. Views of the project area from this area occur primarily from single-family residences situated on the northern edge of the bluff. Views of the project area are extremely limited from the roadway because of topography and vegetation. Access constraints precluded observation and evaluation from residential lots. Views were available only from the edge of the road along private property (Figure G-8). Views vary depending on their exact location, but residential viewers could have high sensitivity to changes to the project area. Scenic views of Mount St. Helens, Mount Rainier, the Columbia River, Lord Island, and Walker Island are the primary focal points, but views also include the Longview urban and industrial areas (approximately 2.5 to 5 miles away). Although individual industrial facilities can be discerned, the considerable distance to the project area reduces viewer sensitivity to individual developments within the larger industrial landscape.

Viewer sensitivity from this viewpoint is moderate to high due to the residential viewing location; however, elements of the project area and the larger agglomeration of industrial facilities blend into a relatively contiguous industrial landscape. The ambient glow of the industrial area along the Columbia River, including Port and Weyerhaeuser facilities, is visible but no single facility dominates views.

- **Viewpoint 9, West Longview Neighborhood (8,000 feet northwest of the project area).** This viewpoint is located along Willow Grove Connection Road (SR 432) just south of the residential neighborhood along Schneiter Drive. The general character of the area is single-family residential homes bordered by extensive wetlands associated with the Coal Creek Slough. The area between the neighborhood and the project area contains large tracts of agricultural land with dispersed single-family residences. The view of the project area is obscured by the approximately 75-foot-tall, 47-acre Mount Solo landfill (EMCON Northwest 1992) and a broad row of trees. Residents would not have direct views of the project area (Figure G-9). Although no

direct sources of lighting from the project area or industrial facilities can be seen, ambient light originating from industrial uses, including the project area, is visible.

## Natural Views

The typical viewers in natural areas are assumed to be recreationalists using the Columbia River or public parks. As noted above, the Columbia River offers a variety of recreational opportunities such as boating, fishing, and other forms of water recreation, and the Lower Columbia River Water Trail passes by the project area. Dibblee Beach Park offers public beach and water access, fishing, swimming, picnicking, sunbathing, and other passive recreation opportunities such as hiking and bird watching. The landscape character of natural areas is formed by distinctive and memorable natural features (e.g., landforms, rock, outcrops) and patterns (vegetation and open space) with few human-made features. Visual texture consists of rough natural surfaces and colors, including browns, yellows, and greens, and the smooth waters of the Columbia River. Views for a typical recreationalist are assumed to be infrequent and of short to moderate duration; however, viewer sensitivity tends to be high due to interest in natural areas and the inconsistency of natural and industrial lands.

In addition to use by recreationalists, the Columbia River is also navigable by commercial boat operators. Viewers from commercial boats are expected to have a low sensitivity to visual changes because of the infrequent and transitory nature of their views, making it unlikely that they would focus on changes to the project area.

## Key Natural Viewpoints

- **Viewpoint 10, Dibblee Point Beach (6,500 feet south of the project area).** This waterfront area extends along the Columbia River from the confluence of the Cowlitz and Columbia Rivers northwest to the project area. This section of the river is characterized as a wide channel of flat water, with Lord Island and Walker Island visible in the northwest portion. The viewshed includes the river channel and shoreline areas on both the Washington and Oregon sides. The Washington shoreline includes heavy industrial and shipping uses with no public access. Dibblee Point Beach offers public recreational access to the Oregon shoreline south/southeast of the project area (Figure G-10). Viewers from Dibblee Point Beach and on-water river recreationalists (e.g., anglers, water trail users, cruisers) are expected to have high viewer sensitivity to changes in the existing area. Light along the Columbia River mainly originates from industrial facilities along the river. Water surfaces also reflect light and glare during low light conditions.
- **Viewpoint 11, Willow Grove Park and Boat Launch (21,375 feet northwest of the project area).** The park offers 0.75 mile of public beach, picnic areas, pedestrian trails, and open spaces. The park shares paved parking lots and restroom facilities with the large paved boat launch, which is an important public access for boating and water activities on the Columbia River. The boat launch is located outside the study area, approximately 4.5 miles west of Longview, but was included as a viewpoint because it offers public access to the river and allows a viewer to travel upriver from the boat launch and into the study area. Views may then be affected as discussed in Viewpoint 10.

Views of the project area are obstructed by vegetation on Fisher Island and Hump Island (Figure G-11). Transmission lines and emission plumes adjacent to the project area are visible in background views (4 to 10 miles). Because of the existing vegetation, no individual lighting source is discernible from this location, but the ambient glow of the industrial area along the Columbia River and city lights from Longview and Kelso are detectable. Based on the screened views and distance from the project area, viewers would not be sensitive to changes in the project area.

Table G-1 summarizes the viewer sensitivity levels and the existing visual quality of each viewpoint as it relates to the Proposed Action.

**Table G-1. Viewpoints, Viewer Sensitivity, and Existing Visual Quality—Proposed Action**

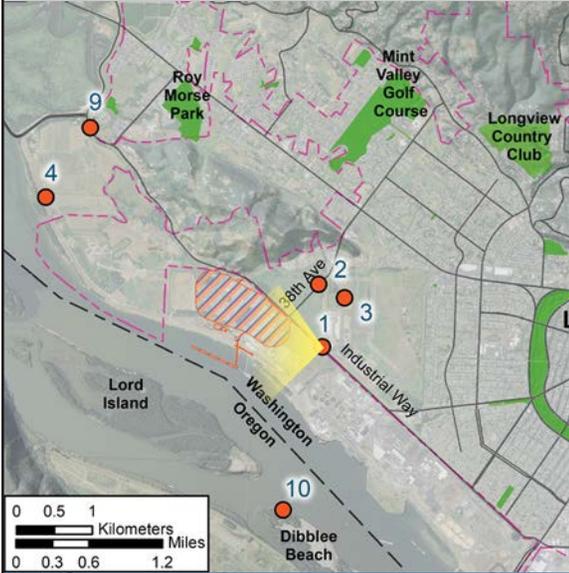
<b>View-point</b>	<b>View</b>	<b>Viewer Sensitivity</b>	<b>Viewer Description</b>	<b>Type</b>
1	Looking west on Industrial Way	Low	Industrial workers and commuters travelling on Industrial Way and other local roads. Would experience frequent views of the project area from nearby industrial areas.	Urban/ Industrial
2	Looking south along 38 <sup>th</sup> Avenue	Low	Industrial workers and commuters traveling on 38 <sup>th</sup> Avenue and other local roads. Would experience frequent views of the project area from nearby industrial areas.	Urban/ Industrial/ Rural
3	Looking southwest from Mint Farm Industrial Area (from Prudential Boulevard)	Low	Industrial workers and commuters traveling Prudential Boulevard and other local roads. Would likely experience frequent views of the project area from nearby industrial areas.	Urban/ Industrial/ Commercial
4	Looking east from Barlow Point Road	High	Residents and agricultural workers looking east toward the project area. Would likely experience frequent views of the project area from rural areas located within the City of Longview and unincorporated Cowlitz County. Views may be of long duration and viewers may have a high sensitivity to change.	Rural/ Residential
5	Looking southwest from Hillside Residential (from Alexia Court)	High	Residents and travelers of local roads. Viewers would experience frequent dispersed views of the project area at various times of day and for long durations.	Rural/ Residential
6,7	Looking north/northwest from US 30 viewpoints	Moderate	Highway travelers looking northwest from US 30 and scenic pullouts. Viewers would experience views of the project area for short durations. Frequency may range from infrequent for visitors to daily for commuters.	Rural

<b>View-point</b>	<b>View</b>	<b>Viewer Sensitivity</b>	<b>Viewer Description</b>	<b>Type</b>
8	Looking northeast from Alston-Mayger Road	Moderate/ High	Residents and travelers looking northeast from rural residential areas along this road and to experience frequent dispersed views of the project area at various times and for long durations.	Rural/ Residential
9	Looking southeast from West Longview Neighborhood	None	Residents looking southeast toward the project area. Views of the project area are obstructed by Mount Solo landfill and existing vegetation.	Rural/ Residential
10	Looking north from Dibblee Point Beach	High	Public beach and on-water recreationalists looking north toward the project area. Infrequent views of the project area of short duration but viewers may be highly aware of change. Few night viewers.	Natural
11	Looking east from Willow Grove Park and Boat Launch	None	Boaters and recreationalists looking east toward project area. Views would be obstructed by vegetation on Fisher and Hump Islands in Columbia River. Boaters traveling upriver may experience varying views of the project area.	Natural

## References

EMCON Northwest, Inc. 1992. *Mt. Solo Landfill Closure/Post-Closure Plan*. Longview, Washington. June.

