

Attachment 14
Visual Resources Discipline Report



CAPITOL LAKE — DESCHUTES ESTUARY

Long-Term Management Project Environmental Impact Statement

Visual Resources Discipline Report

Prepared for:

Washington State Department of Enterprise Services

1500 Jefferson Street SE
Olympia, WA 98501

Prepared by:

Environmental Science Associates (ESA)

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Executive Summary

This Visual Resources Discipline Report describes the potential impacts of the Capitol Lake – Deschutes Estuary Long-Term Management Project on scenic and aesthetic resources in the area surrounding the project. The Capitol Lake – Deschutes Estuary includes the 260-acre Capitol Lake Basin, located on the Washington State Capitol Campus, in Olympia, Washington. Long-term management strategies and actions are needed to address issues in the Capitol Lake – Deschutes Estuary project area. An Environmental Impact Statement (EIS) is being prepared to document the potential environmental impacts of various alternatives and determine how these alternatives meet the long-term management objectives identified for the watershed. This report was originally prepared to support the project's Draft EIS, and has been revised for the Final EIS. In general, revisions have been made to provide additional information, update and expand analyses and findings, refine measures to mitigate potentially significant impacts, and correct inadvertent errors. Notable substantive revisions in the Visual Resources Discipline Report are as follows:

- The analysis was updated to reflect changes to the Estuary and Hybrid Alternatives to avoid long-term closure of the 5th Avenue Bridge.
- The analysis was updated to reflect the change under the Hybrid Alternative from a saltwater-fed to a freshwater-fed pool.
- Several mitigation measures were clarified.

Visual resource impacts are assessed based on the potential of project alternatives to result in changes in the landscape that are viewed as adverse by the affected communities and visitors to those communities. Impacts are also assessed based on the compatibility of the alternatives with adopted plans and policies that guide and govern visual resources in the study area. Where impacts are identified, the report discusses measures that can be taken to mitigate or minimize impacts.

The analysis examines the No Action Alternative, as well as three action alternatives (Managed Lake, Estuary, and Hybrid). The No Action Alternative would not change any physical features and would be generally consistent with current plans and policies for visual resources. Although the No Action Alternative would not address many of the land use and environmental goal of adopted plans, only minor to moderate visual impacts have been identified. These impacts are related to continued and

worsening impacts to aesthetic values of the lake basin given the continued increase in algae and aquatic plant populations over time. Because the lake is already affected by aquatic algae and aquatic plant populations, the impacts on visual quality would be **less-than-significant**.

Under all action alternatives, there would be a need for construction staging areas where public access to parks and other public facilities would be reduced or restricted, in some areas for several years. Most of the study area would remain open. However, most of Marathon Park would be closed for 4 to 8 years, depending on the alternative, during which time visual access to the shoreline would be obstructed. In addition, it is expected that construction equipment/materials, such as coffer cells, would remain in place in the water of the Capitol Lake Basin for several years, detracting from the visual appearance of the lake while the project is under construction. These visual disruptions would substantially reduce the value of the area for some popular recreation activities, such as walking and wildlife viewing. The Estuary and Hybrid Alternatives would have the longest duration of closures at Marathon Park. Given the duration of construction-related staging at Marathon Park and in-water construction and staging, construction impacts on visual resources are considered **significant and unavoidable** for all action alternatives.

Unlike the No Action Alternative, all action alternatives would promote the goals, policies, objectives, and priorities in adopted plans applicable to the shoreline.

The Managed Lake Alternative would retain the existing appearance of Capitol Lake more than the other action alternatives. Policies support “preservation and enhancement of existing views”, although policies focus on maintaining visual access to views of the shoreline and other features, without specifically mentioning Capitol Lake. The Managed Lake Alternative would result in substantial changes to the Middle Basin, where habitat islands supporting trees such as cottonwoods and alders would obstruct views across the basin from locations along Deschutes Parkway, as well as views of open water from other areas around the basin. There would be other minor changes to all three basins with the addition of a new non-vehicular bridge and boardwalks. Reductions in algae and aquatic plant growth from improved water quality and aquatic plant removal in the lake would be a minor beneficial effect. Overall, the changes would remain harmonious with the surrounding landscape and maintain a unified naturalistic shoreline environment.

The Estuary Alternative would introduce tidal fluctuations in the water levels, a defined river channel, exposed tideflats, new habitat islands, and secondary channels between islands. This would change the appearance of the waterbody substantially, and also make it dynamic, with all three basins filling and emptying twice per day. The Estuary Alternative would include habitat islands like those in the Managed Lake but these would not support taller trees because the habitat islands would be planted with salt tolerant species. Habitat islands would alter views of open water from several areas around the North and Middle Basins. There would be other minor changes to all three basins with the addition of new boardwalks, as well as a new 5th Avenue Bridge and road extension along the North Basin. While the lake would become an estuary and have a different vegetation and water regime, the changes under the Estuary Alternative would be harmonious with the surrounding landscape because it would

maintain a unified naturalistic shoreline environment in a setting that is dominated by parks and open space.

The Hybrid Alternative would be the same as the Estuary Alternative in the Middle and South Basins. However, in the North Basin, the visual impacts of the barrier wall would be severe, introducing a large, conspicuous structure that divides the waterbody and blocks views across it from the east and west. Although mitigation for the appearance of the wall could be provided, its sheer scale would result in a **significant unavoidable impact**.

For all action alternatives, new boardwalks are expected to have **substantial beneficial effects** for all action alternatives. The Hybrid Alternative would also include a new walkway along the top of the barrier wall, adding nearly half a mile of additional view access.

During construction, visual resource impacts could be reduced through mitigation, such as use of detours or a temporary trestle (under the Estuary and Hybrid Alternatives). Visual resource impacts related to on-land staging in Marathon Park and in-water construction and staging in the Capitol Lake Basin, could not be fully mitigated and would be a **significant unavoidable impact** under all action alternatives.

Table ES.1 Summary of Construction Impacts and Mitigation Measures

Impact Finding		Minimization and Other Measures	Significant and Unavoidable Adverse Impact
Managed Lake Alternative			
Obstruction of views in Marathon Park and visual detractions in Capitol Lake Basin related to staging and construction (long-duration)	Significant	In addition to measures included in Section 5.7.1.1: <ul style="list-style-type: none"> The staging area in Marathon Park could be minimized during non-construction periods to allow visual access to where feasible 	Yes
Estuary Alternative			
Obstruction of views in Marathon Park and visual detractions in Capitol Lake Basin related to staging and construction (long-duration)	Significant	In addition to measures included in Section 5.7.1.1: <ul style="list-style-type: none"> The staging area in Marathon Park could be minimized during non-construction periods to allow visual access to where feasible 	Yes

Impact Finding		Minimization and Other Measures	Significant and Unavoidable Adverse Impact
Hybrid Alternative			
Obstruction of views in Marathon Park and visual detractions in Capitol Lake Basin related to staging and construction (long-duration)	Significant	In addition to measures included in Section 5.7.1.1.1: <ul style="list-style-type: none"> • The staging area in Marathon Park could be minimized during non-construction periods to allow visual access to where feasible 	Yes

Table ES.2 Summary of Operations Impacts (including Benefits) and Mitigation Measures

	Impact Finding	Minimization and Other Measures	Significant and Unavoidable Adverse Impact
No Action Alternative			
Increased floating algae and aquatic plants in Capitol Lake Basin	Less-than-significant -	None	No
Managed Lake Alternative			
Visual impacts related to changes in Capitol Lake Basin (waterbody would change but remain a unified landscape, harmonious with its setting)	Less-than-significant	None	No
Improved visual access at boardwalks	Substantial Beneficial Effect	N/A	N/A
Algae and aquatic plant reductions from improved water quality and aquatic plant removal in the lake	Substantial Beneficial Effect	N/A	N/A
Estuary Alternative			
Visual impacts related to changes in Capitol Lake Basin (waterbody would change but remain a unified landscape, harmonious with its setting); improved visual access at boardwalks	Less-than-significant	None	No
Improved visual access at boardwalks	Substantial Beneficial Effect	N/A	N/A
Hybrid Alternative			
Visual impacts related to changes in Capitol Lake Basin (severe visual division of North Basin through introduction of large-scale feature that is not harmonious with natural features and blocks views across the lake from east and west)	Significant	In addition to measures included in Section 5.7.1.1: <ul style="list-style-type: none"> • The barrier wall could have a textured concrete surface • Guardrails on the wall could be designed to be as transparent as possible 	Yes
Improved visual access at boardwalks and along barrier wall	Substantial Beneficial Effect	N/A	N/A



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Appendix A Visual Policies

List of Acronyms and Abbreviations

Acronyms/ Abbreviations	Definition
3D	3-dimensional
Corps	U.S. Army Corps of Engineers
CSB	community sounding board
EIS	Environmental Impact Statement
Ecology	Washington State Department of Ecology
Enterprise Services	Washington State Department of Enterprise Services
GIS	geographic information system
I-5	Interstate 5
KVP	key viewpoint
NEPA	National Environmental Policy Act
RCW	Revised Code of Washington
RSLR	relative sea level rise
SEPA	State Environmental Policy Act
SMA	Shoreline Management Act
SMP	Shoreline Master Program



1.0 Introduction and Project Description

1.1 PROJECT DESCRIPTION

The Capitol Lake – Deschutes Estuary includes the 260-acre Capitol Lake Basin, located on the Washington State Capitol Campus, in Olympia, Washington. The waterbody has long been a valued community amenity. Capitol Lake was formed in 1951 following construction of a dam and provided an important recreational resource. Historically, the Deschutes Estuary was used by local tribes for subsistence and ceremonial purposes. Today, the expansive waterbody is closed to active public use. There are a number of environmental issues including the presence of invasive species, exceedances of water quality standards, and inadequate sediment management.

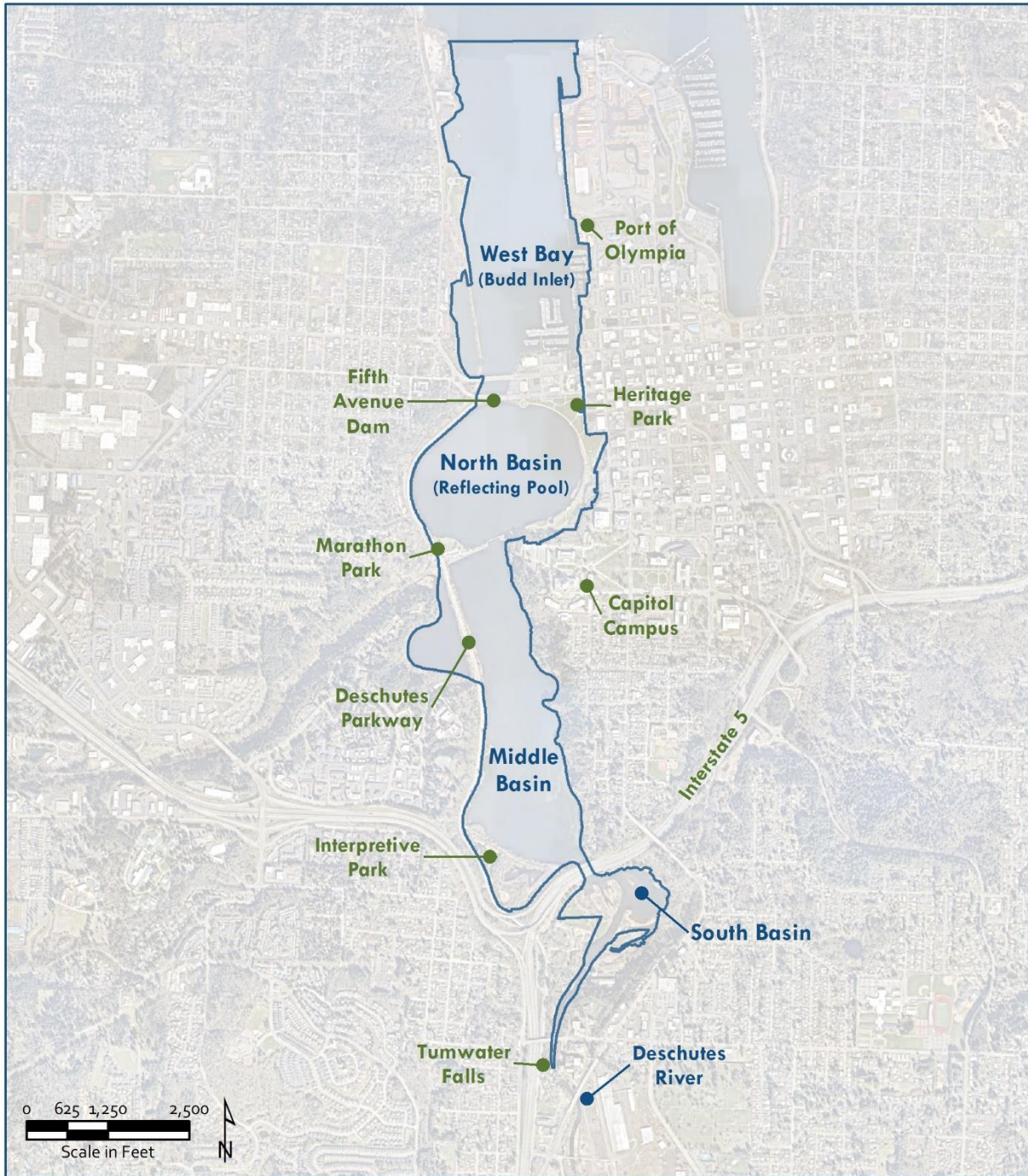
The Washington State Department of Enterprise Services (Enterprise Services) is responsible for the stewardship, preservation, operation, and maintenance of the Capitol Lake Basin. The 260-acre Capitol Lake Basin is maintained by Enterprise Services under long-term lease agreement from the Washington Department of Natural Resources.

In 2016, as part of Phase 1 of long-term planning, a group of stakeholders representing a broad range of interests, in collaboration with the state, identified shared goals for long-term management and agreed an Environmental Impact Statement (EIS) was needed to evaluate a range of alternatives and identify a preferred alternative. In 2018, the state began the EIS process. The Draft EIS was published on June 30, 2021, and evaluated four alternatives: a Managed Lake, Estuary, Hybrid, and a No Action Alternative.

The long-term management alternatives are evaluated against the shared project goals of improving water quality, managing sediment accumulation and future deposition, improving ecological functions, and enhancing community use of the resource. Refer to Figure 1.1 for the project area for long-term management.

Within the Final EIS, Enterprise Services has identified the Estuary Alternative as the preferred environmentally and economically sustainable long-term management alternative for the Capitol Lake – Deschutes Estuary. The EIS process has maintained engagement with the existing Work Groups, which include the local governments, resource agencies, and tribe. It also provides for expanded engagement opportunities for the public, such as a community sounding board.

Figure 1.1 Project Area



1.2 SUMMARY OF PROJECT ALTERNATIVES

1.2.1 Managed Lake Alternative

The Managed Lake Alternative would retain the 5th Avenue Dam and Bridge in its existing configuration. The 5th Avenue Dam would be overhauled to significantly extend the serviceable life of the structure. The reflecting pool within the North Basin would be maintained, and active recreational use would be restored in this area. Sediment would be managed through initial construction dredging and recurring maintenance dredging in the North Basin only. Sediment from construction dredging would be used to create habitat areas in the Middle Basin to support improved ecological function, habitat complexity, and diversity. Sediment would continue to accumulate and over time would promote a transition to freshwater wetlands in the South and Middle Basins. Boardwalks, a dock, and a boat launch would be constructed for community use.

This project would also construct a new, approximately 14-foot-wide non-vehicular bridge south of the existing 5th Avenue Bridge to provide a dedicated recreational trail connection.

Adaptive management would be needed to maintain water quality, improve ecological functions, and manage invasive species.

1.2.2 Estuary Alternative

Under the Estuary Alternative, the existing 5th Avenue Dam and Bridge would be removed, and an approximately 500-footwide (150-meter-wide) opening would be established in its place. This would reintroduce tidal hydrology to the Capitol Lake Basin, returning the area to estuarine conditions where saltwater from Budd Inlet would mix with freshwater from the Deschutes River. Sediment would be managed through initial construction dredging in the Capitol Lake Basin and recurring maintenance dredging within West Bay. Dredged materials from construction dredging would be used to create habitat areas in the Middle and North Basins to promote ecological diversity, though tideflats would be the predominant habitat type. Boardwalks, a dock, and a boat launch would be constructed for community use. This alternative also includes stabilization along the entire length of Deschutes Parkway to avoid undercutting or destabilization from the tidal flow.



Boardwalks similar to this one at the Nisqually National Wildlife Refuge would be constructed in the Middle and South Basins under all of the action alternatives

Existing utilities and other infrastructure would be upgraded and/or protected from reintroduced tidal hydrology and saltwater conditions.

The Estuary Alternative has been updated in the Final EIS to include a new 5th Avenue Bridge that would be constructed south of the existing 5th Avenue Dam and Bridge. The new bridge would include a vehicle lane, bike lane, and sidewalk in each direction, with the sidewalk on the south side providing a dedicated recreational trail connection. This bridge would be constructed and connected to the transportation system before the existing 5th Avenue Dam and Bridge are removed.

Adaptive management plans would be developed to improve ecological functions and manage invasive species during the design and permitting process.

1.2.3 Hybrid Alternative

Under the Hybrid Alternative, the existing 5th Avenue Dam and Bridge would be removed, and an approximately 500-footwide (150-meter-wide) opening would be established in its place. Tidal hydrology would be reintroduced to the western portion of the North Basin and to the Middle and South Basins. Within the North Basin, a curved and approximately 2,600-foot-long (790-meter-long) barrier wall with a walkway would be constructed to create an approximately 45-acre reflecting pool adjacent to Heritage Park. The reflecting pool of the Hybrid Alternative has been updated in the Final EIS to be groundwater-fed, rather than saltwater. Construction and maintenance of this smaller reflecting pool, in addition to restored estuarine conditions in part of the Capitol Lake Basin, gives this alternative its classification as a hybrid.

Sediment would be managed through initial construction dredging in the Capitol Lake Basin and recurring maintenance dredging within West Bay. In the Middle and North Basins, constructed habitat areas would promote ecological diversity, though tideflats would be the predominant habitat type. Boardwalks, a dock, and a boat launch would be constructed for community use. This alternative also includes stabilization along the entire length of Deschutes Parkway to avoid scour or destabilization. Existing utilities and other infrastructure would be upgraded and/or protected from reintroduced tidal hydrology and saltwater conditions.

The Hybrid Alternative would also construct a new 5th Avenue Bridge, as described for the Estuary Alternative, prior to removing the existing 5th Avenue Dam and Bridge.

Adaptive management plans would be needed to improve ecological functions, manage invasive species, and maintain water quality in the freshwater reflecting pool.

1.2.4 No Action Alternative

The No Action Alternative represents the most likely future expected in the absence of implementing a long-term management project. The No Action Alternative would persist if funding is not acquired to implement the Preferred Alternative. A No Action Alternative is a required element in a State

Environmental Policy Act (SEPA) EIS and provides a baseline against which the impacts of the action alternatives (Managed Lake, Estuary, Hybrid) can be evaluated and compared.

The No Action Alternative would retain the 5th Avenue Dam in its current configuration, with limited repair and maintenance activities, consistent with the scope and scale of those that have received funding and environmental approvals over the past 30 years. In the last 30 years, repair and maintenance activities have been limited to emergency or high-priority actions, which occur sporadically as a result of need and funding appropriations.

Although Enterprise Services would not implement a long-term management project, current management activities and ongoing projects in the Capitol Lake Basin would continue. Enterprise Services would continue to implement limited nuisance and invasive species management strategies.

In the absence of a long-term management project, it is unlikely that Enterprise Services would be able to procure funding and approvals to manage sediment, improve water quality, improve ecological functions, or enhance community use. The No Action Alternative does not achieve the project goals.

1.3 CONSTRUCTION METHODS FOR THE ACTION ALTERNATIVES

This impact analysis relies on the construction method and anticipated duration for the action alternatives, which are described in detail in Chapter 2 of the EIS.



2.0 Regulatory Context

2.1 RESOURCE DESCRIPTION

Visual impacts are typically identified through technical, institutional, and public considerations. Technical considerations are assessed by comparing the spatial dominance, scale and contrast, and compatibility of a project (Corps 1988) with the existing context in the project area and its surrounding landscape. Institutional and public considerations are based on laws and policies that concern visual resources and public comments. Visual quality also considers viewer preferences for the natural and built environments, which can vary according to the sensitivity of the viewer and how much they are exposed to certain views.

