Section 3.11

Historic, Archaeological, & Cultural Resources

This section details the current historic, archaeological, and cultural resources policy and regulatory frameworks, describes the current conditions (affected environment), analyzes the alternatives' potential impacts on historic, archaeological, and cultural resources, and suggests possible mitigation measures. Finally, it summarizes any significant unavoidable adverse impacts.

Impacts of the alternatives on historic, archaeological, and cultural resources are considered significant if they result in:

- Substantial adverse changes to, alteration, or loss of a resource that impacts its eligibility for inclusion in the National Register of Historic Places (NRHP) or the Washington Heritage Register (WHR), or as a City of Seattle Landmark (SL). Resources that are not eligible for these registers will not be adversely impacted by the proposed alternatives.

3.11.1 Affected Environment

This section describes the prehistoric, ethnographic, and historic contexts of the areas within the MICs as background by which to address the potential for impacts to historic, archaeological, and cultural resources.

Precontact Period Context

Based upon current scientific understandings of the archaeological record, the earliest human occupations in the Pacific Northwest were characterized by highly mobile bands of broad-spectrum foragers. The widespread Clovis culture, the first well-defined cultural complex in North America, has been dated to between 12,800 and 13,200 calibrated years before present (cal. B.P.) (Ames and Maschner 1999:65–66; Kirk and Daugherty 2007:13). Recent research suggests that large stemmed projectile points (i.e., Western Stemmed complex) may have been produced by populations pre-dating Clovis (e.g., Jenkins et al. 2012). These early Paleoindian cultures consisted of small, nomadic bands that specialized in hunting a variety of small- to large-sized game animals, including megafauna that went extinct across North America at the end of the Pleistocene (e.g., wooly mammoth [*Mammuthus primigenius*], mastodon [*Mammut americanum*], ancient bison [*Bison antiquus*]) (Kirk and Daugherty 2007:13).

Following the Clovis period, early and middle Archaic populations across western Washington produced large, willow leaf-shaped ("Olcott" phase) projectile points, in addition to lanceolate points and scrapers (Ames and Maschner 1999; Kopperl et al. 2016; Nelson 1990:483). Similar projectile points have been found in sites from the Fraser River Valley in British Columbia down to the margins of the Columbia River, indicating the wide dispersal of related groups across the broader Northwest Coast during this period. Sites containing Olcott material are most commonly documented well inland from the coast along rivers, suggesting that these populations were likely still subsisting largely upon terrestrial plant and animal resources and had not yet developed the extensive reliance upon riverine and coastal food resources observed among later Coast Salish peoples (Kopperl et al. 2016; Nelson 1990:483).

Between approximately 6400 and 2500 cal. B.P., there was a gradual shift across the Northwest Coast to an increasingly heavy reliance on marine and riverine resources for subsistence. This shift was coincident with a general trend toward increasing sedentism as more sites were settled along river courses, estuaries, and productive marine environments (Ames and Maschner 1999:93–94; Nelson 1990:483). During this period, settlements began to be occupied on a seasonal basis. Larger, denser artifact concentrations have been identified within sites dating from 6400 to 2400 cal. B.P., and deep shell middens have been dated to as early as 5,200 years ago (Larson and Lewarch 1995; Mierendorf 1986:57; Wessen 1988). It was during this time that coastal and neighboring inland communities developed their complex suites of lithic, bone, and antler tool technologies suited for marine mammal hunting, riverine fishing, and the further exploitation of terrestrial plant and animal resources (Ames and Maschner 1993:93–95; Blukis Onat et al. 1980:29–30; Kopperl et al. 2016:117–118).

Along with steady population growth and increasingly intensive resource utilization across the broader Northwest Coast, Late Pacific (2400–200 cal. B.P.) precontact archaeological sites in the region demonstrate the emergence of status differentiation and complex social hierarchies (Ames and Maschner 1999:95–96). Increased reliance on stored foods and controlled access to resources, including salmon and shellfish, also developed during this period. By this time, the general ethnographic (prior to Euroamerican influence) pattern observed along the Northwest Coast had become well-developed, although these societies saw swift and dramatic changes with the arrival of Euroamerican explorers, traders, and settlers beginning in the late 1700s (Ames and Maschner 1999:95–96, 112).