### Viewpoint Location Map



### Existing Nighttime Conditions



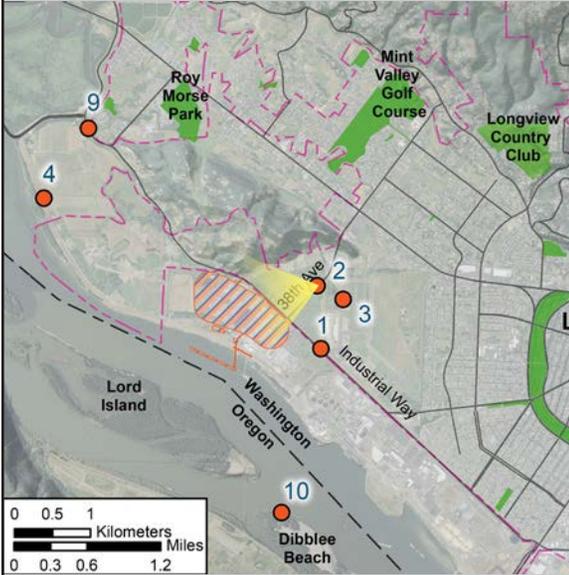
### Existing Conditions Photograph - Viewpoint 1



**Figure G-1**

Proposed Action Existing Conditions Photograph - Viewpoint 1  
(View from Industrial Way)  
Millennium Bulk Terminals—Longview

### Viewpoint Location Map



### Existing Nighttime Conditions



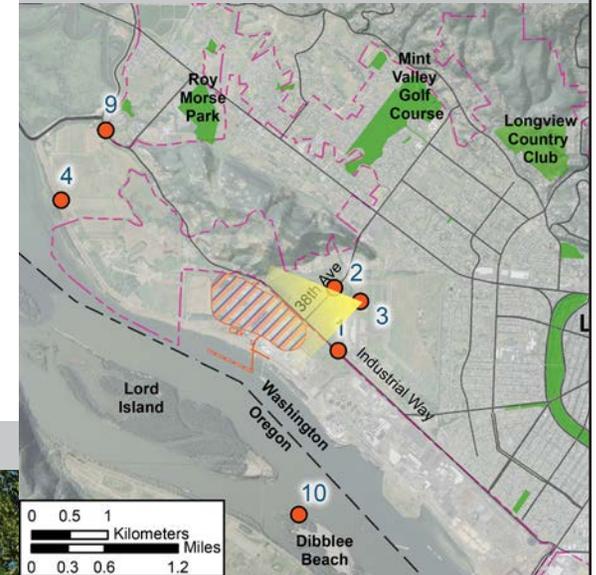
### Existing Conditions Photograph - Viewpoint 2



**Figure G-2**

Proposed Action Existing Conditions Photograph - Viewpoint 2  
(View from 38th Ave)  
Millennium Bulk Terminals—Longview

### Viewpoint Location Map

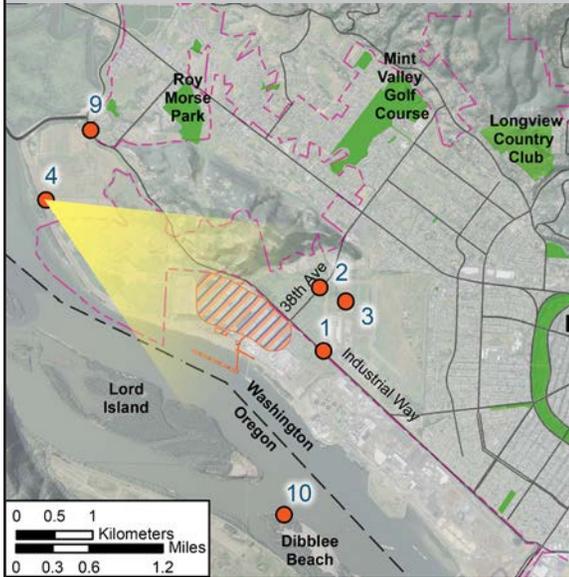


### Existing Conditions Photograph - Viewpoint 3



**Figure G-3**  
Proposed Action Existing Conditions Photograph - Viewpoint 3  
(View From Mint Farm Industrial Park)  
Millennium Bulk Terminals—Longview

### Viewpoint Location Map



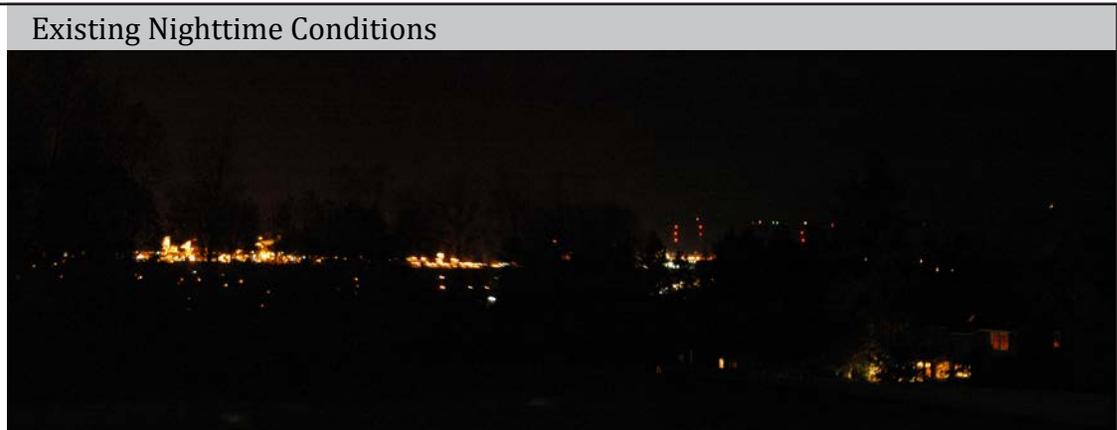
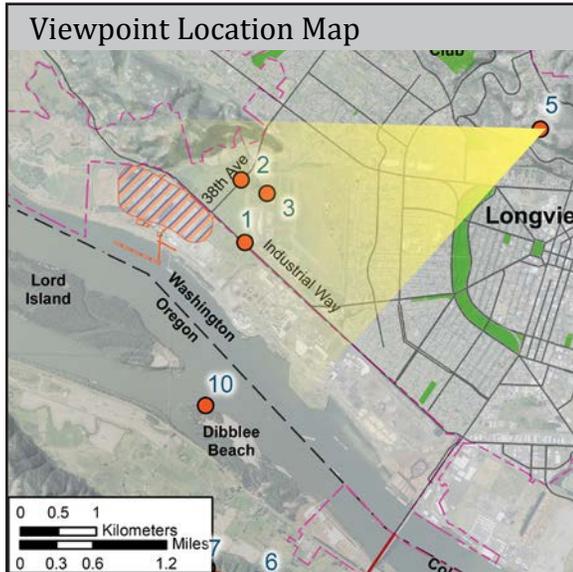
### Existing Nighttime Conditions



### Existing Conditions Photograph - Viewpoint 4



**Figure G-4**  
Proposed Action Existing Conditions Photograph - Viewpoint 4  
(View from Barlow Point Road)  
Millennium Bulk Terminals—Longview



Existing Conditions Photograph - Viewpoint 5



Approximate Location of project area for Proposed Action  
 - Top of existing dock facilities can be seen from this location.