2.2 RELEVANT LAWS, PLANS, AND POLICIES

Visual resources within the study area (as defined in Section 3) are protected by a variety of federal and state laws, plans, and policies (Section 2.2.1), and local plans and policies (Section 2.2.2). To determine how well the alternatives would meet these institutional and public considerations for the natural and built environments, plans, policies, and regulations relevant to the study area were reviewed to identify applicable planning policies and regulations pertinent to the protection of views and visual resources. These policies generally promote the preservation of natural, open, and rural areas and views of the shoreline, but also pertain to urban design and design of the built environment generally.

2.2.1 Federal and State

There are few federal and state laws or regulations pertaining to visual resource protection in the Capitol Lake – Deschutes Estuary. At the federal level, there are no regulations protecting visual resources at this site. The National Environmental Policy Act (NEPA) requires federal agencies to assess impacts, but policies to protect visual resources are established by each agency. The U.S. Army Corps of Engineers (Corps) will be responsible for issuing federal permits for this project and would conduct its own NEPA review and has adopted procedures for doing so. Use of the Corps' procedures is not required for review under SEPA. However, as described in Section 3 below, the Corps' procedures were adapted in the analysis of visual resource impacts.

Applicable state regulations and policies are summarized in Table 2.1. In Washington State, similar to NEPA, SEPA requires disclosure of impacts but does not specify protection required for visual resources. The Shoreline Management Act (SMA) requires local governments to consider visual as well as physical access to shorelines in shoreline planning and management, but does not have specific requirements about the quality of views. While the state has adopted regulations regarding the use of Capitol Lake, no state regulation specifically directs the management of views or visual quality of the lake. Because Capitol Lake and much of its shorelines are owned by the State of Washington, it is subject to rules and policies established by Enterprise Services, which owns upland areas and leases submerged lands of the lake from the Department of Natural Resources. Enterprise Services’ rules and policies are established at the discretion of the agency Director, and those specific to campus design, are made in coordination with the Capitol Campus Design Advisory Committee and the State Capitol Committee. The Master Plan for the Capitol of the State of Washington is the applicable policy document for the state’s Capitol Lake holdings, and identifies goals for view protection, as well as design objectives related to specific views (Washington State General Administration 2006). The West Capitol Campus Historic Landscape Preservation Master Plan, which is an implementation of the Master Plan for the Capitol, also contains goals and objectives regarding views from the West Capitol Campus, specifically relating to views of the water and Olympic Mountains from the North Overlook. It establishes a goal of maintaining the historic intent of the early campus designers, and includes a 1927 statement from the Olmsted Brothers regarding the North Overlook, which states their intent to: “take advantage of the splendid view looking [north] over the sea water below” (Washington State General Administration 2009). At the time, Capitol Lake had not yet been created, and the area now occupied by the lake was an estuary. The West Campus Historic Landscape Preservation Master Plan also notes the importance of “views of the Capitol Dome and the “Capitol Group” (a cluster of prominent buildings centered around Capitol Dome) atop the bluff, reflected by Capitol Lake and framed by the native forest.” These views of the Capitol Dome and Capitol Group are available from many locations north of Capitol Lake, as well as several locations along the west and southwest of the study area.

Table 2.1 State Laws, Plans, and Policies

Regulatory Program or Policies	Lead Agency	Description
Washington Shoreline Management Act of 1971	Department of Ecology (Ecology)	Created a requirement for local jurisdictions to manage and protect shoreline areas, including their ecological integrity, provision for water-dependent uses, and visual and physical access to the water by the public; requires local jurisdictions to develop management plans that accomplish these objectives in accordance with state policy and guidance (Revised Code of Washington [RCW] 90.58, Washington Administrative Code 173-26).
Master Plan for the Capitol of the State of Washington	Enterprise Services	Provides design guidance for development of the entire Capitol Campus, including management of views of Capitol Lake and of the Capitol from Capitol Lake (Washington State General Administration 2006).

Regulatory Program or Policies	Lead Agency	Description
West Capitol Campus Historic Landscape Preservation Master Plan	Enterprise Services	Establishes the goals of maintaining historic intent of Campus design, with specific reference to the North Overlook (Washington State General Administration 2009).

2.2.2 Local

Local governments are required to adopt comprehensive plans under the state Growth Management Act, and Shoreline Master Programs (SMPs) under the SMA. Each of the two affected cities (Olympia and Tumwater) has adopted a comprehensive plan and SMP that contain regulations and policies regarding visual resource protection (Table 2.2). The City of Tumwater has Design Guidelines (City of Tumwater 2016) that apply to development citywide, as well as guidelines for the Brewery District. The City of Olympia also has design policies in its Downtown Strategy that include reference to shoreline views and identify visual preferences (City of Olympia 2017). Appendix A includes a table of relevant policies that were referred to for this analysis.

Taken as a whole, these policies express a general preference for protecting public views of the water, water’s edge, surrounding mountain views, and for naturalistic design treatments, but do not call out specific views. Views of the Capitol Dome are an exception and are emphasized in a number of policies. These documents expressly state that private views are not protected.

Table 2.2 Local Laws, Plans, and Policies

Regulatory Program or Policies	Lead Agency	Description
City of Tumwater Comprehensive Plan	City of Tumwater	Prepared by the City of Tumwater (2016, last updated 2019) to meet the requirements in the Growth Management Act (RCW 36.70A), provides goals and polices to guide development and protect natural and cultural resources. However, no policies specifically refer to protecting views. It does include discussion of the Parks and Open Space designation having the purpose of retaining views and preserving land in an “open and natural state.”
City of Tumwater Shoreline Master Program	City of Tumwater	Adopted by the City of Tumwater (2014), provides several policies regarding public access that refer to the protection of visual access and scenic quality, including the following: 3.6 Aquatic [Shoreline Designation]. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views... 4.4 Public Access, Goal B.1. Increase the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and/or to view the water and the shoreline from adjacent locations... 7.9 Recreation, Policy A.5. Design recreational developments to preserve, enhance, or create scenic views and vistas.

Regulatory Program or Policies	Lead Agency	Description
City of Tumwater Citywide Design Guidelines	City of Tumwater	Adopted by the City of Tumwater (2016), provides guidance primarily for the built environment that has limited applicability to this project. Relevant policies include Section 4.c.3.5 Landscape Character, which expresses a preference for the retention of mature conifers, open grassy expanses, and naturalistic design.
City of Olympia Comprehensive Plan	City of Olympia	Prepared by the City of Olympia (2014, last updated 2019) to meet the requirements in the Growth Management Act (RCW 36.70A), provides goals and policies to guide development and protect natural and cultural resources that are general in nature, such as PR3.3 "Preserve and enhance scenic views and significant historic sites within Olympia's park system." The Comprehensive Plan also repeats several policies listed in the SMP, described below.
City of Olympia Shoreline Master Program	City of Olympia	Adopted by the City of Olympia (2015), provides policies regarding public access that refer to the protection of visual quality, including the following: <ul style="list-style-type: none"> - PN 12.5 E. All development and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views... - PN 12.15 A. Protect and maintain existing visual and physical public access so that the public may continue to enjoy the physical, visual, and aesthetic qualities of the shoreline. - PN 12.19 A. Preserve views and vistas to and from the water, by public and private entities, to ensure that the public may continue to enjoy the physical and aesthetic qualities of the shoreline, including views of the water and views of shoreline areas from the water and the iconic views of the State Capitol and Olympic Mountains. - PN 12.26 A. Public recreation...Recreational uses and developments that facilitate the public's ability to reach, touch, and enjoy the water's edge, to travel on the waters of the State, and to view the water and shoreline are preferred. ... H. Recreation facilities should be designed to preserve, enhance, or create scenic views and vistas.
Olympia Downtown Strategy	City of Olympia	Adopted by the City of Olympia (2017), provides policies applicable mainly to planning and development of downtown, but includes non-policy language describing preferred views. Views of the Capitol Dome, Olympia waterfront, Mount Rainier, the Olympic Mountains, and Black Hills are listed as defining views (p.21) of downtown, and are all visible from the project area.

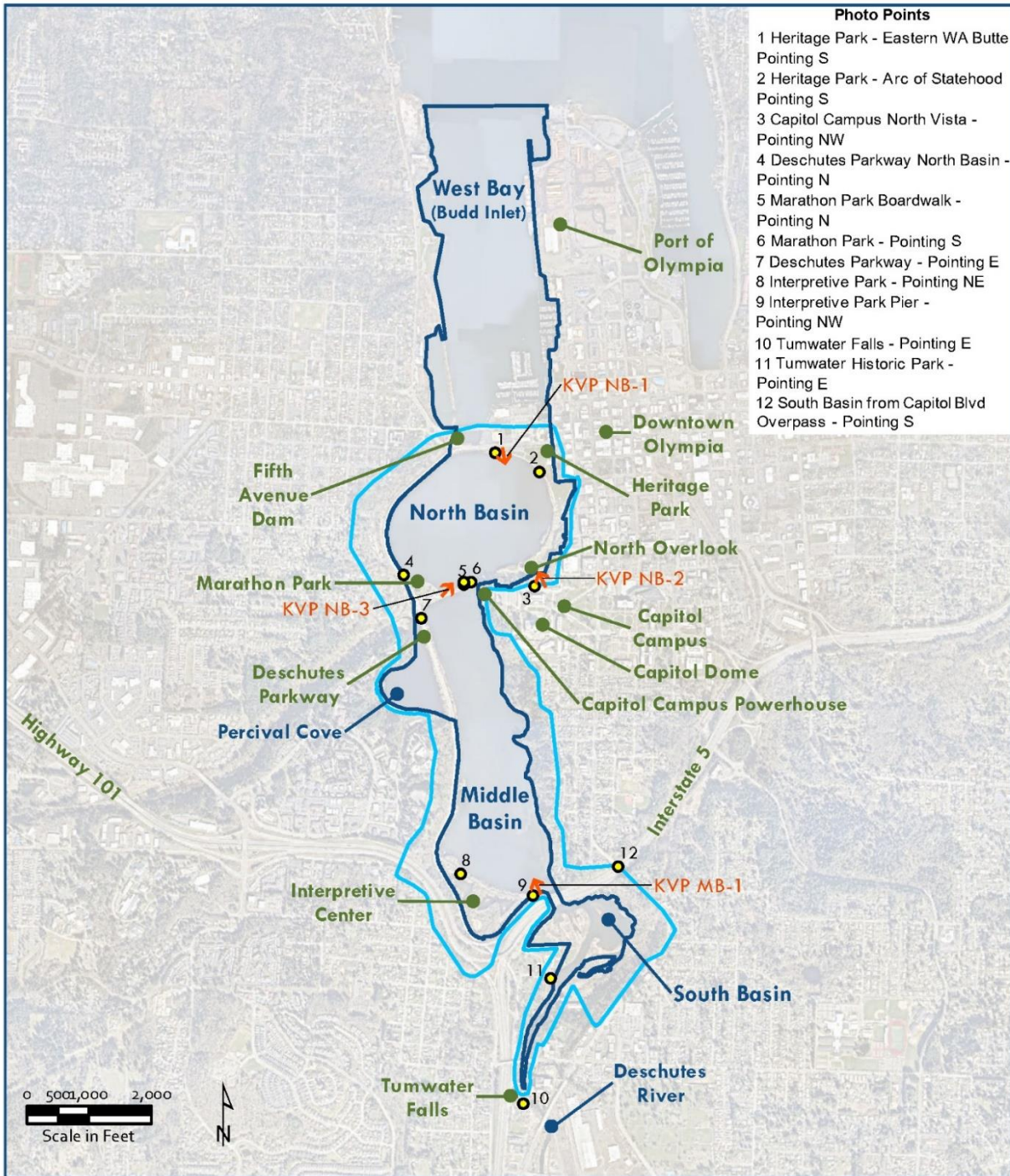


3.0 Methodology

3.1 SELECTION OF THE STUDY AREA

The project area shown in Figure 1.1 is the area directly affected by the project. The visual resources study area extends beyond the project area to areas where the effects of project would be visible from, including public viewpoints, scenic routes and highways, and views from private property. The study area for visual resources is the area of Capitol Lake and the adjacent land as shown on Figure 3.1. The study area includes Deschutes Parkway and the parks that abut the lake's north, west, and south shores; a portion of the campus of the State Capitol on the eastern shore; and the predominantly residential shorelines lining the southeast shore of the lake. Areas where public or private views of the lake are obstructed by topography or greenbelts are excluded. The analysis does not consider potential views from future development. The project would not substantially affect views from or of West Bay, so it is not included in this analysis.

Figure 3.1 Visual Resources Study Area



- Photo Points**
- 1 Heritage Park - Eastern WA Butte Pointing S
 - 2 Heritage Park - Arc of Statehood Pointing S
 - 3 Capitol Campus North Vista - Pointing NW
 - 4 Deschutes Parkway North Basin - Pointing N
 - 5 Marathon Park Boardwalk - Pointing N
 - 6 Marathon Park - Pointing S
 - 7 Deschutes Parkway - Pointing E
 - 8 Interpretive Park - Pointing NE
 - 9 Interpretive Park Pier - Pointing NW
 - 10 Tumwater Falls - Pointing E
 - 11 Tumwater Historic Park - Pointing E
 - 12 South Basin from Capitol Blvd Overpass - Pointing S

- Legend**
- Photo Point
 - ↑ KVP Point
 - ▭ Project Area
 - ▭ Study Area

3.2 DATA SOURCES AND COLLECTION

Data sources used for the visual resources analysis include aerial and terrestrial photography; geographic information system (GIS) data including terrain, vegetative cover, and 3-dimensional (3D) modeling of structures and vegetation; relevant policy and planning documents; and land and shoreline use regulations applicable to the study area. Sources used in the analysis are listed in Table 3.1.

Photographs used in this analysis were taken on site visits in the spring and summer of 2019 and 2020.

Table 3.1 Data Sources Used in the Analysis

Source	Data Utilized
City of Olympia	
Comprehensive Plan (adopted 2014, last updated 2019)	Relevant policy statements
City of Olympia Shoreline Master Program (2015)	Relevant policy statements and regulations
Olympia Downtown Strategy (2017)	Relevant policy statements
City of Tumwater	
2016–2036 Comprehensive Plan Update (2016, last updated 2019)	Relevant policy statements
Shoreline Master Program (2014)	Relevant policy statements and regulations
Citywide Design Guidelines (2016)	Relevant policies and guidelines
Google Earth	
Google Earth imagery and data	Aerial photography (July 2018), Street View imagery (2019), terrain, 3D Buildings (2020, includes tree canopy), viewshed imagery (to establish study area)
Thurston County	
Thurston County Assessor’s GIS parcel data (2019)	Existing land use, zoning (Tumwater, Thurston County), parks
Washington State Department of Enterprise Services ¹	
Master Plan for the Capitol Campus	Planning background and management policies
West Capitol Campus Historic Landscape Preservation Master Plan	Planning background and management policies

Notes:

1. Enterprise Services was previously called the Washington State Department of General Administration.

3.3 ANALYSIS OF IMPACTS

Comments from the scoping process indicated that the project area includes scenic resources that are very important to the surrounding communities and the region, and this is confirmed by Enterprise Services policies and policies adopted by agencies with jurisdiction in the study area. The project could

substantially affect these resources. Although there is no prescribed method for view analysis under Enterprise Services' SEPA Policies, the *Visual Resources Assessment Procedure for US Army Corps of Engineers* (Corps 1988) provides an accepted framework for visual assessment of the scale and character of the project. However, the procedures are not all directly applicable because the Corps has a different mandate under NEPA. Therefore, the methods used have been adapted for this project, as described below.

The Corps' Visual Resources Assessment Procedure is composed of two parts: the Management Classification System and the Visual Impact Assessment Procedures. The Management Classification System establishes the degree and nature of visual change acceptable, typically by an agency that manages the resource. However, in this case, Enterprise Services manages only the immediate area around the lake. Enterprise Services has not developed a Management Classification System for the study area but does manage the lake and much of the adjacent shoreline under a Master Plan (Washington State General Administration 2006), which provides some guidance on visual preferences and the protection of visual quality. In addition, the cities of Tumwater and Olympia have adopted policies to guide land use and shoreline development that provide information on visual preferences. The Master Plan and applicable policies guided the development of the study area and approach to this analysis.

Section 3.3.1 describes the steps from the Corps Visual Impact Assessment Procedures that were used and how they were adapted for this analysis.

3.3.1 Analytical Steps

The first step in the analysis established the study area—the area where potentially significant impacts could occur. Next, the study area was broken into Landscape Similarity Zones, with photos depicting typical views in each zone. Four key viewpoints (KVPs) were selected for preparation of detailed visual simulations. The visual characteristics of each Landscape Similarity Zone under each of the alternatives were then examined and compared to the No Action Alternative. This section describes these analytical steps in detail.

3.3.1.1 Establish the Study Area

To assess the potential for significant adverse impacts on visual quality, aerial imagery and maps of the project area and vicinity were reviewed, and two site visits were made (June 2019 and May 2020). The Google Earth viewshed tool was used to examine the visibility of various parts of the project area. These results were used to outline a *study area* that encompasses the areas of highest visibility around the entire project area. The study area for the visual resources analysis is shown in Figure 3.1.

3.3.1.2 Identify Landscape Similarity Zones

The affected environment was documented based on a review of the study area landscape and its uniqueness within the regional landscape, with reliance on agency policies to determine specific features that are valued.

The study area is examined by basin (North, Middle, and South). Within the basins, there are areas that have similar views and types of viewers. These are referred to as Landscape Similarity Zones in the Visual Resources Assessment Procedure. The Landscape Similarity Zones for this project are distributed as follows.

- North Basin
 - Heritage Park Area (from the railroad bridge to the west end of the 5th Avenue Dam)
 - Capitol Campus North Overlook
 - Deschutes Parkway
 - Marathon Park
- Middle Basin
 - Deschutes Parkway (west shore)
 - Interpretive Center
 - East shore
- South Basin (includes east and west shores)

Photos were taken during field visits in spring and summer of 2019 and 2020. This report includes a selection of photos, although more were used in preparing the analysis to ensure that any significant changes in visual resources were captured. Numerical scores for management classification were not established for these zones. Instead, this analysis describes the visual quality of each Landscape Similarity Zone in each basin. In particular, the degree of **visual “unity”** is described. Unity refers to the degree to which the landscape is composed of elements that are compatible with the dominant character of the landscape. A highly unified landscape contains few, if any, elements that compete with the dominant visual character. The analysis describes the relative unity of each Landscape Similarity Zone, as well as the effects that each alternative would have on visual unity.

3.3.1.3 Identify Key Viewpoints and Develop Visual Simulations

Key viewpoints (KVPs) are locations where the project alternatives would be expected to have the highest potential for people to observe changes in visual character because of the project. KVPs are in public places—parks, public rights-of-way, or the State Capitol Campus. Since private views are not protected as a matter of policy, views from private property were not considered for key viewpoints. However, impacts on private views are described in the impact analysis (Section 5).

Based on aerial imagery, topography, and the 2019 and 2020 site visits, several potential KVPs were identified. These potential KVPs were presented to the community sounding board (CSB) for the project, with recommendation to develop three or four locations for visual simulations based on the areas of highest potential change and of most interest to the CSB, which represents a diverse mix of community members. Reflecting feedback from the CSB, Enterprise Services and EIS Project Team adjusted the locations of some KVPs and selected three KVPs for visual simulation, named KVP NB-1,

KVP NB-2, and KVP MB-1. A fourth KVP was added during the analysis- KVP-NB-3, when it was recognized that it was important for depicting one of the most substantial changes that would result under the Hybrid Alternative. The locations and orientation of these KVPs are shown on Figure 3.1. These locations were selected because they represent the following:

- Views experienced by a large number of viewers.
- Locations where the changes caused by the project alternatives would be highly visible.
- Locations that will also help the viewer understand the typical changes that would occur elsewhere in the project area as a result of the project alternatives.

The visual simulations for the selected KVPs provide representative views that illustrate impacts in many areas around the project area. The analysis includes expected changes to views from locations that have not been simulated.

3.3.1.4 Evaluate Visual Effects

The final step in the analysis evaluated effects each of the project alternatives would have on the Landscape Similarity Zones within each basin.

Consistent with the Corps' methodology, visual effects resulting from the project alternatives were identified in terms of **spatial dominance**, **scale and contrast**, and **compatibility**, defined as follows:

- **Spatial Dominance:** The prevalent occupation of a space in a landscape by an object(s) or landscape element.
 - **Dominant:** The modification is the major object in the visual setting or occupies a large part of a confined setting.
 - **Co-dominant:** The modification is one of the major objects in the visual setting, or occupies a confined setting, and its features are of equal visual importance with other objects.
 - **Subordinate:** The modification is insignificant and occupies a minor part of the setting.
- **Scale and Contrast:** The difference in absolute or relative scale in relation to other distinct objects or areas in the landscape.
 - **Severe:** The modification is much larger than and would contrast with surrounding objects.
 - **Moderate:** The modification is slightly larger than and would contrast with surrounding objects.
 - **Minimal:** The modification is much smaller than or would not contrast with surrounding objects.