Ethnographic Background

This section presents an Ethnographic Background prepared by Historic Resources Associates to provide context for Historic, Archaeological, & Cultural Resources evaluated in this EIS. See **Section 3.8 Land & Shoreline Use** for an overview of historical planning and land use decisions developed by the City of Seattle in support of this EIS.

The EIS study area is within the traditional territory of the Lushootseed-speaking Duwamish people. The settlements of this ethnographically documented Coast Salish group were principally located along the Duwamish, Black, and Cedar Rivers, as well as along the coasts of Puget Sound and Lake Washington in the vicinity of present-day Seattle (Duwamish Tribal Services 2018; Ruby and Brown 1992:72). The Duwamish were part of the broader Southern Coast Salish culture, which was generally adapted toward the intensive utilization of marine and riverine resources (Suttles and Lane 1990). A principal division among the Duwamish existed between the Sxwaldja$\acute{E}$bc ("saltwater dwellers") who lived in settlements on Puget Sound and the Xatcua$\acute{E}$bc ("lake dwellers") who lived along the shores of Lake Washington. The latter, as well as Duwamish groups living along the interior rivers of the region, were considered to be poorer and lower-status than the coastal communities (Hilbert et al. 2001:45; Ruby and Brown 1992:72–73; Suttles and Lane 1990:485–486; Swanton 1952:26).

Like other Southern Coast Salish peoples, the Duwamish relied heavily upon salmon and other fish for subsistence and utilized a diverse suite of technologies to harvest them in different settings. They made use of trolling, seine, and gill net technologies to harvest fish in Puget Sound, while weirs, nets, gaff hooks, harpoons, and spears were all employed in rivers (Suttles and Lane 1990:488–489). Terrestrial mammals, especially black-tailed deer and elk were also hunted by the Duwamish and neighboring Tribes using the bow and arrow, and they gathered a great variety of plant foods, including edible roots, bulbs, and berries (Duwamish Tribal Services 2018; Gunther 1945; Suttles and Lane 1990:489).

The Duwamish lived a semi-sedentary lifestyle, spending part of the year in permanent winter villages and the warmer months in temporary encampments from which they fished, hunted, and gathered plant resources. Smaller bands would travel across their territory to hunt and forage for plant resources during the summer months, returning to their permanent settlements for the ceremonially rich winter season and to intensively fish in the spring and autumn (Duwamish Tribal Services 2018; Suttles and Lane 1990).

In 1855, members of the Duwamish and neighboring Puget Sound tribes signed the Treaty of Point Elliott, which directed the removal of Tribal members to reservations. The Duwamish were ordered to relocate to the Port Madison Reservation, along with the Suquamish (Lane 1975:3–4). Many Duwamish remained along the Black River in defiance of government orders but were removed by the early 1900s (Lewarch et al. 1996:3–13). The Duwamish Indian Tribe petitioned for federal recognition in 1979. In 2001, the federal government rejected the petition, reversing the decision of the previous administration to recognize its Tribal status. The Duwamish Indian community continues to pursue recognition, build their community, and maintain their cultural traditions (Duwamish Tribal Services 2018; Thrush 2007:196–197).