**Figure G-5**  
 Proposed Action Existing Conditions Photograph - Viewpoint 5  
 (View from Hillside Residences)  
 Millennium Bulk Terminals—Longview

## Existing Nighttime Conditions

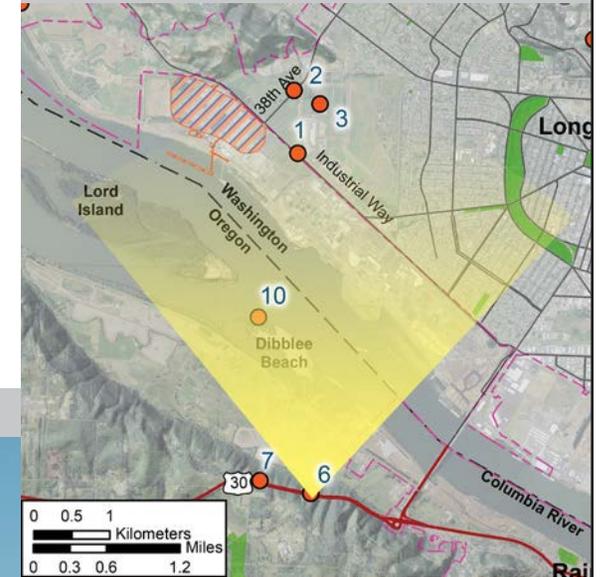


## Existing Conditions Photograph - Viewpoint 6

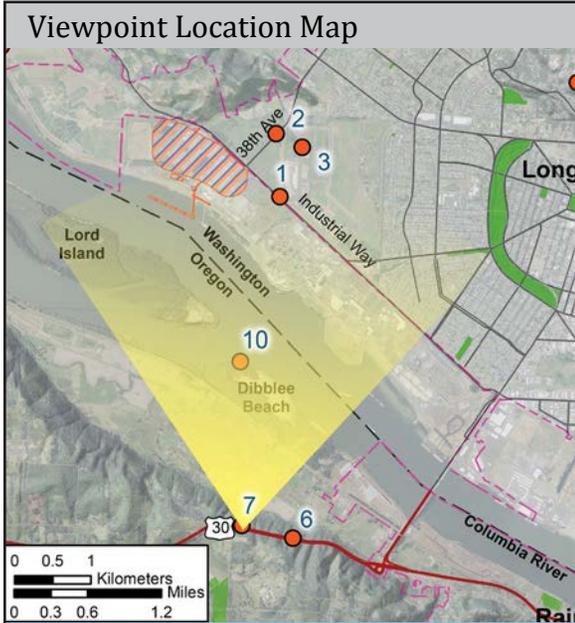
Approximate Location of project area for Proposed Action  
- Existing facilities can be seen in the distance.



## Viewpoint Location Map



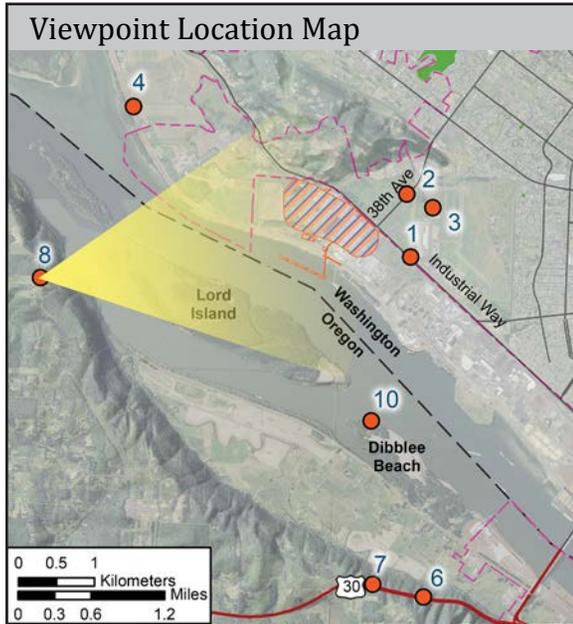
**Figure G-6**  
Proposed Action Existing Conditions Photograph - Viewpoint 6  
(View from US Route 30, Upper Pull-off)  
Millennium Bulk Terminals—Longview



Existing Conditions Photograph - Viewpoint 7



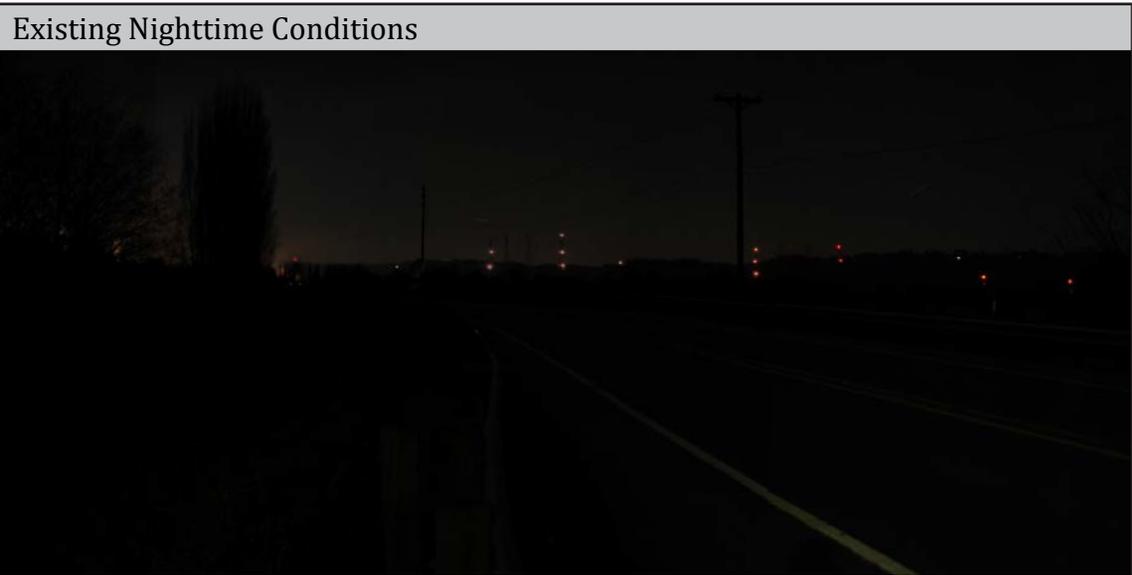
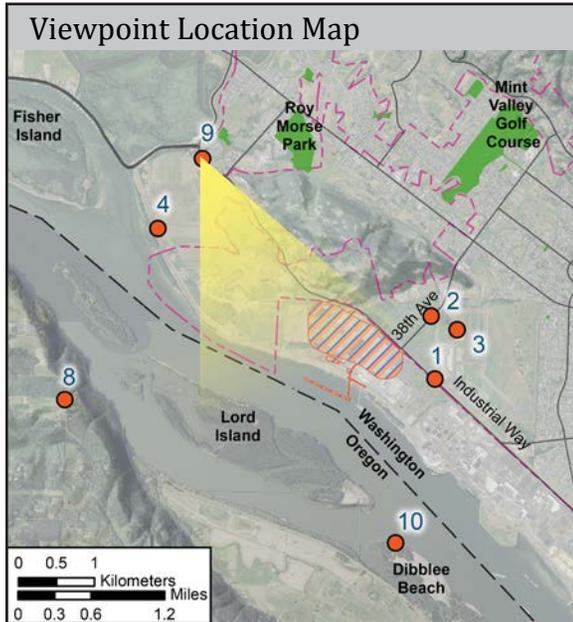
**Figure G-7**  
Proposed Action Existing Conditions Photograph - Viewpoint 7  
(View from US Route 30, Lower Pull-off)  
Millennium Bulk Terminals—Longview