- **Compatibility:** The degree to which landscape elements and characteristics are still unified within their setting.
 - **Compatible:** The modification is harmonious within the setting.
 - **Somewhat Compatible:** The modification is more or less harmonious.
 - **Not Compatible:** The modification is not harmonious within the setting.

Spatial dominance, scale, and contrast are described based on the professional judgment of the analyst, using project plans and visual simulations. Potential compatibility impacts were evaluated in consideration of applicable policies to determine significance of the impacts. Tables 2.1 and 2.2 above identify the applicable laws and policies that address visual impacts. These laws and policies were used to guide determinations of the compatibility of visual elements. They provide a context for determining whether the project is objectively harmonious with other landscape elements and characteristics, as envisioned in the adopted policies of the lead agency and the jurisdictions affected by the project.

3.3.2 Identification of Construction Impacts

The project is expected to cause temporary (short-term) impacts/changes/modifications to visual quality, due to the presence of construction equipment and staging in the project area, and short-term changes to the landscape during construction, such as grading, clearing, and replanting. The scale, proximity, and duration of construction activities determine the intensity of potential impacts.

For this analysis, the magnitude of short-term impacts is considered less-than-significant or significant, as follows:

- **Less-than-significant**—Impacts are considered less-than-significant if the duration of any incompatible visual effects is relatively short, and/or visual effects are minimal to moderate.
- **Significant**—Impacts are considered significant if the visual effects are severe, incompatible with the unity of the landscape setting, and would affect a large number of viewers for a period greater than 3 years.

3.3.3 Identification of Operational Impacts

The project is expected to cause operational (long-term) impacts/changes/modifications to visual quality as portions of the lake are reconfigured with habitat islands, structures are removed and new structures are constructed, and with 5th Avenue Dam removal and related system changes under some of the alternatives, in contrast to existing conditions in the project area. The scale, proximity, and duration of determine the intensity of potential impacts.

For this analysis, the magnitude of long-term (operational) impacts is considered less-than-significant or significant, as follows:

- **Less-than-Significant**—Impacts are considered less-than-significant if any incompatible visual effects are minimal to moderate, or if severe, would not adversely affect a large number of viewers from a public place.

- **Significant**—Impacts are considered significant if the visual effects are severe, incompatible with the unity of the landscape setting, and would affect a large number of viewers from a public place.



4.0 Affected Environment

Capitol Lake is a large waterbody and is itself considered a visual resource. In addition to the lake, the vegetation and open space that surround the lake comprise a visual resource that is valued highly by the public locally and regionally, as recognized in adopted policies and comments received during the scoping process. The lake and the adjoining parks provide defining edges to downtown Tumwater and Olympia and contribute to the setting for the Washington State Capitol. Although the surrounding landscape has changed considerably since it was first designed, Capitol Campus was designed to take advantage of views of the water as a connection with the larger landscape setting that includes Puget Sound and the Olympic Mountains. The *Cultural Resources Discipline Report* (ESA and NW Vernacular 2022) describes the historical context of the project in greater detail.

The study area consists of shorelines of varying character even within each of the three major basins. The shoreline character varies, as does the view from each shoreline. To capture that variety, the views from and of each Landscape Similarity Zone in each basin are described below.

4.1 NORTH BASIN

The North Basin is approximately 2,700 feet wide east-to-west, and 1,900 feet north-to-south. Its shorelines include Heritage Park on the east and north shore, and Deschutes Parkway and Marathon Park on the west and south. The North Basin is noted for views of the Capitol Dome, which are available around much of the east, north, and west perimeter of the lake. The reflecting quality of the lake surface complements the views of the Capitol and the vegetation that lines most of its shoreline. The North Basin can also be seen from the Capitol Campus, and that Overlook is considered an important element of the campus design. The North Basin is a defining visual feature at the southwest edge of downtown Olympia. Views from taller buildings in that area include the basin.

The North Basin consists of four Landscape Similarity Zones, as described below.

4.1.1 Heritage Park

The area east of the 5th Avenue Dam is dominated by Heritage Park, a highly visited public park that is an extension of the Washington State Capitol Campus. The park comprises the east shoreline of

Capitol Lake's North Basin and is generally flat. Heritage Park is made up largely of open grass areas with paved pedestrian paths and formally planted deciduous trees near the water's edge.

At the northern edge of Heritage Park, a mound known as the Eastern Washington Butte offers views across the North Basin toward the Capitol, the most prominent landmark in the Olympia-Tumwater area. This south-facing view is framed on the east by Heritage Park and the forested slope of the Capitol Campus (see Photo 1).

In the southeast portion of the North Basin, the shoreline consists of shallow water with low vegetation, with a concrete bulkhead. The bulkhead forms one edge of a popular walk that encircles the entire North Basin and provides extensive views of the Capitol Dome and the large water area in the North Basin (see Photo 2.)



Photo 1 Eastern Washington Butte looking south toward the Capitol Dome



Photo 2 Heritage Park shoreline looking south toward the Capitol Dome

The views from Heritage Park extend to Marathon Park and Deschutes Parkway. Views do not extend to the Middle Basin because of the railroad bridge that marks the division between the basins. The views looking south toward the Capitol are highly unified, with the formal tree plantings along the shorelines leading to the forested hillside topped by Capitol Dome.

There are some private views of Heritage Park from taller buildings in downtown and from residential development on the slope above Deschutes Parkway. In downtown, taller buildings to the east and north of the lake have broad views of the lake.

4.1.2 Capitol Campus North Overlook

The Capitol Campus lies southeast of and approximately 100 vertical feet uphill from Capitol Lake, separated by a steep hillside. The hillside is heavily forested except for a cleared corridor where a switchback trail connects the main campus with Heritage Park. At the top of this corridor, the North Overlook offers views of Capitol Lake, downtown Olympia, Budd Inlet, Puget Sound, and the Olympic Mountains beyond (see Photo 3). The Law Enforcement Memorial stands at the top of the overlook. The overlook is a very popular stop for visitors to the Capitol. The view from the overlook is framed by tall trees on the adjoining hillside, so that the focus is due north, with Heritage Park in the foreground. The western part of Capitol Lake is not visible from the overlook.

Water and shorelines make up a major part of the view from the overlook. The view includes the south shore of the North Basin, which is marshy rather than open water, as well as the pronounced Arc of Statehood, a white concrete pedestrian walkway along the east shore. Beyond the park, the marinas and buildings of downtown Olympia form the middle ground of the view. Buildings vary in height up to 10 stories. The 5th Avenue Dam is visible but not prominent. Beyond downtown, there are views of Budd Inlet, leading to Puget Sound, and the Olympic Mountains.

Although it contains many urban elements that by themselves are not notable for visual quality, the view from the North Overlook provides a strong sense of place for the viewer visiting the State Capitol.



Photo 3 North Overlook on the Capitol Campus, looking northwest

4.1.3 Deschutes Parkway



Photo 4 Deschutes Parkway Looking east toward Downtown Olympia

Deschutes Parkway extends west of the 5th Avenue Dam and continues south, along the west shore of the North Basin. Deschutes Parkway has a two-lane roadway that includes a paved bicycle path in each direction, with a parking lane along the eastern side. A sidewalk and an unpaved path also parallel the roadway on the eastern side. The parkway is about 10 feet higher in elevation than the current lake level. It is lined with formally planted deciduous trees, and the shoreline is largely vegetated with native and non-native shrubby vegetation that is maintained at a height low enough for pedestrians to see over.

Commuters and tourists use the roadway daily, as do many walkers and runners along the pedestrian path. Views are of open water; there is little in the way of emergent vegetation but at times there can be extensive floating vegetation (see Photo 4). The far shoreline is Heritage Park, which appears as a line of trees along the shore, with a low urban skyline behind it. The 5th Avenue Dam is visible but not prominent. Overall, the view is highly unified, like the view from Heritage Park. From a person traveling on the roadway, views of the water are intermittent, interrupted by parked vehicles as well as the street trees and in some areas low shoreline vegetation. However, the visual experience of moving along this shoreline drive gives plenty of glimpses of the lake, providing a strong and unified overall visual

experience. Note, however, that the lake supports floating algae and aquatic plant growth that is the result of degraded water quality and minimal aquatic plant management.

Uphill and west of the parkway is an area of private residential development. Views from residences are limited by the tall and dense vegetation on the slopes. However, a few residences do have views across the North Basin, some with views of the Capitol Dome.

4.1.4 Marathon Park

Situated in the southwest portion of the North Basin, Marathon Park is a large open space area where many users of the pathways around Capitol Lake park their vehicles before setting out on foot or bicycle. The views from this park are similar to those described for Deschutes Parkway.



Photo 5 Marathon Park boardwalk looking northeast toward downtown Olympia

Marathon Park has an east-west oriented boardwalk that crosses the channel between the North Basin and the Middle Basin. The views from this vantage point looking north across the North Basin afford the only experience of being over the water on the North Basin (see Photo 5). As with other zones in the North Basin, the views of the North Basin from this vantage point are highly unified, with the open water surrounded by a line of trees, backed by forested hillsides to the west and east, and the low city skyline in the distance to the northeast.

The views to the south from the Marathon Park boardwalk have a railroad in the foreground (see Photo 6). The utilitarian nature of the railroad tracks and bridge contrasts with the verdant shores of the Middle Basin as well as the open park areas in Marathon Park. Although interesting, views looking to the south from Marathon Park are somewhat constricted and less unified in character compared to the open water views to the north.

4.2 MIDDLE BASIN



Photo 6 Marathon Park boardwalk looking south toward Middle Basin

The Middle Basin is approximately 800 to 1,700 feet wide east-to-west, and 5,000 feet north-to-south. The Middle Basin is bounded on the north by the railroad bridge and on the south by the Interstate 5 (I-5) bridge. Viewed from a distance, both the eastern and western shores of the Middle Basin appear heavily vegetated and form a naturalistic frame for the open water of the basin. Except when standing near them, the built elements (the bridges and the Powerhouse) are not dominant features in this landscape. Like the North Basin, the Middle Basin as a waterbody is predominantly open water. There are overwater views of the Capitol Dome from viewpoints on the south and west sides of the basin. There are also wetland complexes at Percival Cove and the Interpretive Center that provide very different visual experiences for viewers, where vegetation surrounds trails and varies in height from very low to well overhead.

The Middle Basin consists of three Landscape Similarity Zones, as described below.

4.2.1 Deschutes Parkway

The west shore of the Middle Basin is a continuation of the Deschutes Parkway. Similar to the North Basin, it is lined with formally planted deciduous trees, in some places on both sides of the roadway, and low vegetation leading to the water's edge. Some areas of the shore have small patches of emergent vegetation.

The Middle Basin also includes Percival Cove, a largely natural area that is separated from the main basin by a causeway on which Deschutes Parkway traverses. Percival Cove is primarily open water with an area of emergent vegetation at its north end. It is surrounded by trees on the slopes above, forming a unified, naturalistic scene.

Views from within the zone are similar to those in the North Basin, except that the roadway has open water on both sides. The Middle Basin is narrower than the North Basin, so less of it is visible to a viewer traveling on the roadway (see Photo 7). The water on the west side of the parkway is part of Percival Cove.

The views from this zone are highly unified and naturalistic, including the views of the east shore, where the Capitol Dome can also be seen along much of the corridor.



Photo 7 View from Deschutes Parkway looking northeast across Middle Basin to the Powerhouse

4.2.2 Interpretive Center

Situated at the southwest edge of the Middle Basin near the I-5 bridge, the Interpretive Center is made up of wetlands and paths and has two small piers that provide close visual access to the water. The pathways afford views across the wetlands in the park as well as views north along the long sweep of the Middle Basin. From the vantage of the shoreline path, open water and tree-lined shores dominate the view, and in places the Capitol Dome on the opposite shore can be viewed above the treetops (see Photos 8 and 9). Along other pathways, views are obscured in many places by shrubby shoreline vegetation, but there are also a few clear openings where the full length of the basin can be observed.

This zone includes portions of I-5 and US Highway 101, as well as a small area upslope from US Highway 101. Any views of the Middle Basin from I-5 would be for northbound vehicles and would fleet past a viewer in a matter of a second at highway speeds. Southbound vehicles do not face the Middle Basin, and northbound vehicles are on the low side of a banked curve, and the high side of the roadway precludes views after a brief glimpse. (Northbound travelers on I-5 get a slightly longer view of the South Basin, but that view is also fleeting, with trees being more prominent than water.) On US Highway 101, trees along the north side of the roadway prevent views of the Middle Basin except from the eastbound onramp to I-5. However, at highway speeds, this view also lasts only a second or so, as vehicles descend and merge onto I-5. Heavy traffic would slow motorists down and prolong views of the area.



Photo 8 Interpretive Center looking northeast toward the Capitol Dome

4.2.3 East Shore



Photo 9 Interpretive Center pier looking north

The east shore of the Middle Basin is composed of steep slopes rising approximately 100 feet above the water level, forested with a mix of deciduous and coniferous trees (see Photos 8 and 9). At the northeast end of the Middle Basin is the Powerhouse, an historic industrial building nestled in the slope that provides steam heat to the Capitol Campus (see Photo 7). The plant has a large smokestack that is a landmark that, although prominent, stands below the Capitol Dome, a much more dominant landmark in the same area. Viewed from Deschutes Parkway or the Interpretive Center, the eastern shore appears as a unified landscape of forest greenbelt, with the Capitol Dome and the I-5 bridge to the south being the only built features of any prominence.

There are no public view locations along the waterfront of the east shore. The area is mostly privately owned and has an extensive tree canopy on the steep slopes that line the shore and block views from streets. Some state office buildings may have views of portions of the Middle Basin, but public views of the basin are not available from the Capitol Campus grounds due to tree cover. Residential areas at the top of the slope also appear to be largely cut off from views of the water by tree cover, but some residences near the crest of the slope have views of the western shore of the Middle Basin.

4.3 SOUTH BASIN

The South Basin is bounded on the north by the I-5 bridge and in the south by Tumwater Falls. The falls form a natural and dramatic visual terminus (see Photo 10). The project would not affect views above the falls because project actions do not extend upstream of the falls and water levels would not change above the falls either. The South Basin is the smallest of the basins and is dominated by views of riparian wetlands and forest, with the river channel and a small area of open water as a central spine. The South Basin is considered one Landscape Similarity Zone because views of it are similar from most angles, and views from within it, although varied, contain similar visual elements.



Photo 10 Tumwater Falls

The South Basin is a narrow valley where the Deschutes River flattens after coming through Tumwater Falls (see Photo 11). Areas upslope from the river generally do not have views into the basin because of the surrounding vegetation.

The one area where a pedestrian may gain a view from a public street is on the Capitol Boulevard SE overpass that crosses I-5 at the east edge of the zone. Through a wire mesh fence lining the sidewalk, this bridge provides a view over the South Basin from a distance of 500 feet, and approximately 90 feet higher in elevation (see Photo 12). The sidewalk did not appear to be heavily used on the May 2020 site visit. The basin can also be viewed from I-5. However, views of the water are very limited from a moving vehicle due to topography, vegetation, and a roadway configuration that includes on- and off-ramps, overpasses, and substantial curves in the main road alignment.



Photo 11 Tumwater Historical Park looking south toward Brewery Park



Photo 12 South Basin from Capitol Boulevard SE I-5 overpass, looking southwest

The features of the South Basin form a popular tourist attraction, and thousands of visitors come to the area to see the river, the fish hatchery, and the historic brewery and other buildings in the area.

Therefore, most viewers see this zone from within one of the two parks that form the shorelines of this basin. Tumwater Historical Park has open areas with trails leading to the water's edge. Brewery Park at Tumwater Falls also has trails and a pedestrian bridge over the river that allow users to see the river up close.

The parks and the natural landscape are designed to be visually compatible. Built elements are scaled for pedestrians and are generally subordinate visually to the forested vegetation and river. The historic buildings in the area are co-dominant views in some limited locations, but overall, the river and riparian vegetation dominate. The visual character is largely unified, even in areas where built elements are close to the water. The main exception is the area near the I-5 freeway bridge, where the massive overhead structure contrasts sharply with the rest of the basin.



5.0 Impacts and Mitigation Measures

5.1 OVERVIEW

This section describes the probable visual impacts of the No Action Alternative and the action alternatives (Managed Lake, Estuary, and Hybrid Alternatives). This section also identifies mitigation measures that could avoid, minimize, or reduce the identified impact below the level of significance.

5.2 NO ACTION ALTERNATIVE

The No Action Alternative would not result in construction impacts on visual resources because the project would not be built. Potential impacts would be related to limited ongoing maintenance of the 5th Avenue Dam and ongoing sedimentation of the Capitol Lake – Deschutes Estuary, since no sediment management strategies would be implemented. The visual impacts of dam maintenance would be minor and of short duration.

Long-term impacts from the No Action Alternative include a gradual expansion of vegetated wetlands in areas of the lake as sediment accumulates. This would occur primarily in the southeast portion of the North Basin. These minor changes to vegetation would affect views from within Heritage Park, but most views would remain largely unchanged. Any additional shoreline vegetation in the North Basin would likely be similar in character to existing vegetation. Some areas of the path along the southeast shore of Heritage Park that already have emergent vegetation could become more heavily vegetated and views to the lake could be further obstructed. Similar changes in vegetation could also occur in small areas in other parts of the lake. These changes in vegetation would not dominate views in any Landscape Similarity Zone and would have minimal impact on visual character.

Under the No Action Alternative, increased storm intensity due to climate change is expected to exacerbate flooding in the study area. From a visual impact standpoint, flooding, whether tidal or river flooding, would primarily affect people's access to trails providing visual access, an impact on recreation that is addressed in the *Land Use, Shorelines, and Recreation Discipline Report* (ESA 2022a). Flooding would also cause temporary changes to the visual environment, first when inundation occurs, and afterwards, when sediment would be deposited in parks and walkways adjacent to the

Capitol Lake – Deschutes Estuary. However, these visual effects would be temporary, and would have negligible impacts on visual resources.

Under the No Action Alternative, it is unlikely that Enterprise Services would be able to procure funding and approvals to manage sediment, control aquatic plants beyond what is currently done or implement water quality protection measures. Based on this, there would be continued and worsening impacts to aesthetic values of the lake basin given the continued increase in algae and aquatic plant populations over time. Floating algae and aquatic plant growth already affects Capitol Lake, as shown in Photo 4. Elimination or reduction of floating algae resulting from these water quality issues is one of the objectives of the project that would not be accomplished under the No Action Alternative. The lake is already affected by floating algae and aquatic plant growth, and some people have expressed that this is aesthetically undesirable. An increase in algae and aquatic plant growth could be expected under the No Action Alternative over time. The visual impacts would be minor to moderate, depending on the degree of change that would occur. As a result, impacts on visual quality would be **less-than-significant**.

5.3 IMPACTS COMMON TO ALL ACTION ALTERNATIVES

All action alternatives – Managed Lake, Estuary, and Hybrid – would have construction impacts associated with the following:

- Initial dredging
- Habitat island establishment
- Construction of boardwalks in the South and Middle Basins
- Construction of a dock in the Middle Basin and hand-carried boat launch in the North Basin
- Construction staging and access

5.3.1 Impacts from Construction

Construction of all action alternatives would impact visual quality on a temporary, but extended, duration (4 to 8 years). Construction activities would be visible to recreationalists, workers, residents, commuters, and visitors. Visible elements of the project during construction include construction equipment inside the lake, and heavy machinery occupying staging and construction areas. The scale and duration of construction activities would vary among the action alternatives.

Staging areas would be the most prominent features of the project during construction. Upland staging areas would include temporary fencing, storage of materials, placement of construction field offices, construction vehicle parking, and other modifications to the project area. Staging may also occur in-water, with barges and other vessels to support the proposed in-water construction activities. Staging would contrast with the existing visual character in the parks where staging would occur and would limit views of Capitol Lake or across the water from public areas.

All action alternatives would use Marathon Park as the primary construction staging and contractor waterfront access point for the duration of project construction. Access around Marathon Park would be allowed during construction for pedestrians walking around the lake. The park would be otherwise closed during the approximately 4- to 8-year construction period, depending on the alternative. Visual access to the lake from Marathon Park would be obstructed for an extended period, and large numbers of viewers would be affected.