An important Duwamish village, *šəlšúl* ("Tucked Away Inside"), was located at the west end of the Ballard portion of the Ballard Interbay Northend Manufacturing Industrial Center (MIC). The village site was situated along the northwestern shore of Salmon Bay and was destroyed during the construction of the Hiram M. Chittenden Locks in the 1910s (Hilbert et al. 2001:54–55; Thrush 2007:221–223). Several Duwamish villages were recorded within the Greater Duwamish MIC around the former mouth and lower reaches of the Duwamish River. The village of yəlíqʷad ("basketry cap") was named for the distinctive woven hats worn by peoples such as the Yakama, perhaps because its residents participated in trade networks that spanned the Cascades (Dailey 2020; Hilbert et al. 2001:119; Thrush 2007:236–237). This village was located along the west bank of the Duwamish River west of Kellogg Island. Site 45KI23 (the Duwamish No. 1 Site) has been identified at this location, and likely represents the archaeological remains of the village. The village of túʔulʔaltxʷ ("where herring live" or "herring house"), was situated to the west of the mouth of the Duwamish River under the West Seattle bluff. An unknown Euroamerican settler burned the town down in 1893, and its name was eventually given to the Terminal 107 Park (Hilbert et al. 2001:46; Thrush 2007:234). A third village, dxʷqʷíƛ̓əd ("Place of the Fish Spear"), was located atop a large flat next to the Duwamish River at what is presently the north end of Boeing Field (Hilbert et al. 2001:47; Thrush 2007:240).

Historic Period Context

Early Settlement

European visitation to the Puget Sound Region began in 1792 when George Vancouver and his crew explored the region. Within the next 100 years, Native populations plummeted due to repeated outbreaks of introduced diseases such as smallpox, influenza, and typhoid fever (Boyd 1990; Suttles and Lane 1990). The Treaty of Washington in 1852 conveyed the territory to the United States, and the Donation Land Claim Act drew settlers into land occupied by the Duwamish and their neighbors. In 1855, members of the Duwamish and neighboring Puget Sound tribes signed the Treaty of Point Elliott, which provided for the removal of Tribal members to reservations, including the Port Madison Reservation (Suquamish/Fort Kitsap). Some Duwamish people continued to live in and around Seattle, maintaining friendly relations, working for, and trading with incoming settlers. Many others, meanwhile, relocated to the Port Madison Reservation, but due to undesirable conditions were compelled to leave. Many then attempted to return to their ancestral lands, and a few were able to claim or purchase land (Ruby and Brown 1992; Thrush 2007).

Tribal lands and fishing rights continued to be eroded through the late 1800s and 1900s, culminating, in the late 1900s, in a series of lawsuits and court cases that upheld certain treaty rights (Marino 1990; Ruby and Brown 1992). The federally-recognized Muckleshoot, Snoqualmie, Suquamish, and Tulalip Tribes are the descendant Tribes that represent the various tribes and bands with territorial interests in the portion of Seattle addressed by this EIS, that were signers of the Point Elliott Treaty. The Duwamish Tribe is not currently federally recognized but continues to fight for this distinction. See **Section 3.8 Land & Shoreline Use** for related information on f historical planning and land use decisions developed by the City of Seattle in support of this EIS.

It was in 1851 that the first Euroamerican settlers arrived in what is now the Seattle area. They were the Denny Party, which included Arthur A. Denny and his brother David T., John N. Low, Carson D. Boren, William N. Bell, Charles C. Terry and his brother Lee, and their families (Denny 1888:7–13, 16–17; Fiset 2001; USSG 1856, 1863). These early settlers encouraged additional settlement by adjusting their claims to accommodate new arrivals, such as sawmill owner, Henry L. Yesler in 1852, and filed the first plat for the town of Seattle. Logging, which began with local men working with oxen and small timber mills, became the primary industry of this period (Caldbick 2014; Denny 1888:16–22; Fiset 2001). Over time, larger mills were constructed in the area and the industry offered steady employment for incoming settlers (Sanborn Map Co. 1884, 1888, 1893).

To the north, Dr. Henry Smith with his wife, mother, and sister settled in the Interbay area in 1853 and filed for land claims. More settlers followed, made claims, and supported themselves by farming and logging (Wilma 2001a). To the south, Luther Collins, Jacob Maple, Samuel Maple, and Henry Van Asselt settled along the Duwamish River on lands that now make up Georgetown, with farming the main industry in this area (Wilma 2001b).