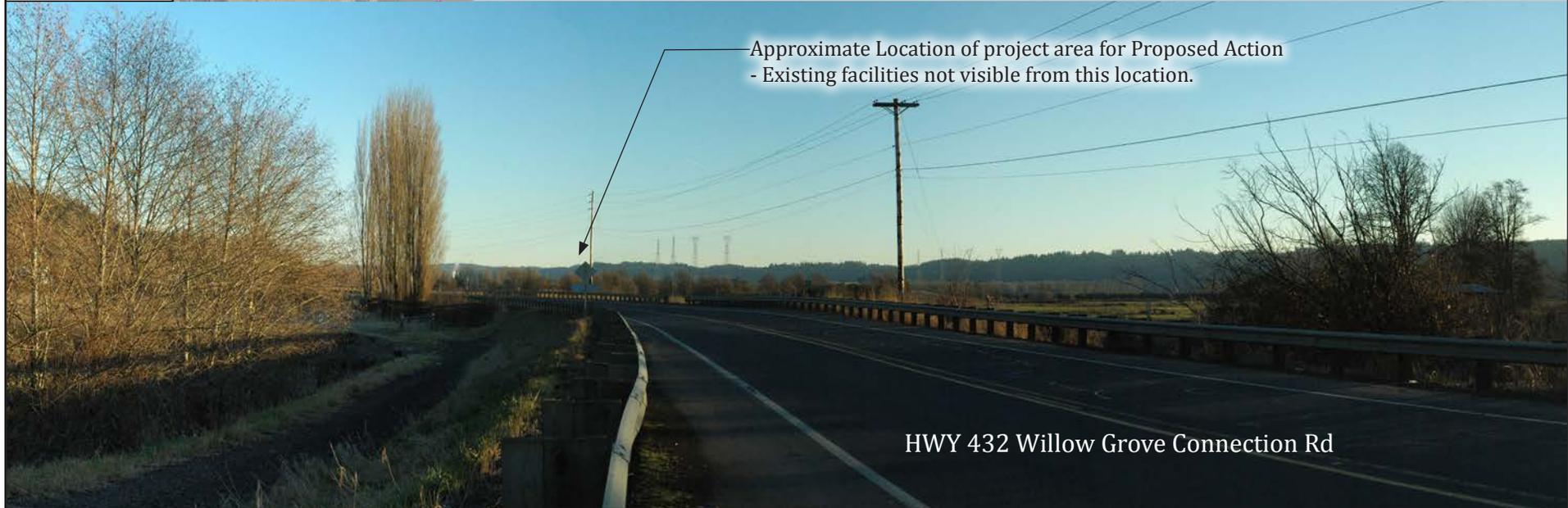
Existing Conditions Photograph - Viewpoint 8



**Figure G-8**  
 Proposed Action Existing Conditions Photograph - Viewpoint 8  
 (View from Alston-Mayger Road)  
 Millennium Bulk Terminals—Longview



Existing Conditions Photograph - Viewpoint 9



**Figure G-9**  
Proposed Action Existing Conditions Photograph - Viewpoint 9  
(View from West Longview Neighborhood)  
Millennium Bulk Terminals—Longview

## Existing Nighttime Conditions

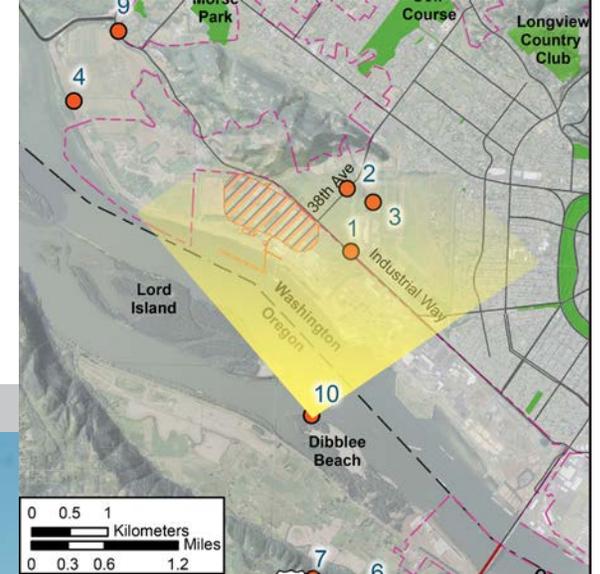


## Existing Conditions Photograph - Viewpoint 10

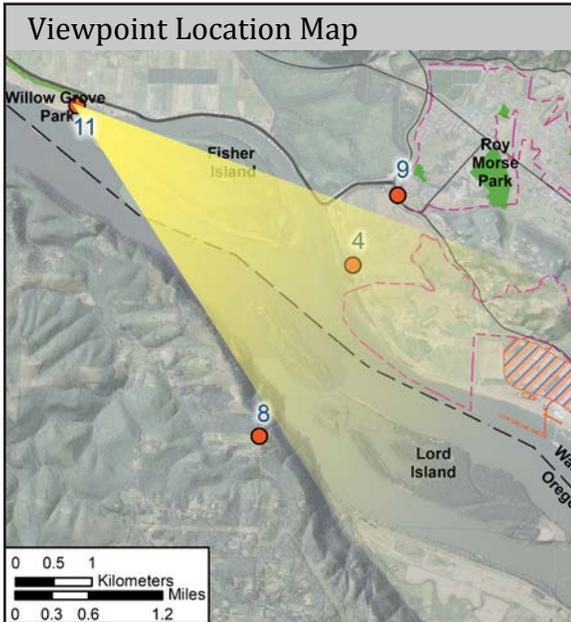
Approximate Location of project area for Proposed Action  
- Existing facilities can be seen in the distance.



## Viewpoint Location Map



**Figure G-10**  
Proposed Action Existing Conditions Photograph - Viewpoint 10  
(View from Dibblee Beach)  
Millennium Bulk Terminals—Longview