A secondary construction access point would be established at Tumwater Historical Park for equipment needing to access the Middle Basin to construct sediment containment cells and form habitat islands. Tumwater Historical Park would be intermittently used for construction access only during in-water work periods. Closures of a portion of Tumwater Historical Park are anticipated when this site is being used as an access point.

Construction staging would also occur around the 5th Avenue Dam during construction of project elements. Construction staging and access areas would be returned to their previous conditions after construction. The 5th Avenue Dam staging area would be adjacent to the existing path and scenic Deschutes Parkway and would be visible for many viewers, both in vehicles and on the path. However, construction staging and equipment would generally not obstruct views of the lake for these viewers, except during limited periods.

Dredging within the lake would involve floating equipment, as well as fixed coffer cells, where the dredged material would be placed. Construction of all action alternatives would involve dredging in the North Basin and Middle Basin, and placement of dredged material in the Middle Basin. Dredging activities would be visible from many locations surrounding the basins for up to 5.5 months of the year, over a 4- to 5-year period. Coffers would remain in place and visible throughout this period until dredged material has been placed. Although visible, dredging equipment is relatively small compared to the scale of these two basins. The presence of this equipment would contrast with the normally placid visual character of these waterbodies, but would not dominate views. Coffers, consisting of steel sheet piling that would extend a few feet above the water level, would also contrast with the naturalistic setting of the lake. Dredging would also temporarily increase turbidity in the water, as described in the *Water Quality Discipline Report* (Herrera 2022). Muddy-colored water would affect the visual quality of viewers at the water's edge and possibly from the North Overlook viewpoint on the Capitol Campus. With environmental permit conditions and mitigation required to limit impacts from turbidity, these impacts would be of relatively short duration and would not severely affect the visual quality for viewers in any of the basins.

All action alternatives would include the construction of new boardwalks along the west shoreline of the South and Middle Basins. In the South Basin, an approximately quarter-mile boardwalk would be constructed waterward from the existing walking paths within Tumwater Historical Park. The approximately three-quarter-mile boardwalk in the Middle Basin would include two connections to the walking path on Deschutes Parkway. Under all action alternatives, the dock at the southern point of the Capitol Lake Interpretive Center would be rebuilt as an overwater viewing platform, and the existing dock at the northern point of the Capitol Lake Interpretive Center would be demolished. These

construction activities would contrast with the normally placid visual character of the lake but would be relatively small in scale and would not dominate views from any of the shorelines.

All action alternatives would also include the construction of a boat launch for hand-carried boats at Marathon Park in the North Basin. Construction of the boat launch could involve some grading to lay back a portion of the shoreline at the park prior to placing gravel/sand surface for the launch. Construction of the boat launch would occur when the park is otherwise closed for construction staging; therefore, no additional visual impacts would occur. Impacts at other locations could include intermittent park and trail closures or detours, which would limit visual access to the lake for periods of weeks or months. The duration and location of these temporary closures would vary among the action alternatives.


Habitat islands would be constructed within the Capitol Lake Basin under all action alternatives. Installing habitat islands within and adjacent to the water would involve crews of workers, using watercraft to transport materials. There would also be areas along the shore where clearing is necessary to construct pedestrian facilities. Habitat islands and areas disturbed for construction would be replanted as soon as possible after construction is complete. Planting activities would be even less noticeable than dredging and construction of other elements and would likely only be noticeable to viewers who were close to work crews. Planting would primarily be done by hand and take place over a few months. Planting habitat islands would not obstruct or restrict any views. For the first few years after habitat islands are constructed, areas with recent plantings would not be fully vegetated, and may require occasional work to remove unwanted invasive plants.



Many visual impacts during construction would be small in scale, occur intermittently, and shift location around the basins, and are therefore not considered significant. However, a substantial portion of Marathon Park would be closed for 4 to 5 years, eliminating or obstructing visual access to a portion of the North Basin for numerous users. In addition, coffer cells would be present year-round in the North and Middle Basins for 4- to 5-years, creating a long-duration disturbance in the visual landscape. Considered together with the intermittent disruptions to visual access that would occur over the overall 4- to 8-year period, large numbers of viewers are likely to find the visual quality of the lake diminished during construction of any of the action alternatives. For these reasons, construction impacts on visual resources are considered **significant** for all action alternatives.



5.3.2 Impacts from Operation



Impacts from operation of the action alternatives vary widely. The impacts from operation of each alternative are described in Sections 5.4.2, 5.5.2, and 5.6.2. Table 5.1 summarizes the effects from operation of each of the alternatives.



Table 5.1 Existing Views of Capitol Lake Deschutes Estuary with Summary of Expected Changes by Alternative



Location	Image	No Action Alternative	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative
North Basin					
<p>Photo 1. Heritage Park Eastern Washington Butte looking south toward the Capitol Dome</p>		<p>No change, except possible increase in floating algae.</p>	<p>No change.</p>	<p>Daily fluctuation in water level from tides. Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water. At low tides, which also occur twice per day, water would be visible only in the river channel. The majority of the day, the North Basin would be partially inundated.</p> <p>Habitat islands visible in open water areas in center of the basin and near the far shore.</p> <p>A new 5th Avenue Bridge spanning the northern portion of the North Basin would be visible, with a low profile paralleling the water and fitted with a rail similar to the existing 4th Avenue Bridge. See simulations from KVP NB-1.</p>	<p>At right edge of this view, a barrier wall would be visible, and the walkway in the foreground would need to be regraded to meet the elevation of the barrier wall walk.</p> <p>The barrier wall would reduce the area of open water viewable from this location by about 50%, because the height of the barrier wall would obstruct views to the west, although at high tides, some open water would be visible west of the barrier from the top of the mound. The barrier structure would contrast with the tree lined paths on all other edges of the North Basin. The change in grade to accommodate the transition to the barrier wall path would reduce the visible area of open water and the railing would obscure the reflection of the Capitol Dome in the lake surface.</p> <p>The new 5th Avenue Bridge spanning the northern portion of the North Basin would be visible, with a low profile paralleling the water and fitted with a rail similar to the existing 4th Avenue Bridge. The new 5th Avenue configuration and the bike path and sidewalk would transition to the existing 5th Avenue roadway near the Eastern Washington Butte, requiring localized regrading.</p> <p>See simulations from KVP NB-1.</p>


Location	Image	No Action Alternative	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative
<p>Photo 2. Heritage Park Arc of Statehood shoreline looking south toward the Capitol Dome.</p>		<p>Possible minor increase in emergent vegetation due to sediment buildup. Possible increase in floating algae and aquatic plants.</p>	<p>No change.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water. At low tides, which also occur twice per day, open water would not be visible. Tideflats and intertidal vegetation replace emergent vegetation in foreground. Habitat island visible in open water areas.</p>	<p>Water level would be similar to existing level.</p>
<p>Photo 3. North Overlook on the Capitol Campus, looking northwest</p>		<p>Possible minor increase in emergent vegetation due to sediment buildup. Possible increase in floating algae and aquatic plants.</p>	<p>No change.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water. At low tides, which also occur twice per day, water would be visible only in the river channel. The majority of the day, the North Basin would be partially inundated. Habitat islands visible in open water areas near east and west sides of the estuary, reducing the extent of open water visible from this viewpoint. New 5th Avenue Bridge would be visible in the distance, spanning the northern portion of the North Basin. See simulations from KVP NB-2.</p>	<p>Water level would be similar to existing level. At left edge of North Basin in this view, the 2,600-foot-long barrier wall would cut off about 10% of the visible open water area in the western (left-hand side in this view) portion of the North Basin. At higher high tides, water would be visible to the west of barrier wall from this viewpoint. New 5th Avenue Bridge would be visible in the distance, spanning the northern portion of the North Basin. See simulations from KVP NB-2.</p>

Location	Image	No Action Alternative	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative
<p>Photo 4. Deschutes Parkway looking east toward downtown Olympia</p>		<p>Possible increase in floating algae and aquatic plants.</p>	<p>No change in typical water levels. Reduction in floating algae and aquatic plants.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water. At low tides, which also occur twice per day, water would be visible only in the river channel. The majority of the day, the North Basin would be partially inundated.</p> <p>Habitat islands in the middle ground of this viewpoint. Vegetation on islands would be low; foreground shoreline could have vegetation up to 40 feet in height that would obscure views of open water and tideflats, but allow some views across to far shore.</p> <p>Floating aquatic plants largely absent.</p>	<p>Daily fluctuation in water level from tides. Open water as shown at present would occur only twice daily at high tides.</p> <p>At center of North Basin in this view, the 2,600-foot-long barrier wall visible across the entire width, and would block the view of the far shore.</p> <p>Habitat islands in the foreground with low vegetation; foreground shoreline could have vegetation up to 40 feet in height that would obscure views of open water, tideflats, and barrier wall.</p>
<p>Photo 5. Marathon Park boardwalk looking northeast toward downtown Olympia</p>		<p>Possible increase in floating algae and aquatic plants.</p>	<p>No change in water level. Reduction in floating algae and aquatic plants.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water. At low tides, which also occur twice per day, water would be visible only in the river channel. The majority of the day, the North Basin would be partially inundated.</p> <p>Habitat islands with low vegetation at the left edge of this view would reduce views of open water and obscure views of tideflats on western side of estuary.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides.</p> <p>At center of North Basin in this view, 2,600-foot-long barrier wall visible across the entire width, would block view of far shore.</p> <p>As tides recede, tideflats would appear in place of open water on west side of barrier wall. At low tides, which also occur twice per day, water would be visible only in the river channel. The majority of the day, the west side of the North Basin would be partially inundated.</p> <p>Habitat islands with low vegetation at the left edge of this view would reduce views of open water and obscure views of tideflats on western side of estuary.</p>

Location	Image	No Action Alternative	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative
Middle Basin					
<p>Photo 6. Marathon Park boardwalk looking south toward Middle Basin</p>		<p>Possible increase in floating algae and aquatic plants.</p>	<p>Habitat islands throughout the Middle Basin with vegetation that includes cottonwoods, cedar, hemlock, and fir trees that can reach mature heights of more than 50 feet. This would restrict views of water to narrow corridors between islands and cast more shade on the water, creating a darker surface appearance.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water.</p> <p>Tideflats and river channel replace open water at low tides. River channel would be to the left in this view, with little water visible at low tide due to bridge in foreground.</p> <p>Habitat islands with vegetation up to 40 feet in height throughout the Middle basin would restrict views of water and tideflats to narrow corridors between islands, even at high tide.</p>	<p>Same as Estuary Alternative.</p>
<p>Photo 7. View from Deschutes Parkway looking northeast across Middle Basin to the Powerhouse</p>		<p>Possible increase in floating algae and aquatic plants.</p>	<p>Habitat islands throughout the Middle Basin (middle ground in photo, beyond bridge railing). Vegetation would include cottonwoods, cedar, hemlock and fir trees that can reach mature heights of more than 50 feet. This could obscure most views of open water from this location and along the east side of Deschutes Parkway through the Middle Basin.</p>	<p>Daily fluctuation in water level from tides. Open water as shown at present would occur only twice daily at high tides.</p> <p>Tideflats and river channel replace open water at low tides. River channel would likely be obstructed by vegetation on habitat islands in this view.</p> <p>Habitat islands to the west (middle ground in photo, beyond bridge railing). Similar to the Managed Lake, vegetation up to 40 feet in height would eliminate foreground views of open water, but may allow some views.</p>	<p>Same as Estuary Alternative.</p>

Location	Image	No Action Alternative	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative
<p>Photo 8. Interpretive Center looking northeast toward the Capitol Dome</p>		<p>Possible increase in floating algae and aquatic plants.</p>	<p>Habitat islands throughout the Middle Basin with vegetation that includes cottonwoods, cedar, hemlock and fir trees that can reach mature heights of more than 50 feet. This would limit views of open water to narrow corridors, and cast more shade on the water, creating a darker surface appearance. Views of the Capitol Dome could be obstructed, depending on locations of taller trees. The new boardwalk would be visible in the distance. See simulations KVP-MB-1.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water. At low tides, which also occur twice per day, water would be visible only in the river channel. Tideflats and river channel replace open water at low tides. River channel would be to the right in this view. The majority of the day, the Middle Basin would be partially inundated. Habitat islands to the west (left hand side of photo) with vegetation up to 40 feet in height limit views of open water and tideflats. The north-south view axis of the river would remain open, but views of the Middle Basin from the western portion of the Interpretive Center would encompass only the southern end of the Basin due to view obstruction by the habitat islands.</p>	<p>Same as Estuary Alternative.</p>
<p>Photo 9. Interpretive Center pier looking north</p>		<p>Possible increase in floating algae and aquatic plants.</p>	<p>Habitat islands to the west (left hand side of photo) with vegetation that includes cottonwoods, cedar, hemlock and fir trees that can reach mature heights of more than 50 feet. This would limit views of open water to a narrower corridor, and cast more shade on the water, creating a darker surface appearance. The north-south axis would remain open to view, but views of the Middle Basin from the western portion of the Interpretive Center would encompass only the southern end of the Basin due to view obstruction by the habitat islands. Pier in foreground would be removed, and new boardwalk would be visible in the distance. See Simulations KVP-MB-1.</p>	<p>Full inundation with open water as shown at present would occur approximately twice daily at high tides. As tides recede, tideflats would appear in place of open water. At low tides, which also occur twice per day, water would be visible only in the river channel. Tideflats and river channel replace open water at low tides. River channel would be to the right in this view. The majority of the day, the Middle Basin would be partially inundated. Habitat islands to the west (left hand side of photo) with vegetation up to 40 feet in height limit views of open water and tideflats. The north-south axis would remain open to view. Pier in foreground would be removed, and boardwalk would be visible in the distance. See Simulations KVP MB-1.</p>	<p>Same as Estuary Alternative.</p>

Location	Image	No Action Alternative	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative
South Basin					
<p>Photo 10. Tumwater Falls</p>		<p>No change.</p>	<p>No change.</p>	<p>No change, except at extreme high tides, when area below falls may become more inundated with water.</p>	<p>Same as Estuary Alternative.</p>
<p>Photo 11. Tumwater Historic Park looking south toward Brewery Park</p>		<p>No change.</p>	<p>No change to water level. New boardwalks would be visible in some locations.</p>	<p>Daily fluctuation in water level from tides. Open water as shown at present would occur only twice daily at high tides. Tideflats and river channel replace open water at low tides. River channel would be approximately in the center of the water in this view. Vegetation expected to slowly change to salt tolerant species.</p>	<p>Same as Estuary Alternative.</p>

Location	Image	No Action Alternative	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative
<p>Photo 12. South Basin from Capitol Blvd SE/I-5 overpass, looking southwest</p>		<p>No change.</p>	<p>No change in water level. New boardwalks may be visible to a limited degree.</p>	<p>Daily fluctuation in water level from tides. Open water as shown at present would occur only twice daily at high tides. Tideflats and river channel replace open water at low tides.</p>	<p>Same as Estuary Alternative.</p>

5.4 MANAGED LAKE ALTERNATIVE

5.4.1 Impacts from Construction

In addition to the construction elements described above in *Impacts Common to All Action Alternatives*, the Managed Lake Alternative includes 5th Avenue Dam overhaul repairs and construction of a non-vehicular bridge on the north side of the North Basin. Construction impacts on visual resources specific to this alternative would primarily be associated with heavy equipment such as cranes and trucks on the dam, temporary in-water structures that may be needed, and in-water equipment.

Overhaul of the 5th Avenue Dam would involve approximately 6 months of major maintenance work at approximately the same time as initial dredging. This could involve heavy equipment and restricted public access around the dam. Visual impacts, although visible from much of the lake shoreline, would be minor in both scale and duration.

A non-vehicular bridge would be constructed on the south side of the 5th Avenue Bridge, connecting existing pathways along Heritage Park and Deschutes Parkway, a popular loop trail around the North Basin. The bridge would not be constructed until after dam repair is complete, which would mean that the existing trail connection around Heritage Park would be closed intermittently over the 6-month period of dam repair. The temporary loss of this connection means that visual access to the lake along 5th Avenue would not be available or would be diminished if a detour route is used.

These construction activities, while minor, would contribute to the overall construction impacts described for all action alternatives, which were determined to be **significant** because of the duration of impacts on Marathon Park.

5.4.2 Impacts from Operation

The Managed Lake Alternative would impact visual resources through the addition of habitat islands that would support vegetation, which could obstruct views, and through the addition of new overwater pedestrian walkway structures in all three basins. Although the repairs to the 5th Avenue Dam would be extensive, they would not change the appearance of the dam substantially. Under the Managed Lake, the frequency or intensity of flooding due to increased storm intensity would not increase relative to the No Action Alternative. As described for the No Action Alternative (Section 5.2), the visual effects of flooding would be temporary conditions, and would have negligible impacts on visual resources.

5.4.2.1 North Basin

Views of the North Basin within Heritage Park would not change substantially as a result of the Managed Lake Alternative. See Table 5.1 for a variety of viewpoints. The 775-foot-long non-vehicular bridge would add a new structure along the shoreline, and there would be minor vegetation removal at each end of the bridge to connect it with the existing trail. At night, the bridge would need to be lit for safety purposes, and the bridge would be a more conspicuous visual element.

There also could be minor changes in the emergent (in-water) vegetation at the southeast corner of the basin. Initial dredging could reduce emergent vegetation in this area, while over time, sedimentation could result in regrowth of emergent vegetation until additional maintenance dredging is done, estimated to be in about 20 years.

There would be little change to the view at KVP NB-1, atop the Eastern Washington Butte in Heritage Park (see Figure 5.1). Floating algae, which is common in the North Basin but not evident in Figure 5.1, would be reduced with improved water quality.

Just west of the Eastern Washington Butte, the non-vehicular bridge would be visible as a subordinate element. Vegetation removal to connect to the trail would be noticeable, but the resulting landscape would be similar to the existing shoreline of Heritage Park, where the walkway and the lake are the dominant features. The bridge would be lower in height although longer than the adjacent dam, and smaller in scale than the adjacent 5th Avenue roadway. In both scale and contrast, the impacts would be minimal. The bridge, although different in character, would connect with the existing perimeter trail in a manner and location where it would be visually compatible with the park setting.

At the North Overlook (KVP NB-2), the only change would be the addition of the non-vehicular bridge (see Figure 5.2). Because the bridge would be on the far side of the lake from the Overlook (about 2,300 feet away), it would be a subordinate feature of the view. The visual impact of bridge itself and the removal of vegetation at each end would be minimal in both scale and contrast from this viewpoint. Although this would introduce a new built element along a shoreline that is dominated by open paths, trees, and other vegetation, it would be relatively low in scale and stand next to the dam and the 5th Avenue and 4th Avenue bridges. These changes would be minor in both scale and contrast and would be compatible with the landscape setting as seen from the North Overlook.

Along Deschutes Parkway, the only change would be at the west end of the non-vehicular bridge. See Table 5.1, Photo 4. From the roadway, the guardrail on the bridge, although likely made of open balustrades or wire mesh, would obstruct views across the lake, but it would not obstruct views of the Capitol Dome. As noted above, views along the parkway are intermittent, interrupted by trees and other vegetation. The non-vehicular bridge would occupy a small portion of the parkway along the North Basin and would be a subordinate feature of the views in this area.

Views from Marathon Park would be little changed as well. Figure 5.3 shows the existing view from Marathon Park. See also Table 5.1, Photo 5. The only change visible from this location would be the addition of the non-vehicular bridge (not shown in Figure 5.3). As with the North Overlook, the bridge would be on the far side of the lake, about 2,100 to 2,300 feet away, and would be a subordinate feature of the views from the park. The visual impact of the bridge would be minimal in both scale and contrast from this viewpoint. Although this would introduce a new built element along the shoreline, it would be similar to the bridge connecting Marathon Park to the southeast shore of the North Basin. These changes would be compatible with the landscape setting as seen from Marathon Park.

Figure 5.1 KVP NB-1 - Existing View Eastern Washington Butte



Figure 5.2 KVP NB-2 - Visual Simulation – North Overlook - Managed Lake



Figure 5.3 KVP NB-3 - Existing View - Marathon Park



5.4.2.2 Middle Basin

Views of the Middle Basin would change considerably under the Managed Lake Alternative, due to the creation of habitat islands in an open water area of the basin. See Table 5.1, Photos 6 through 9. These islands would support trees that reach mature heights of greater than 50 feet, well above the eye level of viewers at most locations where the Middle Basin can be seen. As such, the new habitat islands would not only break up the large area of open water visually, but views of the remaining open water also would be obstructed by the taller vegetation. As shown in Figure 5.4, the habitat islands, while being relatively large in scale and dominance, do not contrast with the surrounding shorelines, which are vegetated with similar species. The result would be a very different landscape, co-dominated by water channels between the islands and the complex of trees and lower vegetation that would grow atop them. Open water reflecting the color of the sky would be replaced by multiple narrower channels with a darker surface reflecting adjacent trees.