By 1860, the population of settlers in Seattle had risen to 302, and many of them were working to grow the town into something more substantial. While most of the industry and commercial activity had grown along the eastern shore of Elliott Bay, sparse residential and family farms were beginning to pop up in the areas surrounding Seattle's central core (Bagley 1929).

Maritime Commerce & Industrial Development

In the 1870s, the discovery of large deposits of coal near present-day Newcastle and Renton, created a need for transportation to Seattle docks on Elliott Bay. Initially, the coal was transported on barges across Lake Washington, then unloaded to wagons and transported overland to Lake Union, where it would be loaded back onto barges and shipped southwest across the lake. Then the coal was once again unloaded onto wagons for the final leg of the route to Elliott Bay. In an attempt to simplify this onerous shipping system, a narrow-gauge rail line was constructed in 1872 between Lake Union's south shore to the coal dock on Elliott Bay. Five short years later, the line was abandoned as the Seattle and Walla Walla Railroad (S&WW) was constructed by the enterprising locals in Seattle from Elliott Bay south to the coal fields near Renton and then north to those near present-day Newcastle (Link 2004:3; MacIntosh and Crowley 1999). In 1884, the Northern Pacific Railroad built its line to Seattle, spurring additional growth (Chesley 2009).

Seattle's economy boomed with shipping, railroads, timber extraction and milling, coal mining and shipping, commercial and industrial manufacturing such as iron works, and service industry support. At this time, Seattle's economy was closely tied to other Pacific ports, especially those in California. At various times, a substantial percentage of lumber shipped from Seattle went to San Francisco to aid in its reconstruction from catastrophic fires and, later, the 1906 earthquake that was accompanied by a fire that destroyed some 25,000 buildings. The close connection between these ports can be seen in the creation of Ballast Island, an artificial landform on the Seattle waterfront, that is largely made up of rock mined from outcrops in San Francisco and dumped in Elliott Harbor to make space for the Seattle products shipped in return sailings. This rise in production created jobs and encouraged population growth.

In response to Seattle's growth, the pace of construction in the surrounding neighborhoods began accelerating in the late 1880s and early 1890s. Mills and other commercial ventures were built on the available lands, existing lumber mills and manufacturing companies expanded, and support services such as restaurants, hotels, breweries, laundries, creameries, soap works, and other similar enterprises were established throughout the neighborhoods. As well, houses were constructed to accommodate increasing numbers of employees, both management and labor, and business owners (Fiset 2001; Sanborn Map Co. 1884, 1888, 1893). Cable cars and electric streetcars crisscrossed Seattle's neighborhoods, ferries transported passengers across Lake Union, and systems of staircases, first constructed of wood and later of concrete, were built for ease of travel over the area's hilly topography (Fiset 2001; Thompson and Marr 2013). According to Sanborn maps, in 1884 the population of Seattle was 7,000 persons; this number more than doubled by 1888 to 16,000 (Sanborn Map Co. 1884, 1888).

Like many cities in the United States, Seattle was devastated by fire. The Great Seattle Fire occurred in 1889 and leveled the city's 18-block waterfront and 40 blocks of the city center. Destroyed were not only wood-frame buildings and structures, but those constructed of brick and stone, including wharves, piers, depots, mills, warehouses, businesses, offices, banks, stores, hotels, apartment buildings, and some residences. Rebuilding began almost immediately. The City widened some streets and raised others, implemented a new building code, banned wood buildings in the fire zone, and established a city water works (Caldbick 2020a, 2020b). Many of Seattle's sawmills that had been destroyed in the fire moved north to the north side of Salmon Bay, to what is now Ballard (Wilma 2001a).

After the fire, in the 1890s, the Great Northern Railway Company's president, James J. Hill, constructed docks, a grain terminal, grain elevator and warehouse at Smith Cove to facilitate maritime commerce with the Far East. Other private docks and warehouses were also built in the area (McClary 2013).