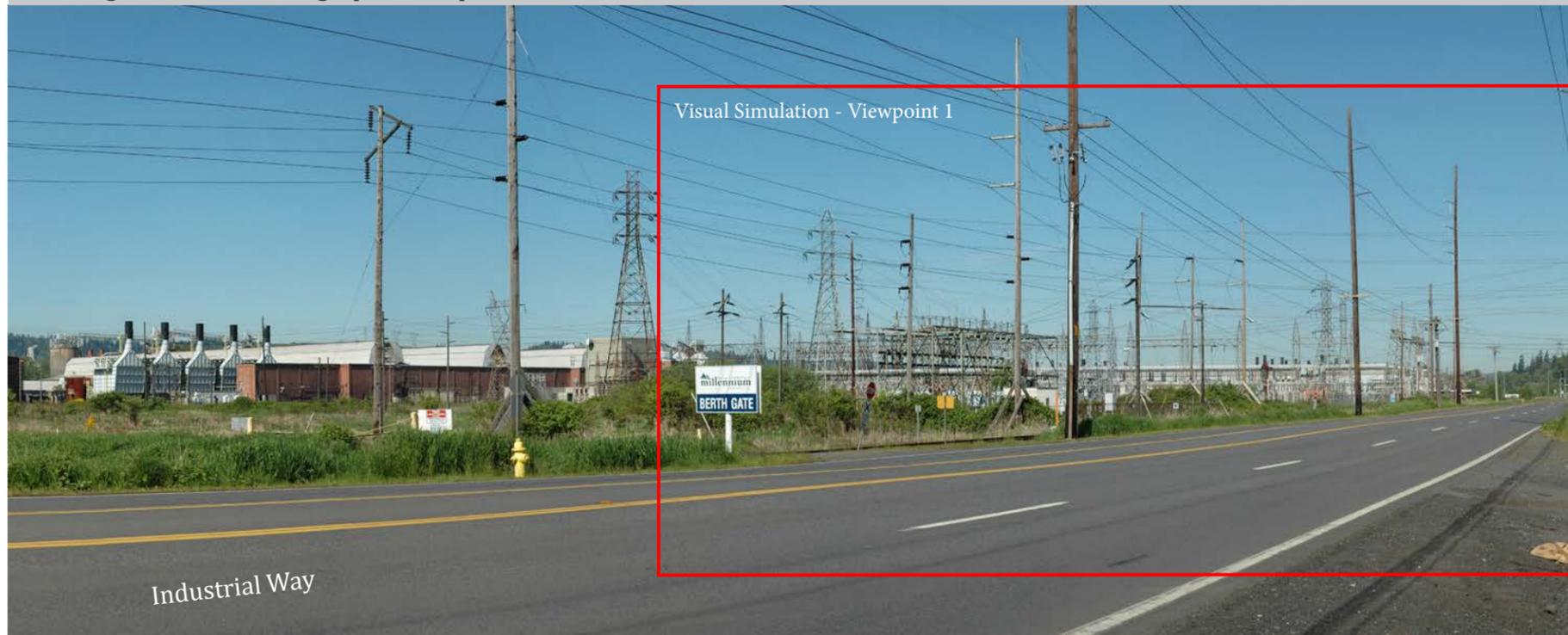
Existing Conditions Photograph - Viewpoint 11



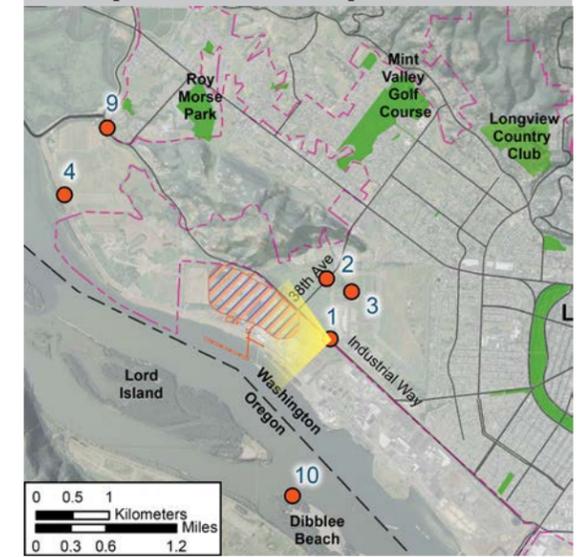
**Figure G-11**  
 Proposed Action Existing Conditions Photograph - Viewpoint 11  
 (View from Willow Grove Park and Boat Launch)  
 Millennium Bulk Terminals—Longview



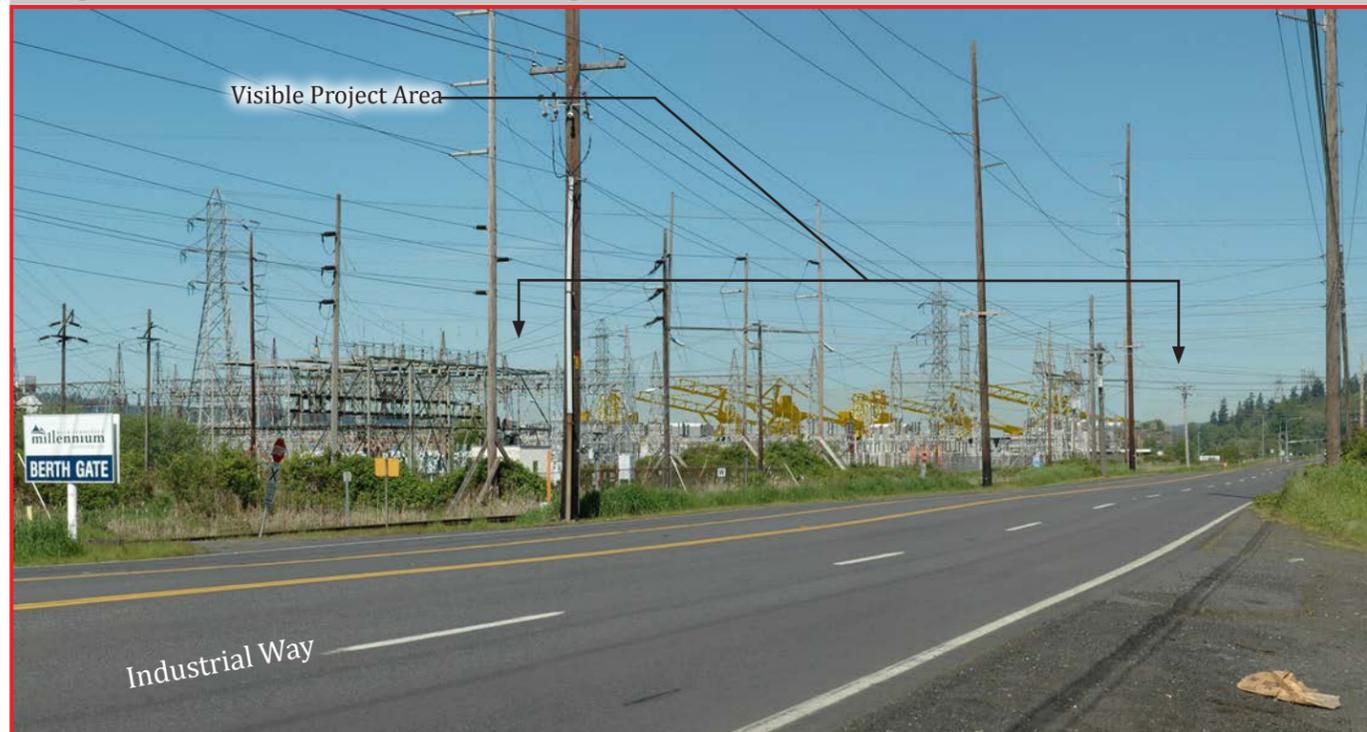
Existing Conditions Photograph - Viewpoint 1



Viewpoint Location Map



Proposed Action Visual Simulation - Viewpoint 1



Visual Simulation Viewpoint 1  
 Field of View = 46 degrees  
 Image Width = 7.5 inches  
 Zoom = 50%  
 True View Distance = 17.7" inches

Notes:

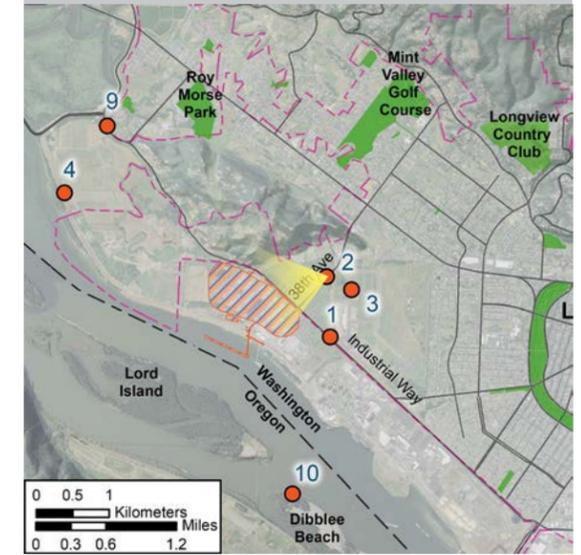
1. Existing Conditions photographs taken with Nikon D-70 (50mm lens) and panorama photomerged using Photoshop CSS.
2. Visual Simulation is based on 3D model and AutoCAD files provided by MBLT.
3. Visual Simulation created with AutoCAD, Sketchup Pro, Google Earth and Photoshop CSS.