On Deschutes Parkway, the dominant element in views from the roadway and sidewalk looking east across the basin would change from open water to riparian forest with a mix of deciduous and evergreen trees. See Table 5.1, Photo 7.

Remaining views of water along the east edge of the parkway would become co-dominant, reduced to about 25% of the width (east-west) of the lake at present. The scale of these changes is considered moderate, because the basin would retain a mostly naturalistic character, dominated by the presence of the lake. The boardwalk proposed for the Middle Basin would be visible from the parkway, primarily from the sidewalk on the east side, however, and would be subordinate to the riparian forest and waterways. West of the parkway, no substantial change to the landscape is expected. Views of the Capitol Dome from the parkway would likely remain for many years, but as trees reach mature heights, some views (especially at the north end of the Middle Basin) would likely be obstructed. The changes to views from Deschutes Parkway are considered compatible and harmonious with the setting, as the views of the Middle Basin from the parkway would continue to have a naturalistic and unified scenic character, even though some views of the Capitol Dome could be lost.

Views within the Interpretive Center would change in a similar way to that described for the Deschutes Parkway. Open water would remain in view in the foreground of views from the trail adjacent to the lake, but the length of these views would be reduced by 50% or more because of the new habitat islands (see Figure 5.4). Views of the Capitol Dome that can be seen at present would likely remain, due to the distance to the nearest habitat islands and the angle of the views to the Capitol Dome. In the area upslope of US Highway 101 where views of the Interpretive Center and the Middle Basin are available from public streets and residences, the Managed Lake Alternative could reduce or eliminate views of open water, due to the height of trees in the habitat islands. This area would still have views over the whole basin, with water visible in places, but the view would be of mixed forest and water channels. The proposed boardwalks would be visible at a distance of 1,000 feet or more from the Interpretive Center and be partially obscured by habitat islands. As described for Deschutes Parkway, the boardwalks would be subordinate to the riparian forest and waterways. These changes to views from within and near the Interpretive Center are considered compatible and harmonious with the

setting, as the park would retain its desired naturalistic character, even though some views could be lost.

The eastern shore of the Middle Basin is an area of wooded hillsides with no public views of the water and no views of the Capitol Dome. Therefore, the project would have few if any impacts on views under any alternative. Under the Managed Lake Alternative, any water views from the upper slope areas would likely be obstructed by the habitat islands as described for other areas of the Middle Basin. For properties that have physical access to the water's edge, there would still be water views, although these would be reduced in scale as described for other viewpoints. The changes to views in the eastern shore portion of the Middle Basin are considered compatible with its setting at the base of the wooded hillsides.

Figure 5.4 KVP MB-1 - Visual Simulation – Interpretive Center - Managed Lake



5.4.2.3 South Basin

In the South Basin, views would remain largely unchanged. See Table 5.1, Photos 10, 11, and 12. The only change under the Managed Lake Alternative would be the construction of boardwalks in Tumwater Historical Park, a park that contains natural areas as well as developed trails, playground equipment, picnic facilities, and restrooms. The boardwalks would be similar in scale to the existing boardwalks in Brewery Park at Tumwater Falls. The boardwalks would be subordinate to the open water areas, wetlands, and Tumwater Falls. Boardwalks would be visually compatible with their setting in Tumwater Historical Park.

5.4.2.4 Summary of Conclusions for the Managed Lake Alternative

Under the Managed Lake Alternative, views in the North Basin would remain very similar to those under the No Action Alternative. Views in the Middle Basin would change substantially, with some loss of views of open water where taller riparian vegetation would be introduced with the habitat islands. Given the nature of these changes, they are considered compatible and harmonious with the setting. Boardwalks would improve access to views within the habitat islands. The South Basin would change least of all, with the only change being the addition of boardwalks that would improve access to views. As a result, impacts of the Managed Lake Alternative on visual quality would be **less-than-significant**.

5.5 ESTUARY ALTERNATIVE

5.5.1 Impacts from Construction

In addition to the construction elements described above in *Impacts Common to All Action Alternatives*, the Estuary Alternative includes 5th Avenue Dam removal and 5th Avenue Bridge construction, both of which would occur in the North Basin. The Estuary Alternative also includes construction of an earthen buttress along Deschutes Parkway from the Interpretive Center to the opening of West Bay, a distance of about 1.5 miles.

A new 5th Avenue Bridge would be constructed south of the existing 5th Avenue Bridge to connect Deschutes Parkway SW to Olympic Way, and traffic would be transitioned to the new 5th Avenue Bridge. Then, the 5th Avenue Dam would be demolished and excavated, and the shoreline in that area would be restored. In-water work would be limited by allowable work windows and would be intermittent. However, the majority of the 5th Avenue Dam work would occur within coffer cells, and would not be limited by the allowable in-water work window. Overall construction of the new 5th Avenue Bridge and demolition of the old would take approximately 5.5 years. Construction impacts on visual resources specific to this alternative would primarily be associated with heavy equipment such as excavators, cranes, and trucks at the dam; temporary in-water structures that may be needed; and in-water equipment. Visual impacts would be minor to moderate in scale depending on where they are viewed from, with impacts being more substantial the closer a viewer is to the construction area.

To minimize impacts on users of the loop trail, the new 5th Avenue Bridge would be constructed parallel to the existing bridge. Thus, viewers could still enjoy views from the existing loop trail until the new trail is completed. A brief closure would be needed to connect the new bridge to the existing trail before opening.

Constructing the Deschutes Parkway shoreline armoring would involve placing material removed from the dam along the base of the slope on the east side of the parkway, if the earthen fill material is determined to be of suitable quality. The foot of the slope would be cleared of vegetation and material would be placed as it is removed from the dam. The visual impacts include clearing this area of vegetation, and having equipment alongside the road to place the material, both of which would contrast with the normally placid setting along the parkway. Stormwater outfall and culvert replacement would involve similar visual impacts, but at specific locations along the Arc of Statehood, Heritage Park, and within the Interpretive Center. Any given location would have construction for a limited period of time, but cumulatively, parkway and park users would see construction next to the roadway and within discrete locations within parks for about 2.5 months.

These construction activities would contribute to the overall construction impacts described for all action alternatives, which were determined to be **significant**.

5.5.2 Impacts from Operation

The Estuary Alternative would affect visual resources primarily by replacing the lake with an estuary subject to daily tidal action, and the addition of habitat islands that would support vegetation which could obstruct and alter views. An earthen buttress proposed along Deschutes Parkway from the Interpretive Center to the opening of West Bay would include new upland plantings as well as create a shallow intertidal area along this corridor.

Capitol Lake has a rich variety of wildlife, and many people visit parks in the study area to view wildlife (ESA 2022a). The Estuary Alternative would affect habitat that would in turn result in different wildlife species being present under each of the action alternatives, as noted in the *Fish and Wildlife Discipline Report* (ESA 2022b). Wildlife viewing as a recreational activity is described in the *Land Use, Shorelines, and Recreation Discipline Report* (ESA 2022a). While it is acknowledged that wildlife is an important part of the visual experience for many viewers, changes in the habitat structure—the size, types, and extent of vegetation communities—comprise the primary changes in the visual environment expected from the alternatives for this project. Therefore, this analysis focuses on modifications to habitat structure (such as converting open water to habitat islands and intertidal habitat) and does not address changes in the individual species of wildlife that would use these areas.

It is acknowledged that some viewers prefer the view of open water to that of an estuary that dynamically changes with the tides; and that the reverse is true for other viewers. Open water provides a more uniform surface than an intertidal area that is only partially filled with water. A uniform surface means more uniform light reflectance, including both the color of the sky and of shoreline features. When the wind is low, the mirror effect of open water can enhance views, such as those of the Capitol Dome. Intertidal areas under the Estuary Alternative would fill at times. Although there would be fewer

hours of a full estuary than under the Managed Lake or No Action Alternatives, a majority of the day the estuary would be partially inundated. Intertidal areas also accumulate flotsam that is deposited at low tide and then may or may not be removed by the next tide. An intertidal area is preferred by other viewers because it changes. The cycles of the tide produce varied visual effects, at times exposing the channels that lie beneath the water and at other times filling those channels like a lake. This analysis does not attempt to determine which of these groups of viewers is larger. Policies support the preservation and enhancement of shoreline views, especially of natural shorelines, but do not express a preference for one or the other of these types of shoreline views. Therefore, this analysis does not place a higher value on one or the other of these shoreline types, but rather, considers the dominance, scale and contrast, and compatibility of the Estuary Alternative and its primary components.

Tideflats, also known as **mudflats**, are intertidal coastal wetlands that form where tides or rivers have deposited sediments. Tideflats consist of exposed layers of bay mud, resulting from the deposition of estuarine silts, clays, and marine detritus. Most of the sediment within a tideflat is within the intertidal zone, and thus the flat is submerged and exposed approximately twice daily.

Structures would also be added under this alternative. The Estuary Alternative includes similar new boardwalks in the South and Middle Basins as proposed for the Managed Lake Alternative. The Estuary Alternative also includes a new 987-foot span vehicular bridge with a bike path and sidewalk on either side of the vehicle lanes, as well as a road realignment, which would extend Deschutes Parkway to Olympic Way in the northwest portion of the study area.

Maintenance dredging would occur in impacted areas of West Bay of Budd Inlet under the Estuary Alternative and would include the temporary removal of piling and relocation of docks while dredging occurs. These activities would be visible changes, but temporary. In addition, dredging has occurred in West Bay in the past, so this would not constitute a new activity for the area. The frequency and extent of maintenance dredging may increase compared to past dredging, but still would occur for only about 5 months over a 6-year period. As such, the visual impacts of maintenance dredging are considered less-than-significant.

The removal of the 5th Avenue Dam allows water levels in Capitol Lake to rise and fall with the tides. As a result, upland flooding of low-lying areas surrounding Capitol Lake Basin is expected to occur during extreme high tides with relative sea level rise (RSLR). From a visual impact standpoint, flooding, whether tidal or river flooding, would primarily affect people's access to trails providing visual access, an impact on recreation that is addressed in the *Land Use, Shorelines, and Recreation Discipline Report* (ESA 2022a). Flooding would also cause temporary changes to the visual environment, first when inundation occurs, and afterwards, when sediment would be deposited in parks and walkways adjacent to the basin. However, the visual effects of flooding would be temporary conditions, and would have negligible impacts on visual resources.

As described in the following sections, the most substantial visual effects of the Estuary Alternative stem from the introduction of tidal influence throughout all three basins.

5.5.2.1 North Basin

Views of the North Basin within Heritage Park would change substantially as a result of the Estuary Alternative. The basin would be converted to an estuary with twice daily tidal exchange. This would result in the formation of tideflats in the intertidal areas. The new 5th Avenue Bridge with bike paths and sidewalks would add a new structure to the North Basin in place of the existing 5th Avenue that would be demolished. There would be minor vegetation removal at each end of the new 5th Avenue alignment to connect the roadway to Deschutes Parkway on the west side and to 5th Avenue on the east side. The new low-trestle bridge would run at a lower elevation than the existing 5th Avenue roadway across the dam. The road that would be constructed to connect Deschutes Parkway SW to Olympic Drive would gain elevation as it approaches the connection point at Olympic Way (the highest point).

Habitat islands would be created throughout the basin, along with a main channel for the Deschutes River leading out to Budd Inlet. There would also be secondary channels between the habitat islands. As noted above, an earthen buttress would be constructed along the Deschutes Parkway from the Interpretive Center to West Bay.

At Heritage Park, the most notable change would be the tidal fluctuation, with high tides filling the basin near to its current depths as a lake, and low tides leaving the shorelines of Heritage Park empty of water, exposing intertidal tideflats. This fluctuation would occur approximately twice daily—two high tides and two low tides each day. This means that when water is low, the reflective surface of water would be absent in much, if not all, of the Heritage Park shoreline area. The majority of the day, the North Basin would be partially submerged. When not submerged, tideflats would be exposed in the intertidal areas.

KVP NB-1 is located at the Eastern Washington Butte. Figure 5.1 above shows the existing view. Figure 5.5, Figure 5.6, and 5.7 show the view at high tide, mean tide, and low tide, respectively. These show the typical high and low tides; each would occur for about 2 hours per day. The remainder of the time, the water levels would be somewhere between the levels depicted, with both tideflats and open water visible across the basin. Figure 5.6 shows the basin at mean tide, the average tide elevation, which is more typical of the condition of the basin between high and low tides. Water levels would be at mean tide or higher approximately 43% of daytime hours in the period between May and September, covering 80% or more of the North Basin.

Figure 5.5 KVP NB-1 - Visual Simulation – Eastern Washington Butte at High Tide - Estuary Alternative



Figure 5.6 KVP NB-1 - Visual Simulation - Eastern Washington Butte at Mean Tide - Estuary Alternative



Figure 5.7 KVP NB-1- Visual Simulation - Eastern Washington Butte at Low Tide - Estuary Alternative



The second most notable visual change in Heritage Park would be the creation of habitat islands. These would include vegetation ranging in height from a few inches up to 40 feet. Even at high tide, these islands would break up the open water area into a patchwork of water channels between swatches of vegetation. As shown in Figure 5.5, the expanse of open water visible at high tide from Eastern Washington Butte would be reduced compared to existing conditions. Open water would remain the dominant visual feature of this view at high tide, with the landmark Capitol Dome being co-dominant. At low tide, tideflats would be the dominant feature. At both high and low tide, the habitat islands would be sub-dominant features. To the west of the view shown in KVP NB-1, habitat islands would be co-dominant features. In both scale and contrast, habitat islands would have minimal to moderate presence in views from KVP NB-1.

Viewed from the North Overlook, the North Basin would appear similar to existing conditions at high tide (see Figure 5.8). Dam removal and the new 5th Avenue Bridge would require vegetation to be cleared, and the new bridge would be wider, longer, and more conspicuous, but still quite distant and sub-dominant from this viewpoint. The North Basin would appear slightly smaller from the Overlook because the new 5th Avenue Bridge would span across the northwest end of the existing basin. However, this would also open a view of open water between the 4th Avenue and 5th Avenue Bridges, which would be partially visible from the Overlook.

Habitat islands would also be sub-dominant in this view at both high and low tides. At lower tides, the tideflats would be dominant, and the reflective quality of open water would be replaced with a dark, silty surface. With the tidal opening, there would be unrestricted movement between West Bay and the basin. This could bring in marine debris or other aquatic features, commonly found across tideflats. Figures 5.9 and 5.10 show mean tide and 0.0 tide levels, respectively. Figure 5.11 shows the low tide condition. In summer months, both low tides and high tides tend to be lower than average, with the result that more tideflat would be exposed during summer months than during winter months. Especially during the growing season, green vegetation on the habitat islands would contrast with the dark surface more at low tides than at high tides, and would break up the expanse of the tideflat.

Even with this substantial change in visual character, the North Basin would remain a unified and harmonious landscape as viewed from the North Overlook. Surrounded by parks and open space, the North Basin's naturalistic character would remain dominant and would not contrast with the estuary.

Figure 5.8 KVP NB-2 - Visual Simulation - North Overlook High Tide - Estuary Alternative

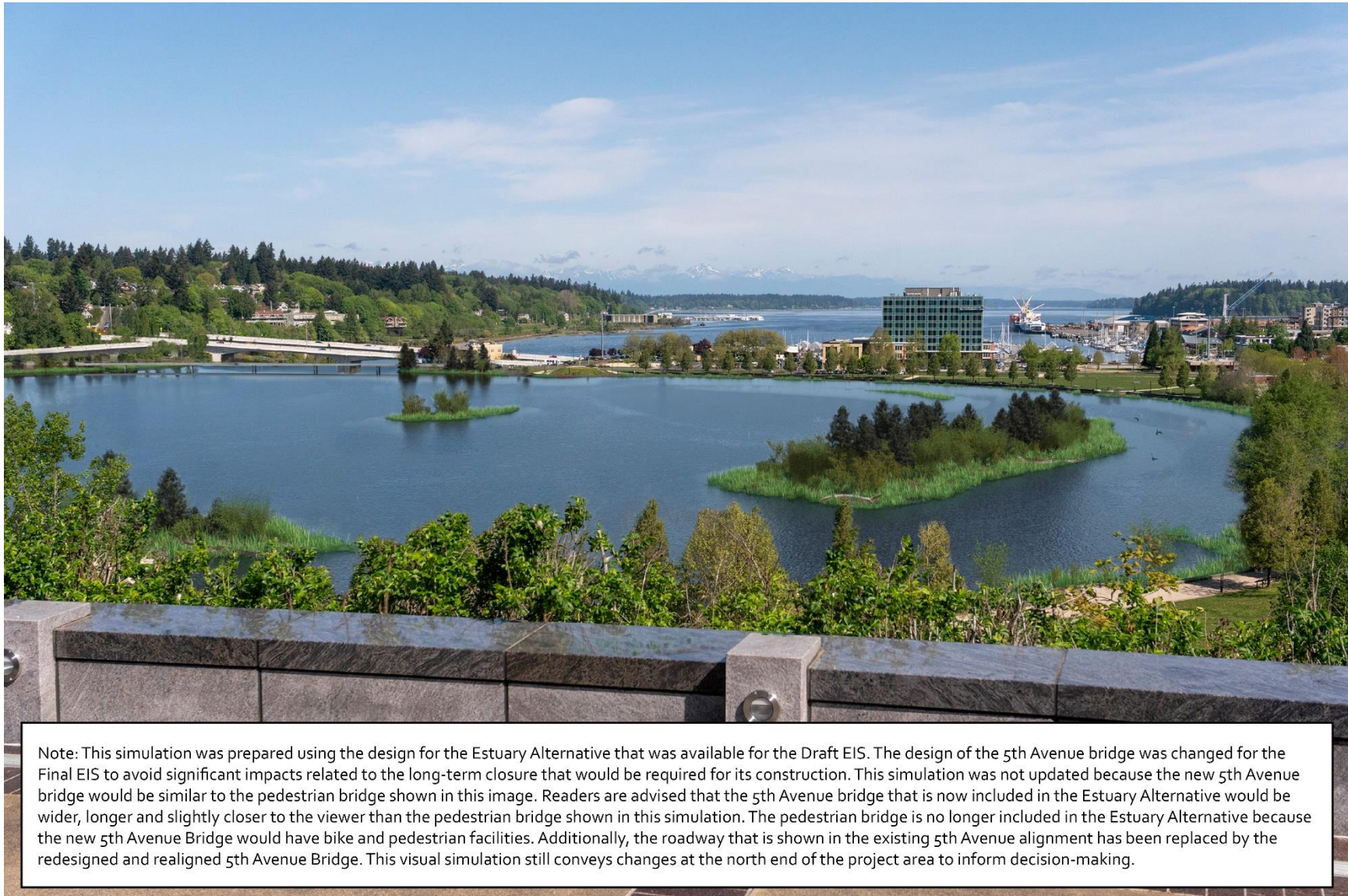


Figure 5.9 KVP NB-2 - Visual Simulation - North Overlook Mean Tide - Estuary Alternative