Around the turn of the twentieth century, construction in Seattle's neighborhoods included educational buildings, religious facilities, and multi-unit apartment buildings in support of the rapidly expanding population (Baist 1905; Fiset 2001). Additionally, religious organizations, commercial enterprises, and industrial operations were upgrading their wood-frame buildings with more substantial masonry versions in the wake of the fire (Link 2004:6). Industry boomed as well, spreading north and south of Seattle to more accommodating topography and expansive rail and waterway transportation systems (Langloe 1946). Private wharves, piers, warehouses, and mills were built south of the city, many were linked to the Northern Pacific lines to handle freight shipped into and out of Seattle. During this time, Georgetown's identity as Seattle's party area began to shift towards industry, especially after annexation by Seattle. By 1904, the population of Seattle had swelled to over 150,000. This number tripled to 456,000 by 1928 (Sanborn Map Co. 1905, 1928; Wilma 2001b).

The onset of the 1910s saw big changes for Seattle's maritime and industrial services. Between 1912 and 1917, the U.S. Army Corps of Engineers (USACE) constructed a canal between Puget Sound and Lake Washington following Ross Creek, which had been widened ca. 1885 for use as a log canal (Chrzastowski 1983:6). The Chittenden/Ballard Locks was completed in 1917, opening a major shipping route that connected Lake Washington, Lake Union, and Salmon Bay Waterway to Puget Sound. The project was funded by King County and the federal government. Simultaneous to the construction of the Canal, the City of Seattle completed bridge construction, street grading, and built the Third Avenue West Tunnel to provide a route for utilities to pass under the new Canal (Fiset 2001; Walton Potter 1977:12).

Other large projects during that time included the flattening of Denny Hill and streets north of downtown Seattle, known as regrades, which allowed for easier transportation routes in and out of the city (Link 2004:8). Much of the earth removed in the regrades was used to fill in wetlands and tidal flats. In 1912, the Great Northern docks at Smith Cove were sold to the newly created Port of Seattle for construction of a deep-sea terminal. The Port's comprehensive plan also included the construction of Fisherman's Terminal on Salmon Bay, the Bell Street Pier,

wharves and warehouses on the East Waterway pier and a second pier on the East Waterway, a public wharf and warehouse at the end of Bell Street, a grain elevator at Hanford Street, and a new ferry service on Lake Washington (Oldham 2020).

Additionally, man-made alterations along the Duwamish River—rerouting, straightening, and channelizing the river, and draining, dredging, and filling tidelands—and extensive logging, created land for agriculture and industry. The dredged material was used to construct Harbor Island, that split the mouth of the river into two channels. The Port of Seattle would later plan extensive terminals on Harbor Island. The renamed Duwamish Waterway supported shipping and large industrial complexes, such as shipbuilders, foundries, clay and coal plant, terracotta factory, antimony smelting and refining plant, iron works, flour mill, meat packer and slaughterhouse, creosoting works, lumber mills, warehouses, and Boeing Company's Plant 1 (Oldham 2020; Sanborn Map Co. 1905, 1928, 1950; Updegrave 2016). This industrial growth created additional employment opportunities and additional residences and apartment buildings were constructed to house the influx of workers (Sanborn Map Co. 1905, 1928).

Like most of the United States, the Great Depression hit Seattle hard, as the area's industries faltered, jobs were lost, and subsequently, the population fell (Fiset 2001; Link 2004:13). The arrival of World War II and the corresponding growth in war supporting industries slowed the decline. During this time, the city's earliest residential neighborhoods were in flux due to pressure of commercial and industrial interests. Additionally, the 1949 earthquake, which damaged numerous buildings, hastened the shift away from mixed residential and commercial neighborhoods towards those with a mix of commercial and industrial (Thompson and Marr 2013).

The gradual rebuilding began in the late 1950s, in part stimulated by the rezoning of the some of Seattle's neighborhoods to general manufacturing (Link 2004:14). Years in the planning, in 1959 work began on U.S. Interstate 5 (I-5) through Washington. The freeway aligned north–south along the east side of Eastlake Avenue E, cutting many neighborhoods in half, disrupting traffic patterns and routes, and introducing visual and auditory impacts. Much of I-5 through Seattle was completed in 1967, but the entire I-5 project was completed in 1969 (Dougherty 2010).