**Figure G-12**  
 Proposed Action Visual Simulation - Viewpoint 1  
 (View from Industrial Way)  
 Millennium Bulk Terminals—Longview

Existing Conditions Photograph - Viewpoint 2



Viewpoint Location Map



Proposed Action Visual Simulation - Viewpoint 2

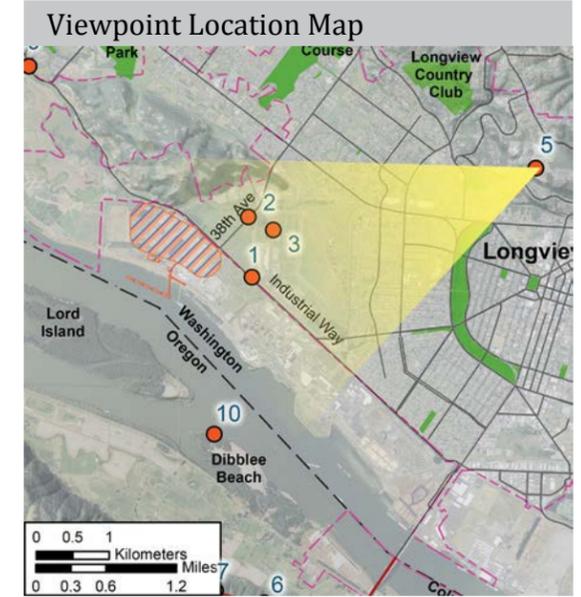


Visual Simulation Viewpoint 2  
 Field of View = 53 degrees  
 Image Width = 13.5 inches  
 Zoom = 50%  
 True View Distance = 27.2" inches

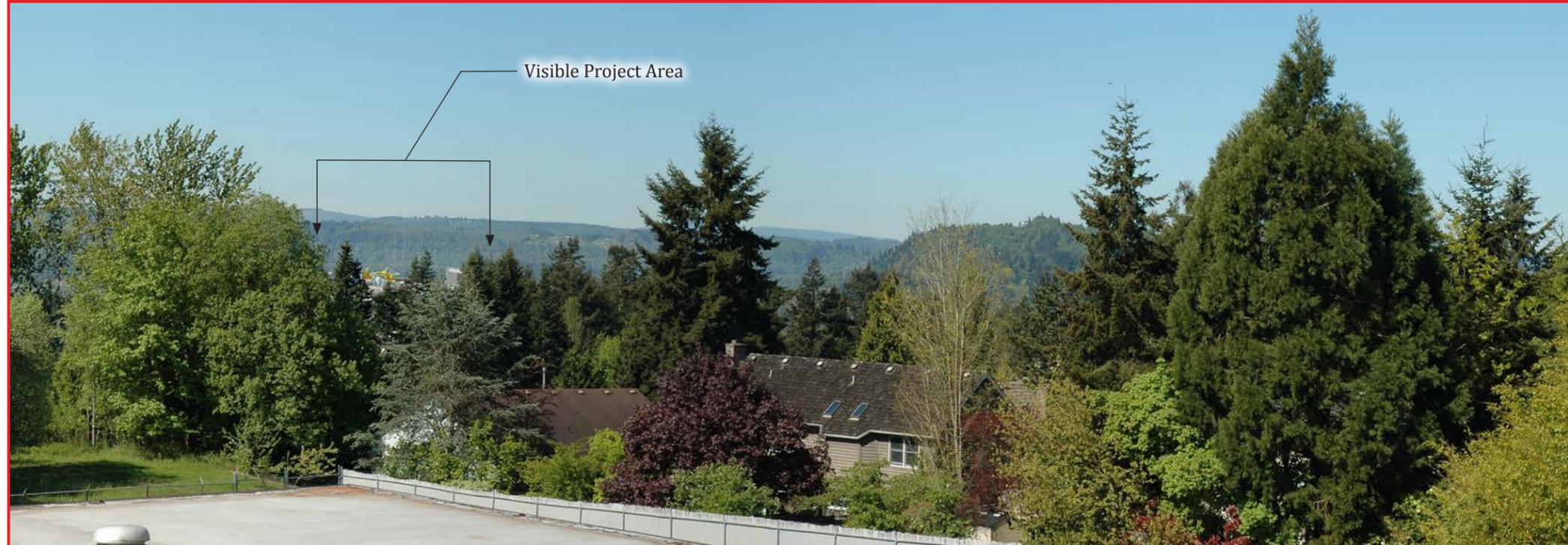
Notes:  
 1. Existing Conditions photographs taken with Nikon D-70 (50mm lens) and panorama photomerged using Photoshop CSS.  
 2. Visual Simulation is based on 3D model and AutoCAD files provided by MBLT.  
 3. Visual Simulation created with AutoCAD, Sketchup Pro, Google Earth and Photoshop CSS.

**Figure G-13**  
 Proposed Action Visual Simulation - Viewpoint 2  
 (View from 38th Ave)  
 Millennium Bulk Terminals—Longview

Existing Conditions Photograph - Viewpoint 5



Proposed Action Visual Simulation - Viewpoint 5



Visual Simulation Viewpoint 5  
 Field of View = 27 degrees  
 Image Width = 11.5 inches  
 Zoom = 50%  
 True View Distance = 48.5" inches

- Notes:
1. Existing Conditions photographs taken with Nikon D-70 (50mm lens) and panorama photomerged using Photoshop CSS.
  2. Visual Simulation is based on 3D model and AutoCAD files provided by MBLT.
  3. Visual Simulation created with AutoCAD, Sketchup Pro, Google Earth and Photoshop CSS.

**Figure G-14**  
 Proposed Action Visual Simulation - Viewpoint 5  
 (View from Hillside Residences)  
 Millennium Bulk Terminals—Longview