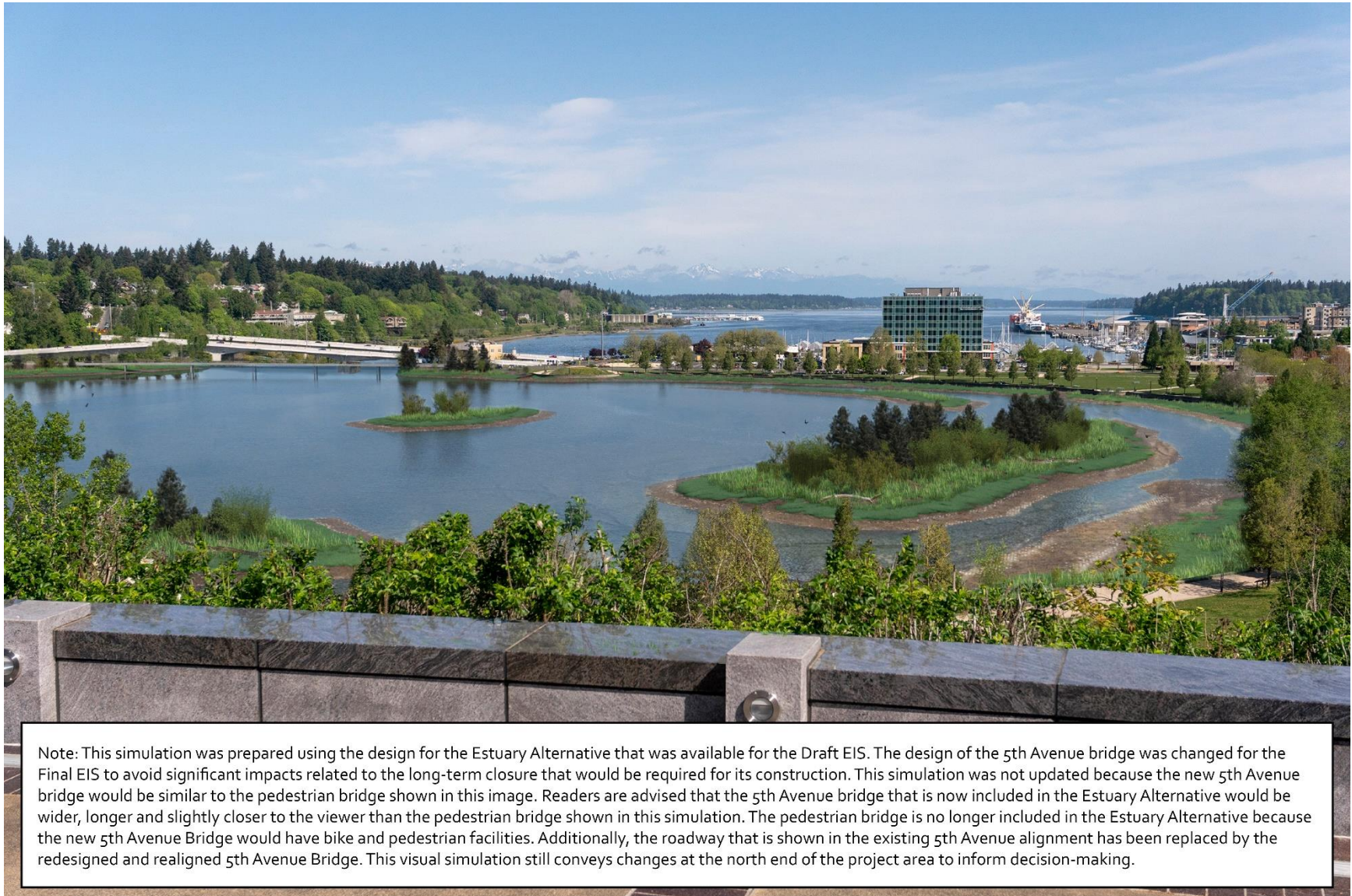


Figure 5.10 KVP NB-2 - Visual Simulation – North Overlook at 0.0 Tide – Estuary Alternative

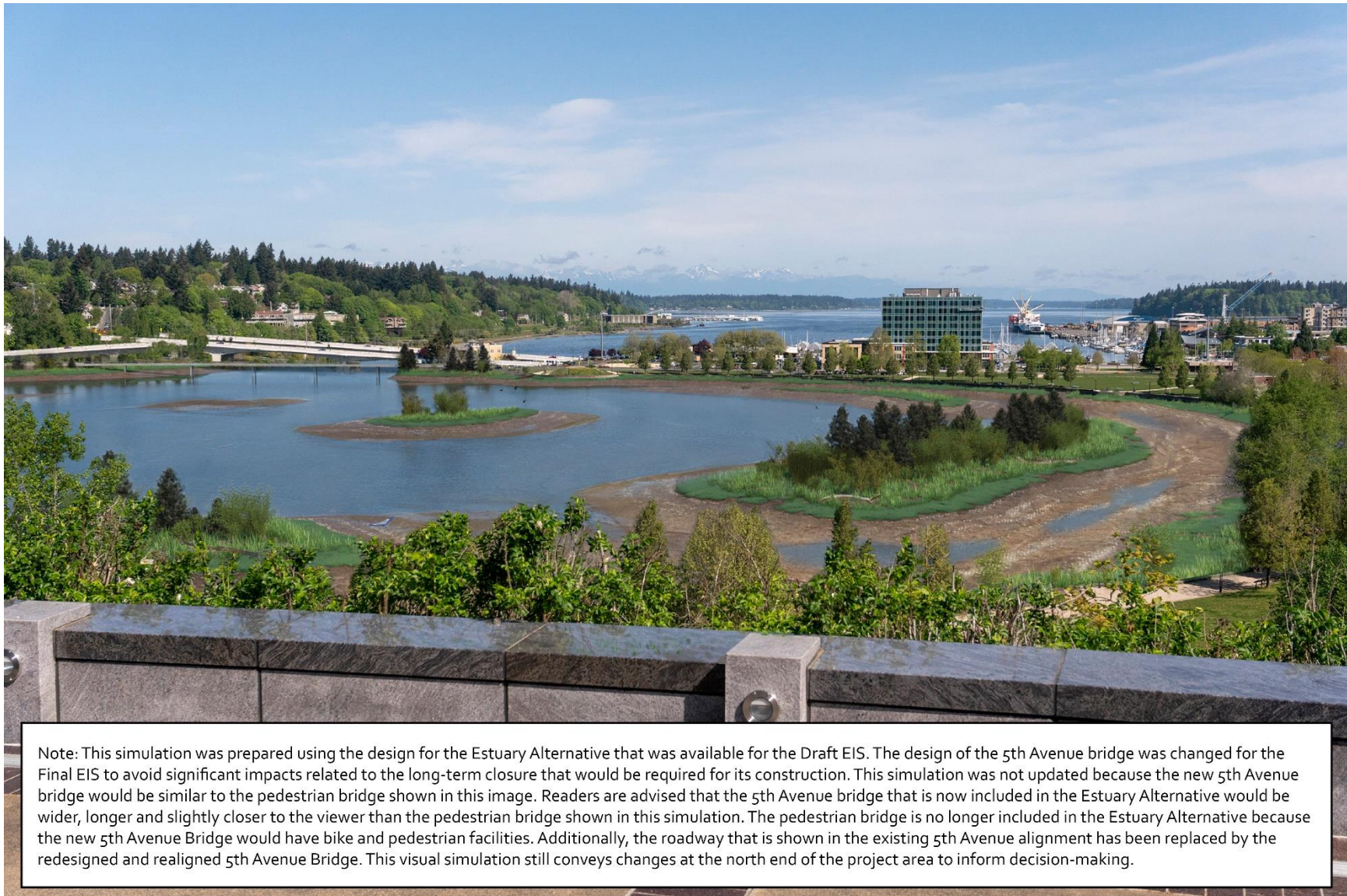
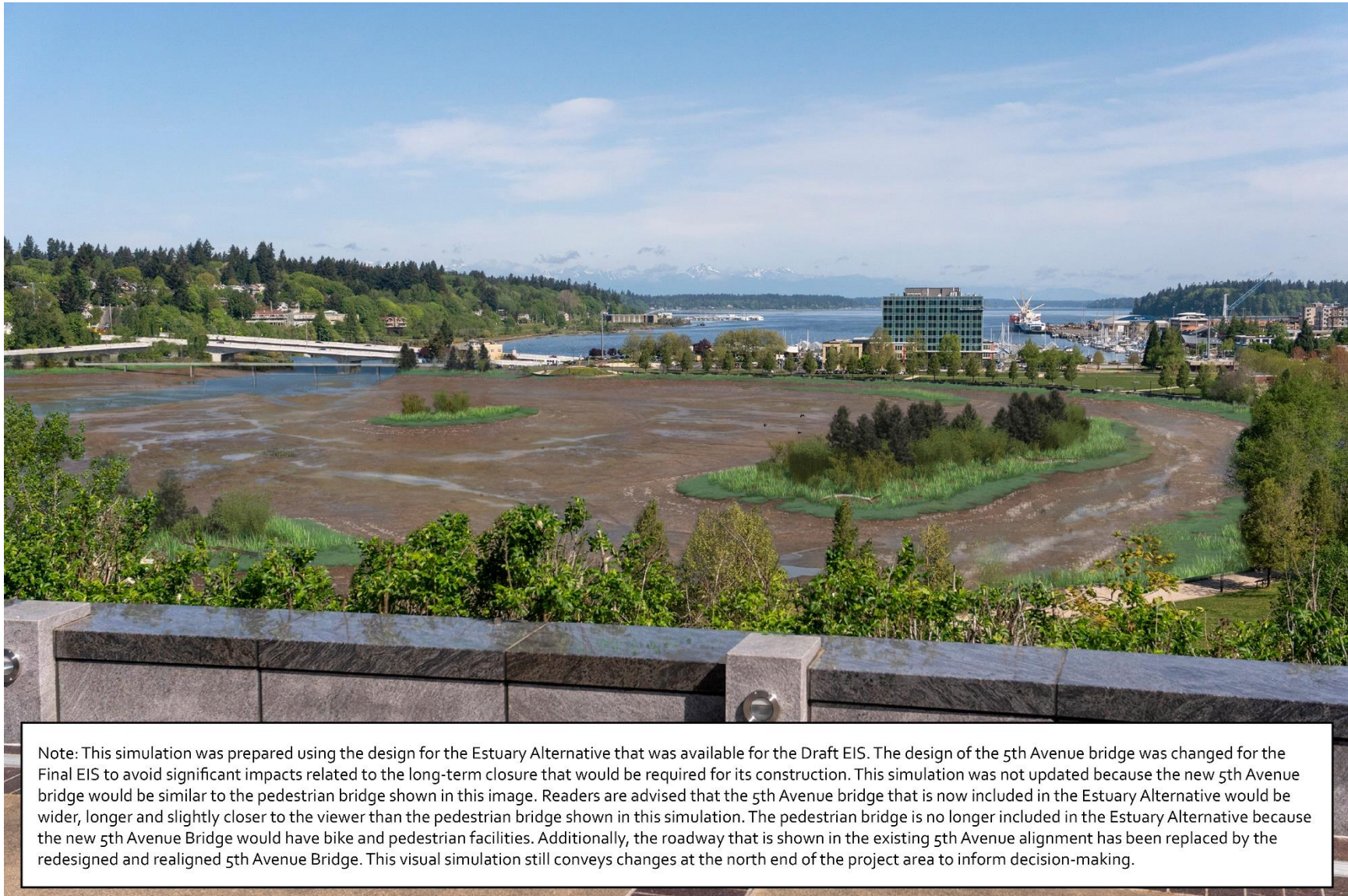


Figure 5.11 KVP NB-2 - Visual Simulation - North Overlook Low Tide - Estuary Alternative



From the buildings in downtown Olympia with views of the existing lake, the Estuary Alternative would have similar effects on views as described for the North Overlook. For most viewers, the new bridge would be only partially visible because of the angle of view. Those that could see it would mostly see the western end, which is the farthest away and thus would not be a substantial change in the quality of the view. The most notable change would be the fluctuation of water levels and the visibility of tideflats and habitat islands in the area now occupied by the lake.

From Deschutes Parkway, habitat islands would dominate the foreground of views looking across the North Basin. See Table 5.1, Photo 4. Open channels of tideflats between islands would fill with water at high tide. The vegetation on the islands on the west side of the North Basin would be low-growing marsh species, with grasses being the tallest plants expected. Vegetation would be low enough that an average-height person standing on the shore would be able to see over the vegetation to the far shore and the Capitol Dome. Views of open water would be available only at the higher tide levels, and viewers would see far less open water than at present. From most vehicles, open water views at present are fleeting because of the height of vegetation lining the shore. With the Estuary Alternative, less open water would be visible, but the change in view would be less distinct than it would be for pedestrians using the sidewalk or running path. For most viewers, the predominant view would be of a tidal marsh, and the reflective quality of open water would be reduced or eliminated from most viewpoints.

From the new 5th Avenue Bridge, vehicles would have a more open view, and viewers traveling in either direction could catch a glimpse of the entire basin. Similarly, viewers descending the new road connection to Olympic Way would be able to see across the basin. For viewers in vehicles, these views would be of short duration, lasting a few seconds, but for pedestrians and cyclists, the more open views would be more substantial. The changes described above would be seen in the context of the predominant landmark of the Capitol Dome above a forested hillside, and the taller buildings of downtown Olympia, which would remain in view longer than any water views. On the hillside above the parkway, a few residences may have views of the North Basin. The changes to those views would primarily involve the fluctuating water levels and exposure of tideflats in the North Basin and possibly the Middle Basin, as described above. Habitat islands would be visible but subordinate from that distance. These changes to views would be minimal in scale and contrast in the context of the overall views available from the residences. Those views, where available, are high above the water, extending east over downtown Olympia toward the Cascades, include the Capitol Dome and the forested slopes to the south of the Campus. The overall view would be little affected by changes to the waterbody.

Except for creating an area of intertidal marsh near the shore along Deschutes Parkway, the Deschutes Parkway stabilization would have little effect on views from or of the parkway. See Table 5.1, Photo 4 for an example of the existing view.

The most notable visual change at Marathon Park would also be the tidal fluctuation, with high tides filling the basin to near its current depths as a lake, and low tides leaving the shorelines of Marathon Park empty of water, exposing intertidal tideflats and marsh. See Table 5.1, Photo 5. This fluctuation would occur approximately twice daily—two high tides and two low tides each day. When water is low, the reflective surface of water would be absent in much, if not all, of the Marathon Park shoreline area,

with the exception of the main river channel, which would have water in it at all times. Marathon Park would retain open views across the North Basin, although habitat islands would be co-dominant features with open water at high tide and tideflats at low tide.

From Marathon Park, the new 5th Avenue Bridge and the realigned Deschutes Parkway would be visible at a distance of 1,900 to 2,300 feet, slightly closer than the distance from the North Overlook. The bridge would align visually in the same area where the dam can be seen today, although it would be farther south. The new road connection from Deschutes Parkway to Olympic Way would also be visible from the park. Both the dam removal and the road would reduce the vegetation lining the north end of the North Basin. In scale and contrast, these features would be more conspicuous than the existing 5th Avenue but would remain subordinate in the overall landscape setting as viewed from the park.

The Estuary Alternative would create a very different visual landscape in the North Basin from the landscape at present. Instead of having a constant and largely static water level, it would have a dynamic water level, and in place of a large open waterbody in the North Basin, it would have a varied surface consisting of open water, river channel, habitat islands, and tideflats. The scale of this change is large enough to be dominant, and it would be noticeably different from existing conditions at lower tide levels. While the basin would be visually different, the estuary would not contrast visually with its surroundings. Despite the scale of these changes, the landscape would remain natural in character, and be visually compatible, unified, and harmonious with its setting among parks and a scenic drive.

Some viewers would perceive this change in waterbody type to be an adverse impact. It would change the character of the view that has been present for several decades. At low tides, there would be little or no reflection on the water of the Capitol Dome and the hill it stands on, although no views of the Capitol would be obstructed. Others, however, would see the changes in a positive light, reflecting the restoration of a natural system that was present before the lake. Both of these perspectives are addressed in plans and policies adopted by agencies with jurisdiction in the study area. In this adaptation of the Corps visual impact assessment methodology, adopted policy is the guide used for assessing whether an impact is adverse. Policies support maintaining the natural character of the shoreline. No agency identifies a visual preference of restoration of an estuary over preservation of existing views, or vice versa. (See Appendix A for a table of relevant policies.) For this reason, this analysis considers either the lake or estuary water type to be consistent with adopted policy, and therefore a change from lake to estuary is not considered an adverse visual impact, *per se*.

5.5.2.2 Middle Basin

Views within the Middle Basin would be affected in a similar manner as described in Section 5.4.2.2 for the Managed Lake Alternative. See Table 5.1, Photos 6 through 9. Views of the Middle Basin would change considerably, due to the creation of habitat islands in an open water area of the basin, and creation of a narrower defined river channel. These islands would support shrubs and trees that reach mature heights of up to 40 feet. As such, the new habitat areas would break up the large area of open water visually, and views of the remaining open water would be obstructed by the taller vegetation in some locations. The islands would also break up the expanse of the tidal flats that would be exposed at

lower tides. The result would be a very different landscape, co-dominated by water channels between the islands and the complex of trees and lower vegetation that would grow atop them.

Similar to the Managed Lake Alternative, the existing open water of the Middle Basin, which reflects the color of the sky, would be replaced by narrower channels with a darker surface reflecting adjacent trees. The slightly lower vegetation under the Estuary Alternative would allow more light to reach the water, compared to the Managed Lake Alternative. However, at tide levels other than high tides, which would be the majority of the time, the area of inundation in the Middle Basin would be less than under the Managed Lake Alternative. Therefore, under the Estuary Alternative, the change to this reflective quality of water would likely be similar to or slightly greater than the Managed Lake.

The Estuary Alternative would also introduce fluctuating water levels, as described for the North Basin. This means that along Deschutes Parkway, the Interpretive Center, and the eastern shore in the Middle Basin, not only would the visible area of open water be reduced because of the habitat islands, it would be reduced as a result of lower water levels outside of high tide. For the majority of the day the Middle Basin would be partially inundated. Figures 5.12, 5.13, and 5.14 show visual simulations of the basin at high tide, mean tide, and low tide levels, respectively. The main channel of the Deschutes River would have water in it at all times, fluctuating with seasonal flows as well as with tide levels. In the Estuary Alternative, this main channel would be relatively wide and straight, so from the north or south ends of the basin, it would still be possible to see the full length of the basin.

Figure 5.12 KVP MB-1 - Visual Simulation - Interpretive Center High Tide - Estuary Alternative



Figure 5.13 KVP MB-1 - Visual Simulation - Interpretive Center Mean Tide - Estuary Alternative



Figure 5.14 KVP MB-1 - Visual Simulation - Interpretive Center Low Tide - Estuary Alternative



On Deschutes Parkway, the dominant element in views from the roadway and sidewalk across the basin looking east would change from open water to saltwater marsh habitat islands intersected by the river channel. Views of water along the east edge of the parkway would become co-dominant, reduced to about 50% of the width (east-west) of the current basin. The scale of these changes is considered moderate, because the basin would retain a mostly naturalistic character, dominated by the presence of the estuary. The boardwalk proposed for the Middle Basin would be visible from the parkway, primarily from the sidewalk on the east side, and would be subordinate to the habitat islands and waterways. The habitat islands would obscure less of the boardwalk in the Estuary Alternative than in the Managed Lake Alternative because of the lower height of vegetation. When the water level drops at low tide, more of the boardwalk support structure would be visible than would be in the Managed Lake Alternative.

Unlike the Managed Lake Alternative, none of the vegetation on the habitat islands in the Estuary Alternative would grow tall enough to obstruct views of the Capitol Dome. Because of the introduction of saltwater, the species that would occupy the habitat islands would not include the taller trees that could grow on the islands in the Managed Lake Alternative. The presence of saltwater would also affect the species that can survive in the wetlands at Percival Cove and the Interpretive Center. Species that are intolerant of saltwater would die out and be replaced by salt-tolerant species. The change in plants to lower growing salt-tolerant species would not adversely affect views, but shorter trees could open up some areas to more sunlight and reduce the screening that vegetation provides at the Interpretive Center from the parkway.

Views within the Interpretive Center would change in a similar way to that described for the Deschutes Parkway. Open water would remain in view in the foreground of views from the trail adjacent to the lake (see Figure 5.12) at high tide. Views nearer Deschutes Parkway would be reduced due to the habitat islands, but the view north looking down the river channel would remain open. Views of the Capitol Dome that can be seen at present would likely remain, due to the distance to the nearest habitat islands and the angle of the views to the Capitol Dome. In the area upslope of US Highway 101 where views of the Interpretive Center and the Middle Basin are available from public streets and residences, the Estuary Alternative could reduce or eliminate views of open water, due to the height of trees in the habitat islands. This area would still have views over the entire basin, with water visible in places, but the view would be of mixed forest and water channels. The proposed boardwalks would be visible at a distance of 1,000 feet or more from the Interpretive Center and partially obscured by habitat islands. As described for Deschutes Parkway, the boardwalks would be subordinate to the riparian forest and waterways. These changes to views from within and near the Interpretive Center are considered compatible and harmonious with the setting, as the park would retain its desired naturalistic character, even though some views could be lost.

As with other action alternatives, the Estuary Alternative would have few if any impacts on the eastern shore portion of the Middle Basin views. Any water views from the upper slope areas that do exist would not be obstructed. For properties that have physical access to the water's edge, there would still be water views, although these may be reduced in scale due to habitat plantings along the shore. The

changes to views in the eastern shore portion of the Middle Basin are considered compatible with its setting at the base of the wooded hillsides.

As in the North Basin, the Estuary Alternative would create a very different visual landscape in the Middle Basin from the landscape at present. The static water level of the lake would be replaced with a dynamic water level, and in place of a large open waterbody, the Middle Basin would have a varied surface consisting of open water, river channel, habitat islands, and tideflats. Despite this change, the landscape would remain visually unified and harmonious with its setting among parks and a scenic drive.