Although Seattle began as a sparsely populated region whose settlers supported nearby lumber mills, by the turn of the twentieth century, it had become the Pacific Northwest's powerhouse city with considerable commercial, transportation, industrial, and maritime industries. Today the city is home to modern hi-tech, retail, commercial, and multi-family infill construction in villages. While some single-family homes and small commercial ventures make way for denser urban infill most of the city's acres are still in low density residential use.

Current Conditions

Data & Methods

To analyze historic and cultural resources in the study areas for the purposes of this report, HRA's GIS Specialist gathered building data from the King County Assessor's website and the Department of Archaeology and Historic Preservation's (DAHP's) online database, the Washington Information System for Architectural and Archaeological Records Data (WISAARD), for cultural resource survey reports, archaeological site records, historic property inventory forms (HPIs), cemetery records, and National Register of Historic Places (NRHP)- and Washington Heritage Register (WHR)-listed and eligible resources in the MICs/project subareas. Additionally, HRA's architectural historian reviewed the Seattle Landmarks (SL) designated Landmarks List and Landmarks Districts map on the City's website.

For the architectural resources analysis, the GIS Specialist created maps showing the locations of the parcels that meet the 50-years or older threshold, properties that have been recorded on an HPI form, and NRHP-listed properties and districts.

HRA's in-house library was used to obtain information on the environmental, archaeological, and historical context of the project vicinity. HRA research staff also examined General Land Office (GLO) plats, available online through the Bureau of Land Management (BLM) website, to locate potential historical features. These nineteenth-century maps, arranged by township and range, indicate locations of then-extant historical structures, trails, and features. Although most of these structures are no longer extant, the maps indicate where historic period cultural resources could be encountered. Researchers reviewed additional historic maps (e.g., U.S. Geological Survey [USGS] maps, Sanborn Fire Insurance maps, County atlases) available through online resources.

Based on environmental characteristics, ethnographic data, and the distribution of previously recorded cultural resources, HRA formulated initial expectations about the sensitivity of the MICs for containing historic-period architectural and archaeological resources. DAHP's statewide predictive model layer was also reviewed for probability estimates of the presence of precontact cultural resources.

Full Study Area

Cultural resources identified in or adjacent to the Full Study Area include districts, sites, buildings, structures, or objects (BSOs) that are 45 years old or older, and listed or eligible for listing in the NHL Program, NRHP, WHR, WHBR, or the SL program, whose age threshold for inclusion is 25 years old or older.

Architectural Resources

Within the full study area, there is 1 NHL property and a number of properties that are listed in the NRHP, WHR, and SL. There are 3 NRHP-listed historic districts in the study area, 12 NRHP-