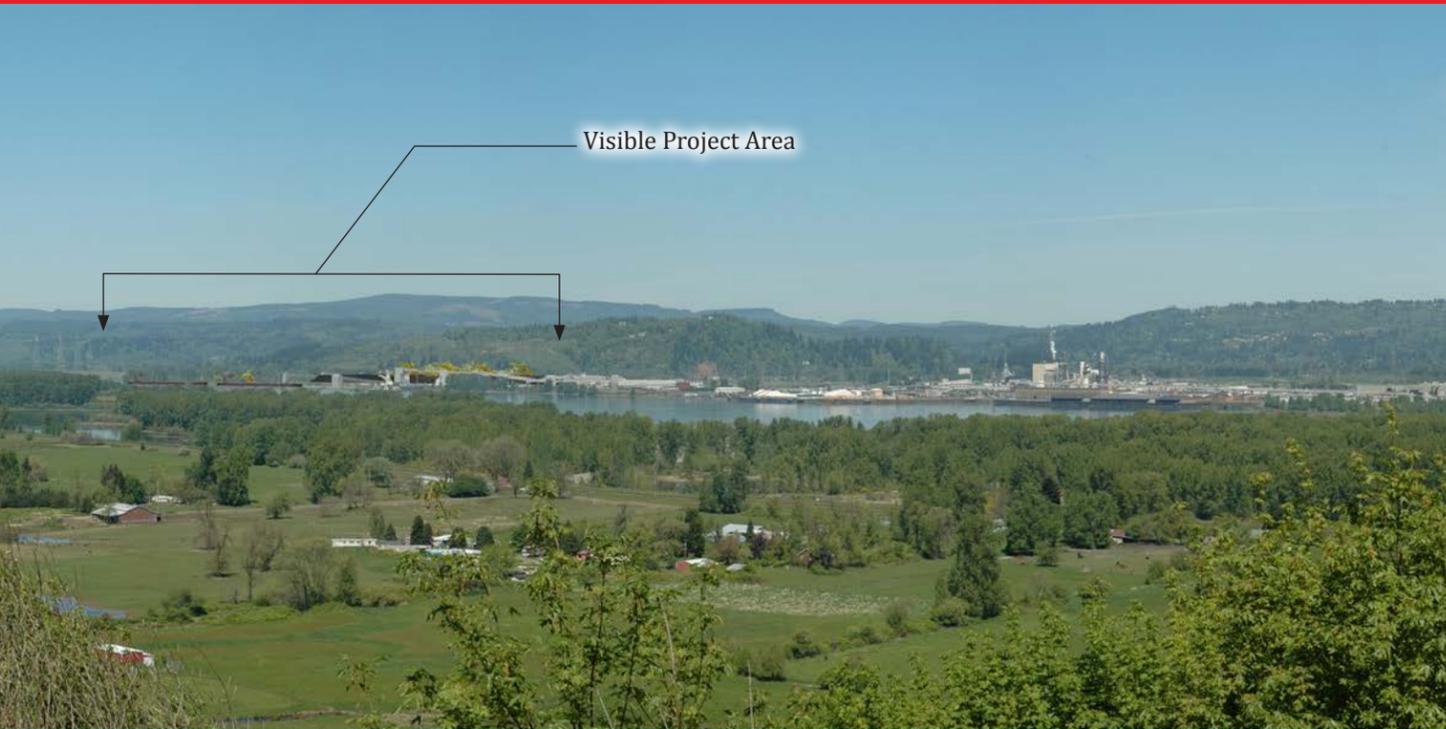
Existing Conditions Photograph - Viewpoint 6



Visual Simulation - Viewpoint 6

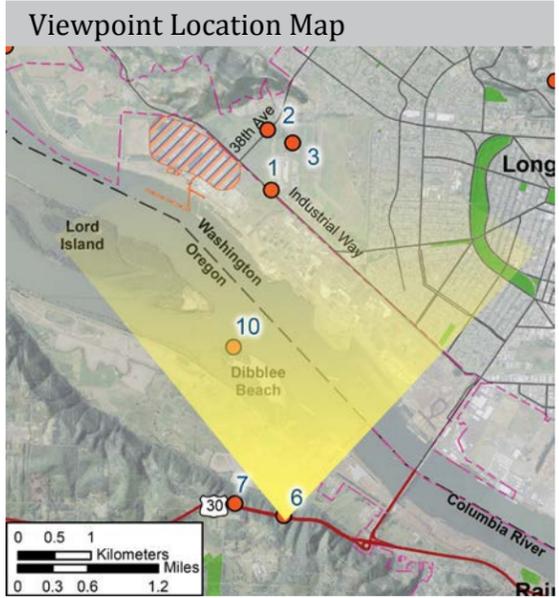


Proposed Action Visual Simulation - Viewpoint 6



Visual Simulation Viewpoint 6  
 Field of View = 32 degrees  
 Image Width = 8.0 inches  
 Zoom = 50%  
 True View Distance = 13.0" inches

- Notes:
1. Existing Conditions photographs taken with Nikon D-70 (50mm lens) and panorama photomerged using Photoshop CSS.
  2. Visual Simulation is based on 3D model and AutoCAD files provided by MBLT.
  3. Visual Simulation created with AutoCAD, Sketchup Pro, Google Earth and Photoshop CSS.

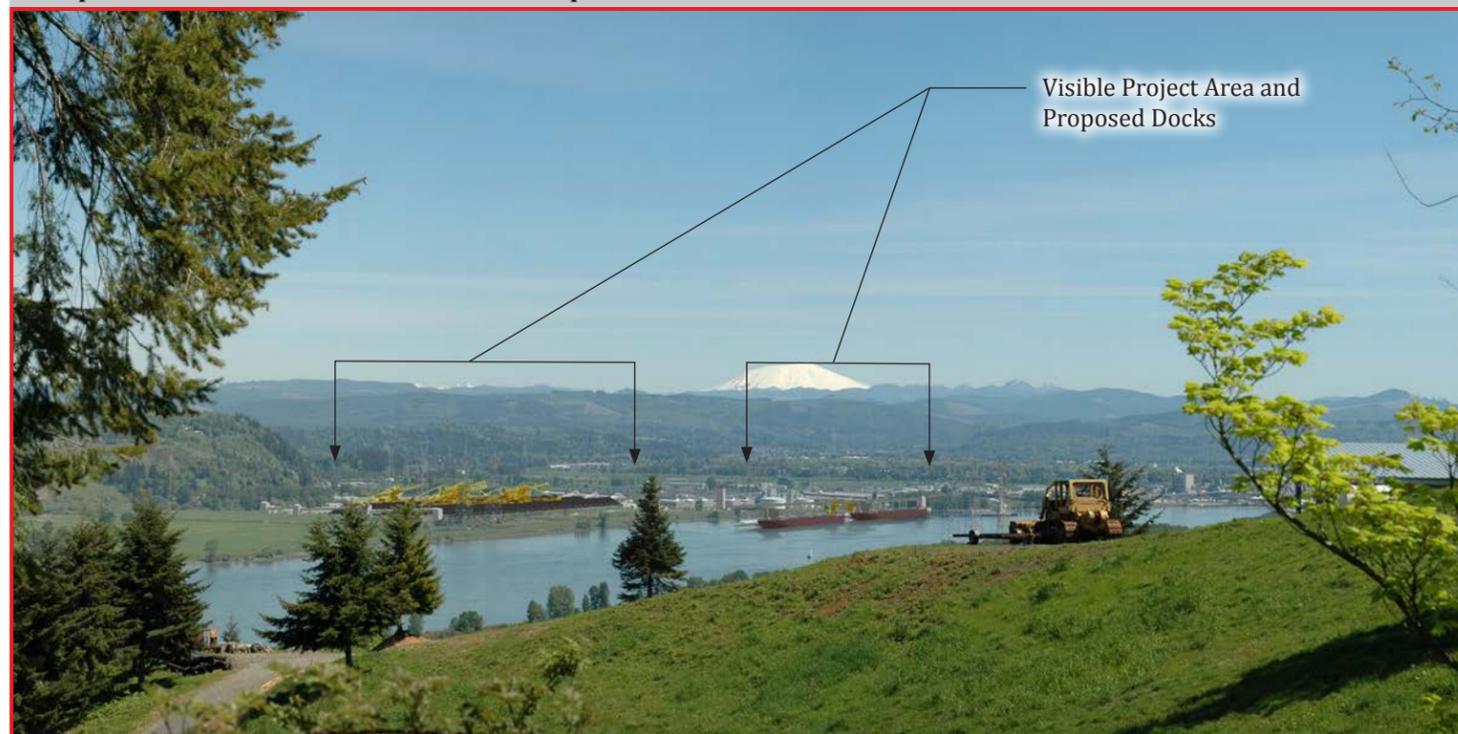


**Figure G-15**  
 Proposed Action Visual Simulation - Viewpoint 6  
 (View from US Route 30, Lower Pull-off)  
 Millennium Bulk Terminals—Longview