5.5.2.3 South Basin

The most prominent change in the South Basin under the Estuary Alternative would be the tidal fluctuation of water levels, as described for the North Basin. Because of its location at the upper end of the estuary, the South Basin would appear as a river environment most of the time and would only fill to water levels that create open water during the higher tide. The mixture of freshwater and saltwater would slowly change the vegetation in some of the freshwater wetlands. As described for the Middle Basin, this could mean the loss of some larger species of trees in and adjacent to the basin. Salt-tolerant species would likely be smaller, resulting in slightly more sunlight entering these areas, and could reduce the screening effect of vegetation in some locations.

The boardwalks in Tumwater Historical Park would be the same configuration as those described for the Managed Lake Alternative. At low tides, the support structure for the boardwalks would be more visible than for the Managed Lake Alternative. The boardwalks would be visually subordinate to the open water areas, wetlands, and Tumwater Falls, and their scale and contrast would be minimal within their setting in Tumwater Historical Park.

No change is expected to Tumwater Falls or any of the historic structures that form landmarks in this area. Under the Estuary Alternative, the South Basin would retain a unified and largely naturalistic visual character, compatible with its setting.

5.5.2.4 Summary of Conclusions for the Estuary Alternative

The Estuary Alternative would not have significant adverse impacts on visual resources. Views in the North Basin would change substantially from those under the No Action Alternative, due to tidal fluctuation in water levels that would expose tideflats, and the introduction of habitat islands. Despite these changes, the landscape would remain visually unified and harmonious with its setting among parks and a scenic drive. Views in the Middle Basin would also change substantially, with the introduction of both tidal fluctuation and habitat islands. Habitat islands would have lower vegetation than under the Managed Lake Alternative and would therefore not block views of the basin from Deschutes Parkway. Boardwalks would improve access to views within the habitat islands. The South Basin would see tidal fluctuation and changes in vegetation due to the mixing of saltwater with freshwater. The addition of boardwalks to the South Basin would improve access to views. In all three basins, the view would continue to be one of a unified and naturalistic waterbody and shoreline that is

compatible with its surroundings. Given that the natural landscape would remain visually unified and harmonious with its setting among parks and a scenic drive, despite the changes, the impacts of the Estuary Alternative on visual quality would be **less-than-significant**.

5.6 HYBRID ALTERNATIVE

5.6.1 Impacts from Construction

In addition to the construction elements described above in *Impacts Common to All Action Alternatives*, the Hybrid Alternative includes 5th Avenue Dam removal, 5th Avenue Bridge construction, realignment of Deschutes Parkway, and the buttress along Deschutes Parkway. Impacts for these elements during construction would be as described for the Estuary Alternative in Section 5.5.1. The Hybrid Alternative also includes a barrier wall to form the reflecting pool, which would traverse the North Basin in an arc from north to south for a distance of approximately 2,600 feet.

The barrier wall would involve in-water construction. Because of in-water work restrictions, it is estimated it would take 15 months of work over six in-water work periods, using two pile-driving barges simultaneously. Construction would include barges, pile-driving equipment, and any temporary in-water structures that may be needed, and would occur concurrently with initial dredging. This construction equipment would be relatively small in scale compared to the basin but would be conspicuous because it would be in the middle of open water for the most part, and would contrast with the otherwise placid waterbody. Visual impacts of construction of the wall would be limited because the wall would be installed prior to dam removal. Except for the upper few feet of the sheet piles comprising the wall, the installed wall would be below the level of the exiting lake until the dam is removed, at which point the west side of the wall would become more visible, especially at low tides. Impacts would be more substantial to viewers on shore when the construction is occurring near the shore. Overall, these impacts are considered minimal to moderate.

Construction activities specific to the Hybrid Alternative, while minor or moderate, would contribute cumulatively to the overall construction impacts described for all action alternatives, which were determined to be **significant**.

5.6.2 Impacts from Operation

The Hybrid Alternative would impact visual resources by replacing most of the lake with an estuary, and by adding a 2,600-foot-long barrier wall to retain a reflecting pool in the western portion of the North Basin. All of the elements presented in Section 5.5 for the Estuary Alternative also apply to the Hybrid Alternative. The reflecting pool barrier would be constructed across the North Basin in an arced fashion and would be filled with groundwater-fed freshwater. As described for the Estuary Alternative (Section 5.5.2), the visual effects of flooding with RSLR would be a temporary condition, and would have negligible impacts on visual resources.

5.6.2.1 North Basin

Views of the North Basin within Heritage Park would change as a result of the Hybrid Alternative, but not as substantially as under the Estuary Alternative. The primary visual change would be that the scale of the reflecting pool would be approximately half the size of the existing open water area in the North Basin. The barrier wall would form the western edge of the reflecting pool and would have a walkway on top. With the guardrails for the walkway, the barrier structure would rise approximately 8 feet above the water level within the reflecting pool. At each end of the wall, the existing shoreline path would be modified to allow pedestrian and bicycle access onto the walkway atop the wall.

The reflecting pool would have a similar appearance to the existing lake. The water level would typically be maintained at approximately the same high water level as the lake is now.

KVP NB-1 is located at the Eastern Washington Butte. Figure 5.1 above shows the existing view. Figure 5.15 shows the view with the barrier in place and the pool at normal high water. In this simulated view, the barrier wall can be seen in the foreground (with railing) and in the distance near the south shore. By turning to look southwest, a viewer would see the full length of the wall and also the far shore of the estuary portion of the basin in the distance.

The paths next to the Eastern Washington Butte would be modified to ramp up to the barrier wall and also to connect the bike path and sidewalk from the new 5th Avenue Bridge to the existing 5th Avenue roadway. On the barrier wall pathway across the reflecting pool, a guardrail would be added on the water side. As a result, the open water visible from the top of the butte would be substantially reduced. The view of the Capitol Dome would not be affected, but some of the reflection of the Capitol Dome in the water surface would be lost from this vantage point. The barrier wall would be a co-dominant feature from this viewpoint. Its scale and contrast as seen from this vantage point would be moderate to severe. It would introduce a major structural element that not only contrasts with the tree-lined shores, but also substantially reduces the scale of the basin that would remain visible.

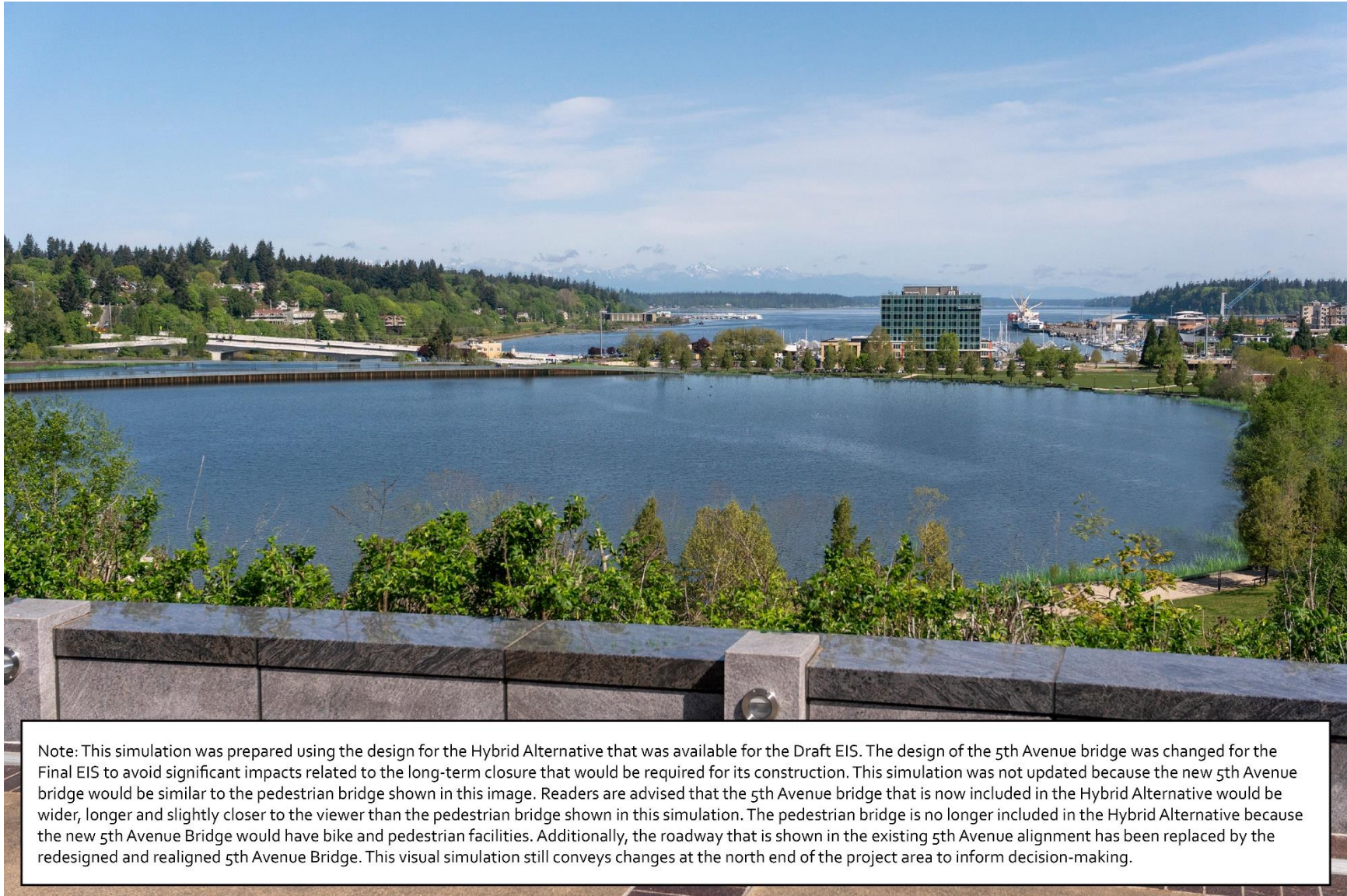
Figure 5.15 KVP NB-1 - Visual Simulation - Eastern Washington Butte - Hybrid Alternative



At other positions in Heritage Park around the lake, views would be similar to existing views, with the exception of the barrier wall in the distance. When viewed from a distance, as opposed to up close as at the butte, the scale and contrast of the wall would be moderate. The new 5th Avenue Bridge would not be visible from most of Heritage Park because of the barrier wall. The exception would be from the Eastern Washington Butte, which is adjacent to the proposed bridge approach. The bridge would not block any existing views of the basin from the butte.

Viewed from the North Overlook, the North Basin would appear similar to existing conditions (see Figure 5.16), since most of what would be visible is the reflecting pool. The barrier wall would be a conspicuous element but subordinate. The new 5th Avenue Bridge would be the same as described for the Estuary Alternative in Section 5.5.2.1. Habitat islands would mostly be obscured from view by the vegetation on the hillside below the Overlook. Any islands that could be seen would be sub-dominant in this view at both high and low tides.

Figure 5.16 KVP NB-2 - Visual Simulation - North Overlook - Hybrid Alternative



From the few buildings in downtown Olympia with views of the existing lake, the Hybrid Alternative would have similar effects on views as described for the North Overlook, except that more of the reflecting pool barrier wall would be visible. The most notable change would be smaller scale of the reflecting pool. From the tallest buildings, views may extend over the barrier wall and include tideflats and habitat islands in the area to the west of the barrier wall.

West of the barrier, views would change substantially, both because of the fluctuating water levels and because of the reflecting pool barrier wall. The wall would extend from 18 to 25 feet in height would block views of the reflecting pool from the west side of the basin, becoming a dominant feature of the view. The changes would be visible from vantage points shown in Table 5.1, Photos 4 and 5. Figures 5.17 and 5.18 show how the west side of the wall would look from the Marathon Park boardwalk.

Figure 5.17 KVP NB-3 Visual Simulation - Marathon Park High Tide – Hybrid Alternative



Figure 5.18 KVP NB-3 - Visual Simulation - Marathon Park Low Tide – Hybrid Alternative



From Deschutes Parkway, habitat islands would co-dominate in the foreground of views looking across the North Basin, and views would essentially terminate at the barrier wall, although trees and downtown buildings would be visible, as would be the Capitol Dome. For most viewers, the predominant view would be of a tidal marsh, smaller in scale and with less open water than the Estuary Alternative, with a man-made structure occupying the entire far edge. The reflective quality of open water would be reduced or eliminated from most viewpoints. The changes in scale and contrast from vantage points along the parkway would be severe.

At night, the barrier wall walkway would need to be lit for safety purposes. This would make the wall contrast more with its surroundings, and stand out as an edge to both the reflecting pool and the estuary.

As with the Estuary Alternative, from the realigned Deschutes Parkway, vehicles would have a slightly elevated viewpoint and viewers could catch a glimpse of the entire basin. On the hillside above the parkway, residences also may have views of the North Basin. Changes to those views include fluctuating water levels and exposure of tideflats, as described for the Estuary Alternative. The wall and reflecting pool would also be visible from these locations. From these vantage points the basin would appear less unified than at present or under the other alternatives. These changes to views would be moderate in scale and contrast.

At Marathon Park, the most notable changes would be the tidal fluctuation, as described for the Estuary Alternative, and the barrier wall. See Figures 5.17 and 5.18. Visual impacts from Marathon Park would be similar to those described for Deschutes Parkway, but viewers would be even closer to the barrier wall. The changes in scale and contrast from vantage points in Marathon Park would be severe.

From Marathon Park, visual impacts of the new 5th Avenue Bridge and the realigned Deschutes Parkway would be the same as described for the Estuary Alternative. In scale and contrast, these features would be more conspicuous than the existing 5th Avenue but would remain subordinate in the overall landscape setting as viewed from the park.

The Hybrid Alternative would create a very different visual landscape in the North Basin from the landscape at present. Instead of having a single pool, a portion of the basin would have a dynamic water level, river channel, habitat islands, and tideflats, while the other portion would be divided off by a large-scale structure and retain some of the reflecting pool qualities of the existing lake. These changes would disrupt much of the unity that characterizes the North Basin at present. A design could make the project features somewhat harmonious with Heritage Park and views from the campus, but views of this alternative from the west, and especially from Marathon Park, would not be harmonious with the setting. Marathon Park and Deschutes Parkway would no longer appear to be on the same waterbody as Heritage Park.

5.6.2.2 Middle Basin

Views within the Middle Basin would be affected in the same manner as described in Section 5.5.2.2 for the Estuary Alternative.

5.6.2.3 South Basin

Views within the South Basin would be affected in the same manner as described in Section 5.5.2.3 for the Estuary Alternative.

5.6.2.4 Summary of Conclusions for the Hybrid Alternative

Under the Hybrid Alternative, views in the North Basin would change substantially from those under the No Action Alternative, due to the addition of the barrier wall, tidal fluctuation in water levels that would expose tideflats, and the introduction of the habitat islands. The barrier wall would not be harmonious with or contribute to a unified landscape, particularly as viewed from Deschutes Parkway and Marathon Park. Views in the Middle Basin would also change substantially, with the introduction of both tidal fluctuation and habitat islands. Habitat islands would have lower vegetation than under the Managed Lake Alternative and would therefore not block views of the basin from Deschutes Parkway. Boardwalks would improve access to views within the habitat islands. The South Basin would see tidal fluctuation and changes in vegetation due to the mixing of saltwater with freshwater. The addition of boardwalks to the South Basin would improve access to views. In the Middle and South Basins, the view would continue to be one of a unified and naturalistic waterbody and shoreline. The impacts on views in the North Basin could be reduced with mitigation described in Section 5.7.2.2 but would remain **significant** due to the presence of the barrier wall, which would not be harmonious with or contribute to a unified landscape.

5.7 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

5.7.1 Measures Common to All Action Alternatives

A number of project design features that minimize visual impacts have been incorporated into the project, including the following:

- Use of native plants to vegetate new habitat islands and disturbed areas, which will be compatible with existing native vegetation.
- Installation of the new boardwalks, which will enhance viewer access to the Capitol Lake – Deschutes Estuary.

Additional measures to address adverse impacts are presented in the following sections.

5.7.1.1 Construction

- The staging area in Marathon Park could be minimized during non-construction periods to allow visual access to where feasible. This could include the identification of safe locations where viewers could approach the water's edge during periods when construction is not active.
- Project areas in parks and along Deschutes Parkway could be planted as soon as feasible to minimize the duration of construction disturbance.
- In-water construction equipment, other than coffer cells, could be removed from the lake between construction seasons.

5.7.1.2 Operation

- Design of park modifications/improvements and of the new 5th Avenue Bridge could be developed with input from user groups, like a Community Sounding Board and representatives from the local jurisdictions, to ensure design compatibility and maximize user enjoyment of views.
- Final design of habitat areas, including their location, would include aesthetic considerations.
- Design of habitat islands and shoreline plantings could include the establishment of view corridors where the height of trees is limited so that they would remain open for long vistas.
- Lighting on the walkways could be placed as low as possible and directed onto the walkway surface only, to minimize the contrast that a lighted structure would have with the surrounding water.

5.7.2 Measures Specific to Each Action Alternative

5.7.2.1 Managed Lake Alternative

- Habitat islands in the Middle Basin could be designed with view corridors where tall tree species would not be planted, to permit more open views from key locations, such as along Deschutes Parkway.
- Maintenance dredging could be scheduled to minimize impacts on views from Marathon Park during the summer season.

5.7.2.2 Estuary Alternative

- View corridors could be established at locations along Deschutes Parkway where lower height vegetation could be used to facilitate motorists' and non-motorized users' views toward the water.

5.7.2.3 Hybrid Alternative

- The barrier wall could have a textured concrete surface to improve the appearance of the structure, especially from the estuary side of the wall where more of the wall would be exposed during low tides.
- The pathway from the barrier wall could be designed to better integrate with the long-term plans for the Eastern Washington Butte.
- Guardrails on the barrier wall walkway could be designed to be as transparent as possible, to reduce the apparent height of the wall.

5.7.3 Significant Unavoidable Adverse Impacts

Although mitigation measures described in this report would avoid or minimize some adverse visual quality impacts for the construction and long-term operation of the three action alternatives, the following impacts would still be considered significant and unavoidable:

- There would be significant unavoidable visual quality impacts under any of the action alternatives during construction of the project given the duration of anticipated construction at Marathon Park.
- There would be significant unavoidable impacts under the Hybrid Alternative because of the scale and contrast imposed by the reflecting pool barrier wall. Even with design treatments, such as a mostly transparent guardrail and textured concrete surface treatment, this alternative would significantly disrupt the visual unity of the North Basin.