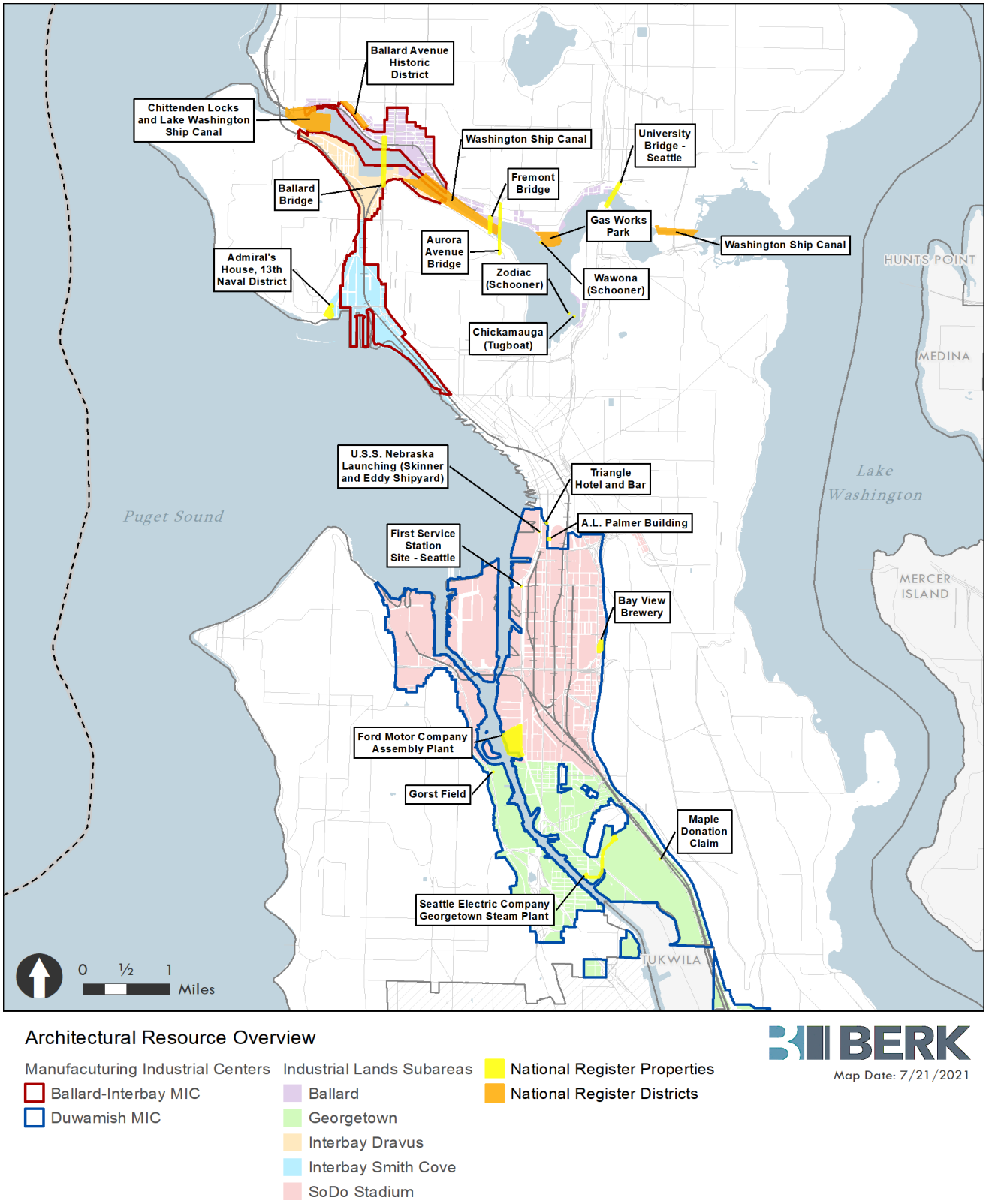
and WHR-listed historic properties, 5 properties that are listed in the WHR, and 15 historic properties designated Seattle Landmarks (**Exhibit 3.11-1**). There are no historic barns listed in the WHBR within the study area. There are several Seattle Landmarks in the Study Area, some of which are listed by the NRHP. See **Exhibit 3.11-2**.

According to the King County Tax Assessor, there are 865 historic-period buildings within the full study area, of which 774 are commercial/industrial buildings and the remaining 91 are residential buildings.

In contrast, DAHP online WISAARD records show 1,566 individual historic-period architectural resources within the full study area that have been previously recorded on HPI forms. Of these, 73 were determined eligible for listing in the NRHP and 154 were determined not eligible. The remaining 1,339 resources have no formal determinations of eligibility, and many were created by data transfer for an Assessors Data Project for King County (**Exhibit 3.11-2**). These resources were not formally surveyed and recorded and have neither eligibility recommendations nor determinations of eligibility.