Existing Conditions Photograph - Viewpoint 8

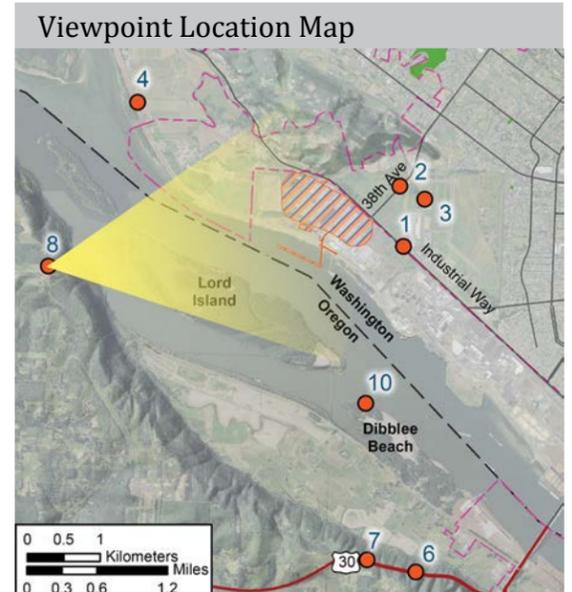


Proposed Action Visual Simulation - Viewpoint 8



Visual Simulation Viewpoint 8  
 Field of View = 34 degrees  
 Image Width = 8.0 inches  
 Zoom = 50%  
 True View Distance = 13.0" inches

- Notes:
1. Existing Conditions photographs taken with Nikon D-70 (50mm lens) and panorama photomerged using Photoshop CSS.
  2. Visual Simulation is based on 3D model and AutoCAD files provided by MBLT.
  3. Visual Simulation created with AutoCAD, Sketchup Pro, Google Earth and Photoshop CSS.



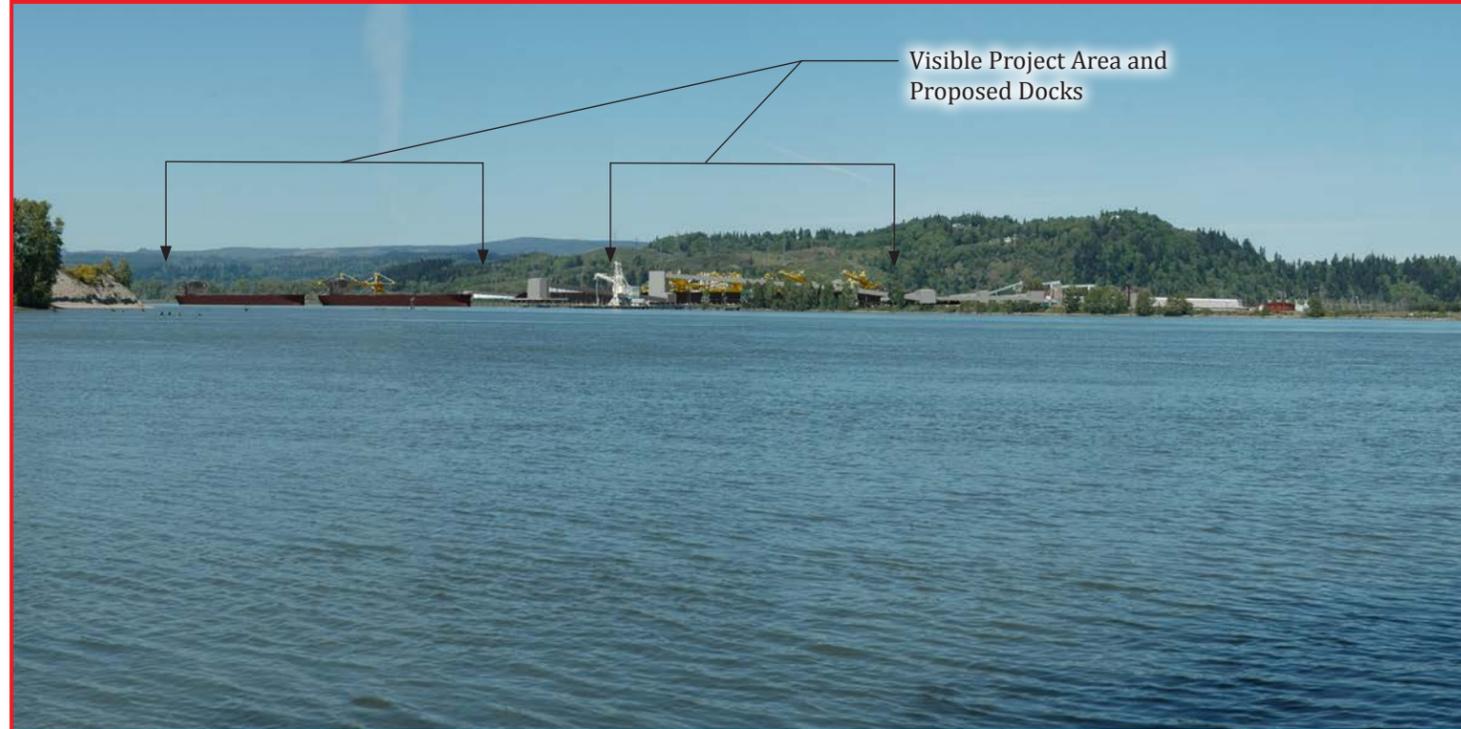
**Figure G-16**  
 Proposed Action Visual Simulation - Viewpoint 8  
 (View from Alston-Mayger Road)  
 Millennium Bulk Terminals—Longview

Existing Conditions Photograph - Viewpoint 10



Visual Simulation - Viewpoint 10

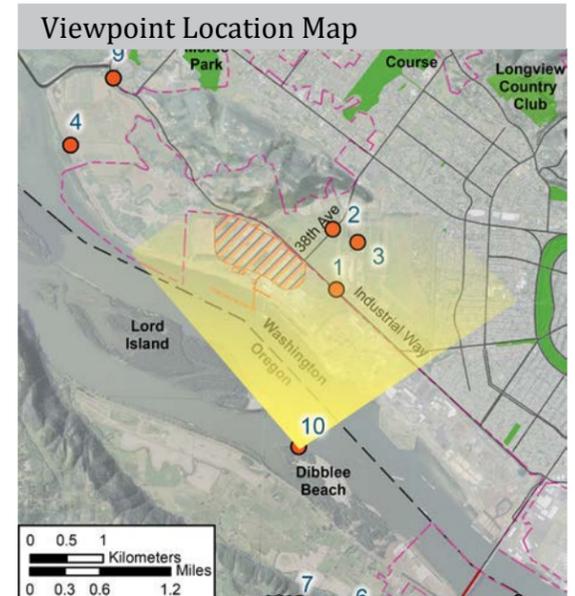
Proposed Action Visual Simulation - Viewpoint 10



Visible Project Area and Proposed Docks

Visual Simulation Viewpoint 10  
 Field of View = 54 degrees  
 Image Width = 8 inches  
 Zoom = 50%  
 True View Distance = 15.8" inches

- Notes:
1. Existing Conditions photographs taken with Nikon D-70 (50mm lens) and panorama photomerged using Photoshop CSS.
  2. Visual Simulation is based on 3D model and AutoCAD files provided by MBLT.
  3. Visual Simulation created with AutoCAD, Sketchup Pro, Google Earth and Photoshop CSS.



**Figure G-17**  
 Proposed Action Visual Simulation - Viewpoint 10  
 (View from Dibblee Beach)  
 Millennium Bulk Terminals—Longview