6.0 References

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Appendix A Visual Policies

#	Document Name	Year Published	Page #	Policy?(yes/no)	Text	Section of document/Notes	Applicability/relevance
1	City of Olympia SMP	2015	11	yes	E. All development and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration. H. Space for preferred shoreline uses should be reserved. Such planning should consider upland and in-water uses, water quality, navigation, presence of aquatic vegetation, existing shellfish protection districts and critical wildlife habitats, aesthetics, public access and views.	2.5 Aquatic Environment Management Policies E and H	Applies to shoreline permit issuance. No specific view preference or guidance.
2	City of Olympia SMP	2015	17	yes	A. Preserve views and vistas to and from the water, by public and private entities, to ensure that the public may continue to enjoy the physical and aesthetic qualities of the shoreline, including views of the water and views of shoreline areas from the water and the iconic views of the State Capitol and Olympic Mountains. B. Development should be designed to preserve and enhance the visual quality of the shoreline, including views over and through the development from the upland side of the subject property, and views over and through the development from the water.	Section 2.19 View protection policies	Applies to shoreline permit issuance. Calls for preserving views of water from shoreline areas, and views that include the State Capitol.
3	City of Olympia SMP	2015	20	yes	A. Public recreation is a preferred use of the shoreline. Recreational uses and developments that facilitate the public's ability to reach, touch, and enjoy the water's edge, to travel on the waters of the State, and to view the water and shoreline are preferred. Where appropriate, such facilities should be dispersed along the shoreline in a manner that supports more frequent recreational access and aesthetic enjoyment for a substantial number of people. B. Water-oriented recreational uses, such as boating, swimming beaches, and wildlife viewing, should have priority over non-water oriented recreation uses, such as sports fields. A variety of compatible recreation experiences and activities should be encouraged to satisfy diverse recreational needs.	Section 2.26 Recreation Policies, this seems more related to recreation than the visual section	Applies to shoreline permit issuance. Focuses on facilitating water views from recreation sites
4	City of Olympia SMP	2015	20	yes	H. Recreation facilities should be designed to preserve, enhance, or create scenic views and vistas.	Section 2.26 Recreation Policies, this seems more related to recreation than the visual section	Applies to shoreline permit issuance. Focuses on design of recreation sites.
5	City of Olympia SMP	2015	NA	Yes	4. Where physical access to the water's edge is not feasible, a public viewing area shall be provided	3.26 18.34.460 – Design of Public Access	Not relevant, as access to the water's edge is available.
6	City of Olympia SMP	2015	24	Yes	7. Installation of vegetation shall meet the following standards: b. On public property, vegetation shall be selected and located to maintain public views identified in approved plans;	3.34 18.34.496 – Vegetation Management Plan	Applies to shoreline permit issuance. Focuses on vegetation design - to maintain public views "identified in approved plans".
7	City of Olympia SMP	2015	54	No	The protection of these public views from the shoreline is an important objective of Olympia's Shoreline Program. Protection of such views to and from the shoreline can be achieved through multiple strategies including public ownership and use of shorelands, the inclusion of public access and viewpoints in private development, establishing key view corridors, establishing height limits and design standards, vegetation management standards, and visual assessment where views may be impacted. Private uninterrupted views of the shoreline, although considered, are not expressly protected. Property owners concerned with the protection of views from private property are encouraged to obtain view easements, purchase intervening property and/or seek other similar private means of minimizing view obstruction.	3.35 18.34.500 - View Protection - Intent	Not a policy or regulation. Expresses the fact that private views are considered but not protected by the SMP polices and regs.
8	City of Olympia SMP	2015	55	Yes	B. All development within the shoreline jurisdiction shall comply with the view protection standards of OMC 18.110.060. C. Public shoreline views shall be protected by the use of measures, including but not limited to, maintaining open space between buildings, clustering buildings to allow for broader view corridors, and minimizing building height and total lot coverage. D. When there is an irreconcilable conflict between water-dependent uses and physical public access and maintenance of views from adjacent properties, the water-dependent uses and physical public access shall have priority, unless there is a compelling reason to the contrary. E. Buildings shall incorporate architectural features that reduce scale such as increased setbacks, building modulation (vertical and horizontal), pitched roofs, angled facades, and reduced massing. J. Where on-going maintenance of vegetation on public property to protect public views is necessary, a Vegetation Management Plan shall be approved by the Administrator prior to any work. At a minimum, the Vegetation Management Plan shall identify the viewshed to be preserved, the areas where vegetation will be maintained (including tree removal), and percent of vegetation to be retained. If trees are removed, they shall be replaced with three trees for each tree removed up to a minimum density of 220 trees per acre.	3.36 18.34.504 View Protection Regulations	References to building height, location and design not relevant, unless the wall in the hybrid alternative is considered a building. Also discusses vegetation management to preserve views, and tree replacement.

#	Document Name	Year Published	Page #	Policy?(yes/no)	Text	Section of document/Notes	Applicability/relevance
9	City of Olympia SMP	2015	55	yes	The applicant of a building or structure that exceeds 35 feet to the highest point above average grade level shall prepare and submit a visual analysis in conjunction with any development permit. At a minimum, the analysis shall address how the proposed project impacts views protected under RCW 90.58.320 and OMC 18.110.060. The Administrator may require additional information such as photo-simulations showing proposed buildings in relation to impacted views. If the analysis shows the proposed building or structure would block or significantly compromise the view of a substantial number of residences in adjoining areas or views protected under OMC 18.110.060, the City may place conditions on the development to prevent the loss of views.	3.37 18.34.507 - Visual Impact Assessment	Not relevant because the project is not expected to create any structure more than 25 feet above grade (unless the bridge would be that tall).
10	City of Olympia SMP	2015	14	yes	G. Where feasible visual and physical public access should be required as provided for in WAC 173-26-221(4)(d) and this shoreline program.	2.11 Urban Intensity Management Policies	Applies to shoreline permit issuance, but does not provide specific preference or guidance on view quality.
11	City of Olympia SMP	2015	16	yes	A. Protect and maintain existing visual and physical public access so that the public may continue to enjoy the physical, visual, and aesthetic qualities of the shoreline.	2.15 Public Access	Applies to shoreline permit issuance, but does not provide specific preference or guidance on view quality, except focus on existing visual access.
12	City of Olympia 2016 Comp plan- Public Health, Arts and Recreation	2016	6	yes	PR3.3 - Preserve and enhance scenic views and significant historic sites within Olympia's park system.	Goal and Polices (GR3)	Limited applicability: General policy for sites within the Oly Park System, which the parks on the lake are not.
13	City of Olympia 2016 Comp plan- Natural Environment	2016		yes	E. All development and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration. H. Space for preferred shoreline uses should be reserved. Such planning should consider upland and in-water uses, water quality, navigation, presence of aquatic vegetation, existing shellfish protection districts and critical wildlife habitats, aesthetics, public access and views.	PN12.5 - Aquatic Environment Management Policies, this is the same as #1	Directs design to consider impacts to public views, but does not provide specific preference or guidance on view quality
14	City of Olympia 2016 Comp plan- Natural Environment	2016	21	yes	A. Preserve views and vistas to and from the water, by public and private entities, to ensure that the public may continue to enjoy the physical and aesthetic qualities of the shoreline, including views of the water and views of shoreline areas from the water and the iconic views of the State Capitol and Olympic Mountains. B. Development should be designed to preserve and enhance the visual quality of the shoreline, including views over and through the development from the upland side of the subject property, and views over and through the development from the water.	PN12.19 View Protection Policies, this is the same as #2	Same as SMP policy 2.19 above
15	City of Olympia 2016 Comp plan- Natural Environment	2016	22	yes	A. Public recreation is a preferred use of the shoreline. Recreational uses and developments that facilitate the public's ability to reach, touch, and enjoy the water's edge, to travel on the waters of the State, and to view the water and shoreline are preferred. Where appropriate, such facilities should be dispersed along the shoreline in a manner that supports more frequent recreational access and aesthetic enjoyment for a substantial number of people. H. Recreation facilities should be designed to preserve, enhance, or create scenic views and vistas.	PN12.26 - Recreation Policies	Same as SMP policy 2.26 above
16	City of Olympia 2016 Comp plan- Natural Environment	2016	20	yes	A. Protect and maintain existing visual and physical public access so that the public may continue to enjoy the physical, visual, and aesthetic qualities of the shoreline.	PN12.15 - Public Access Policies, duplicate of #11	Same as SMP policy 2.26 above
17	Downtown Strategy Summary	2017	9	No	Views, particularly views of the water, mountains, and Capitol Dome provide a sense of place that unifies Downtown's visual identity. During the Strategy, the planning team analyzed signature viewsheds to identify potential impacts from future development. Fortunately, most of the critical views will not be affected by development. Additionally, some moderate actions are recommended to reduce impacts in some areas where views might be affected.	Connecting People, Places and Spaces	Provides rationale behind view protection guidelines for downtown. Not a policy.
18	Downtown Strategy Summary	2017	21	No	See table	In the design section there is a table that summarizes the visual elements that contribute to the downtowns character	Table lists waterfront views and views of Capitol dome as defining views of downtown. Aside from Heritage park views, views from downtown to Capitol Lake are limited to the first block or two from the shoreline, and are upper story, private views mainly.
19	Downtown Strategy Summary	2017	2	No	Waterfront and natural setting. Highlight these assets and physically or visually connect to them.	Guiding principles	General guidance does not provide specific preference for view features or quality.

#	Document Name	Year Published	Page #	Policy?(yes/no)	Text	Section of document/Notes	Applicability/relevance
20	Downtown Strategy Summary	2017		No	Improve upon existing attractions to create a vibrant, attractive, family-friendly destination, with emphasis on the surrounding natural environment and many landmark views.	Character Areas	General guidance does not provide specific preference for view features or quality.
21	Downtown Strategy Design	2017	51	No	See table	Civic identity, This table/section discusses the visual elements in downtown Olympia and how to better connect/enhance them	
23	Downtown Strategy Design	2017	47	Yes	GL8: Community views are protected, preserved, and enhanced.	Goals and objectives, and from the Olympia Comprehensive Plan Goals	
24	Downtown Strategy Design	2017	47	No	Based on the Comprehensive goals the following design priorities were identified during the planning and public engagement process: Retain signature views of the Capitol dome, water, and mountains.		
25	Downtown Strategy Design	2017	52	No	Views of prominent physical features such as the Capitol Dome, water, and mountains are an important part of Downtown's character and identity. They provide a sense of place and beauty and connections to the natural landscape and historic fabric. For this reason, the City Council direction for the Downtown Strategy scope of work included an analysis of Downtown views and recommendations for updating view protection standards in the Municipal Code. Views in question are a line of sight between specific public observation points to selected landmark views. In accordance with State law, the City does not protect views from private property. Landmarks include: • Mt. Rainer • Puget Sound/Budd Inlet • Olympic Mountains • Capitol Dome • Black Hills The Observation points selected were located in Downtown or outside if the view was through Downtown.	View protection	Project area includes views of all of these. No controls were placed on the Lake as part of the Downtown Strategy.
26	Downtown Strategy Design	2017	56	no	Table of View analysis of the project, views of the Capitol Campus, Budd Inlet and capitol lake are all included here	View Protection tools and tradeoffs, this section also describes the methodology used for the analysis	Project area includes views of all of these. No controls were placed on the Lake as part of the Downtown Strategy.
27	Downtown Strategy Design	2017	71		The City will update the Comprehensive Plan to memorialize the following landmark views: • State Capitol Campus Promontory to Budd Inlet • Madison Scenic Park to Capitol Dome/Black Hills • Puget Sound Navigation Channel to Capitol Dome • West Bay Park to Mount Rainier • Percival Landing to Capitol Dome • East Bay Overlook to Capitol Dome • Deschutes Parkway to Mount Rainier Views identified early in the process that were unlikely to be blocked (list to be confirmed as part of the Comprehensive Plan update (see Appendix D.2))	D.7 Implement view protection objectives by memorializing designated views in the Comprehensive Plan, updating view protection standards, and taking moderate action to protect views of concern.	Com Plan policies may be considered as SEPA policies. Project would change the character of the water in two of these views: Capitol to Budd inlet and Deschutes Pkwy to Rainier. Not clear if it would block the latter with vegetation.
28	Tumwater City Plan 2036 Parks, Recreation, and Open Space	2019	14	No	The parkland can provide opportunities for passive and active outdoor recreation such as trails for walking, jogging or wildlife viewing.	E. Natural Open Space Parks	Although general appreciation of natural settings is included, wildlife, being mobile, is not the subject of this analysis.
29	Tumwater City Plan 2036 Parks, Recreation, and Open Space	2019	36	No	Identify, preserve and enhance Tumwater's heritage, traditions and cultural features including historical sites, buildings, artworks, views and monuments within the Historic District, and other historical areas and park sites.	Historic Programs and Facilities Objectives	These features are cultural (and impacts are discussed in other DRs), with the exception of "views", which are not specified separately from the features listed.
30	Tumwater City Plan 2036 Land Use Element	2019		no	The Parks and Open Space designation accommodates public recreational pursuits, retains views and historical features, or preserves land in essentially a natural and open state.	2.14 Parks and Open Spaces	Refers to zoning designation criteria and objectives of the zone, which is present in the south middle basins. Overall objective pertains to this project - natural and open state. This is a statement of preference for views.

#	Document Name	Year Published	Page #	Policy?(yes/no)	Text	Section of document/Notes	Applicability/relevance
31	Tumwater City Plan 2036 Land Use Element		59	no	The goals and purpose of the Design Guidelines in Tumwater are to: Recognize that aesthetic considerations along with environmental review contribute toward an enhanced environment; and Recognize that aesthetic considerations are appropriate in order to protect property values of adjacent properties and to ensure that developments contribute to desirable neighborhood character.	2.16 Design Review	
32	City of Tumwater Shoreline Master Program	2014	16	yes	4. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.	3.6 Aquatic	Applies to shoreline permit issuance. No specific view preference or guidance.
33	City of Tumwater Shoreline Master Program	2014	28	yes	A. Purpose As required by RCW 90.58.100(2)(b), the public access goals address the ability of the public to reach, touch and travel on the shorelines of the state and to view the water and the shoreline from adjacent locations. B. Goals 1. Increase the ability of the general public to reach, touch and enjoy the water's edge, to travel on the waters of the state, and/or to view the water and the shoreline from adjacent locations, provided that private ability of the public to reach, touch and travel on the shorelines of the state and to view the water and the shoreline from adjacent locations.	4.4 Public Access	Applies to shoreline permit issuance. No specific view preference or guidance, but policy is to increase opportunities for visual access.
34	City of Tumwater Shoreline Master Program	2014		yes	12. Critical area buffer regulations shall not apply to the removal of noxious weeds, or aquatic weeds and fresh water algae when undertaken pursuant to WAC 173-201. Selective pruning of trees for safety and view protection in vegetation conservation areas may be allowed when conducted in accordance with International Society of Arboriculture ANSI pruning standards	5.2 Critical Areas and Shoreline Vegetation Conservation	Applies to shoreline permit issuance. Could apply to changes in shoreline vegetation.
35	City of Tumwater Shoreline Master Program	2014	44	yes	10. Where views of the water or shoreline are available and physical access to the water's edge is not present or appropriate, a public viewing area shall be provided.	5.3 Public access	Site has physical access so this does not apply.
36	City of Tumwater Shoreline Master Program	2014	72	yes	g. Sites shall be adequately screened from view. Dredge disposal in shoreline areas shall not impair scenic views.	6.8 fill	Applies to shoreline permit issuance. Applicable to placement of dredged material for habitat islands
37	City of Tumwater Shoreline Master Program	2014	73	yes	3. Locate piers and docks so as to: a. Minimize obstructions to scenic views;	6.9 Piers and Docks	Applies to shoreline permit issuance. Could apply to new boardwalk design.
38	City of Tumwater Shoreline Master Program	2014	80	yes	A. Policies 1. Design and locate a stair tower to minimize the impact on views, conform to the existing topography, minimize impervious surfaces, and should not extend waterward of the ordinary high water mark.	6.13 Stair Towers	Not clearly applicable- no stair towers in this project
39	City of Tumwater Shoreline Master Program	2014	92	yes	5. Design recreational developments to preserve, enhance or create scenic views and vistas.	7.9 Recreation	Applies to shoreline permit issuance. Could apply to new boardwalk design.
40	City of Tumwater Shoreline Master Program	2014	12 of 21	yes	4. Trails may be located within the riparian area or buffer to provide public access for viewing wildlife and other recreational activities, provided they are located and designed to minimize impacts on the riparian habitat;	Located in Chapter 16.32 Fish and Wildlife Habitat Protection	Applies to shoreline permit issuance. Could apply to new boardwalk design.
41	City of Tumwater Shoreline Master Program	2014	62	yes	4. Locate, design, and construct flood hazard management projects to provide: d. Protection of recreation resources and aesthetic values such as point and channel bars, islands and other shore features and scenery;	6.6 Dikes, Levees and Instream Structures	Project does not include flood hazard features, with possible exception of modifications to the heritage park shoreline to reduce flooding
42	City of Tumwater Shoreline Master Program	2014	27	yes	A. Purpose As required by RCW 90.58.100(2)(f), the conservation goals address the protection of natural resources, scenic vistas, aesthetics and vital shoreline areas for fish and wildlife for the benefit of present and future generations. B. Goals 1. Preserve, enhance and protect shoreline resources (i.e. wetlands, fish and wildlife habitats, native shoreline vegetation) for their ecological functions and values, and aesthetic and scenic qualities.	4.1 conservation	Applies to shoreline permit issuance. Could apply to changes in shoreline vegetation.

#	Document Name	Year Published	Page #	Policy?(yes/no)	Text	Section of document/Notes	Applicability/relevance
43	City of Tumwater Shoreline Master Program	2014		yes	1. Prioritize shoreline stabilization projects based on the following order of preference: d. Rigid protective measures such as bulkheads and bluff walls constructed of artificial materials such as riprap or concrete. Construction materials for shoreline stabilization should be selected based on long-term durability, ease of maintenance, compatibility with local shore features, including aesthetic values and flexibility for future uses.		Applies to shoreline permit issuance. Could apply to new stabilization along lake edge, esp west side of North Basin.
44	City of Tumwater Shoreline Master Program	2014	42	yes	e. Require physical or visual access to shorelines as part of new or expanded residential, commercial, industrial, recreational and public facility development when the development would either generate a demand for one or more forms of such access, and/or would impair existing legal access opportunities or rights, unless such access is shown to be incompatible due to reasons of safety, security or impact to shoreline ecological functions.	5.3 Public Access	Applies to shoreline permit issuance. Would need to determine if the project would impair visual access. Not expected to increase demand.
45	City of Tumwater Shoreline Master Program	2014	59	yes	5. Breakwaters, jetties, groins and weirs shall be designed and constructed in a manner that will prevent detrimental impacts on water circulation, sand movement and aquatic life. The design shall also minimize impediments to navigation and to visual access from the shoreline.	6.3 breakwaters, Jetties, Groins	Applies to shoreline permit issuance. Would need to determine if the wall would be considered one of these features. .
46	Heritage Park draft predesign phase Study	1992	1	No	The two primary view points are: (1) from the top of the bluff north of the Temple of Justice with panoramic views of Capitol Lake, Budd Inlet, the city of Olympia, and on a clear day the Olympic Mountains, and (2) from the lakeshore, specifically the north and west shores, back toward the Capitol Campus. The uniqueness of the site is exhibited. in the memorable view of the Legislative Building reflecting in Capitol Lake below. In addition to the lake and Capitol views, Mt. Rainier is visible to the east from vantage points on the west side of Capitol Lake. The view opportunities for the Heritage Park project fall into two categories, those of the Legislative Building and its reflection in Capitol lake, and those of the Puget Sound and the Olympic Mountains. The bluff provides unique vantage points of views to the Puget Sound and the Olympic Mountains. These views should be protected and enhanced. Development of additional views should be considered. and observation points a long the bluff developed to maximize views. Views from the Capitol Lake shore to the--Capitol Buildings should be preserved. as should views from Capitol Lake toward the Mid and South Basins from the west side of Capitol Lake.		Applicable to decision on how much each alt affects these views, and could also affect the design, esp on west shore of North basin
47	Master Plan for the Capitol of the State of Washington	2006	5.3	yes	The following are the specific goals that apply to all three state campuses: <ul style="list-style-type: none"> • To maintain and enhance the major view corridors of the campuses as well as views into the campuses from surrounding neighborhoods • To provide features which visually link the different areas of each campus and which enhance the design identity of each campus as a whole • To develop the campus perimeters and create a physical and visual transition to the adjacent neighborhoods 	Policy 5.1- Capitol Campus Open Space, Goals of Policy	Applicable to decision on how much each alt affects these views, and could also affect the design, esp on west shore of North basin
48	Master Plan for the Capitol of the State of Washington	2006	5.6	yes	Currently, the Legislative Building can be viewed from several surrounding vantage points, including northbound and southbound on Interstate 5, eastbound on U.S. 101, Puget Sound, Capitol Lake, downtown Olympia, the Cooper Point area, and the South Capitol Neighborhood. These view corridors (from outside looking in) should be protected. Likewise, there are views (from inside looking out) of the Olympic Mountains to the north, Capitol Lake to the west, and Mount Rainier to the east, all of which should be preserved. Careful placement and design of buildings and landscape features that provide cues to these view corridors will preserve and enhance these important elements of campus planning.	Policy 5.1- Capitol Campus Open Space, Visual Access	Applicable to decision on how much each alt affects these views, and could also affect the design, esp on west shore of North basin
49	Master Plan for the Capitol of the State of Washington	2006	5.16	yes	Protect and maintain open space and preserve the natural views and vistas to and from the Capitol, and to conserve options for placement of works by future	Policy 5.5 Commemorative artwork on State Capital Grounds	Applicable to decision on how much each alt affects these views, and could also affect the design, esp on west shore of North and middle basin
50	Master Plan for the Capitol of the State of Washington	2006	3.14	no	Walkers, runners, and joggers make extensive use of the Parkway (Deschutes) as part of two improved loops that circle Capitol Lake. The loop around the north basin is 1.52 miles, while the full lake loop is 4.95 miles. These pathways connect with downtown Olympia, Tumwater, Heritage Park, Marathon Park, Tumwater Historical Park and the Capitol Lake Interpretive Center, giving users an ever-changing view of the lake, its topography, natural habitats, and urbanized areas.	Deschutes Parkway	Applicable to decision on how much each alt affects these views, and could also affect the design, esp on west shore of North basin