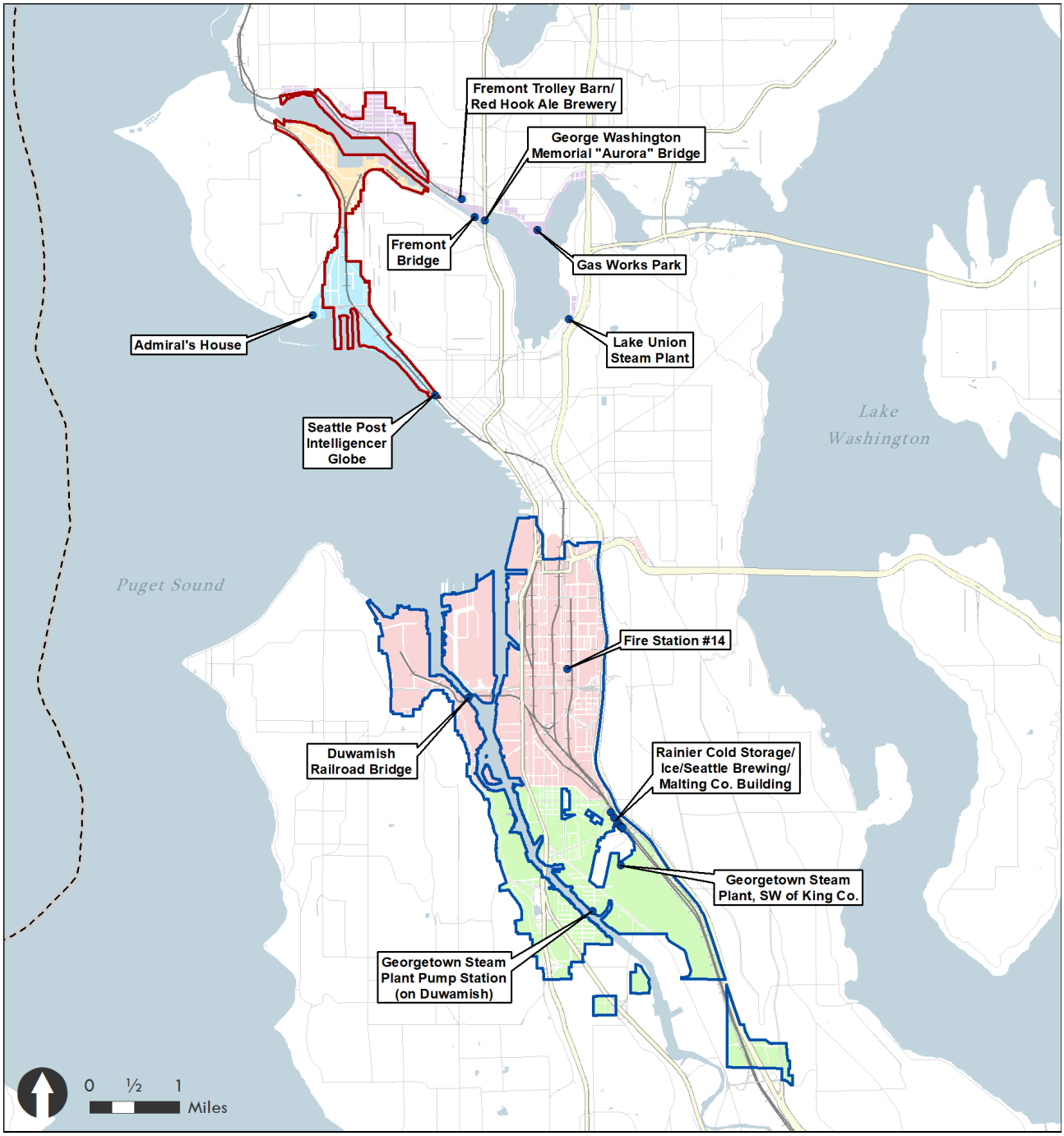
The discrepancy between the Assessor's and DAHP's records are likely due to demolitions that alter County Tax Assessor's records but do not change the records in DAHP's WISAARD database.

Exhibit 3.11-1 National Register of Historic Places Listed Architectural Properties and Districts



Source: HRA, 2021.

Exhibit 3.11-2 Seattle Designated Landmarks



Seattle Designated Landmarks

- Seattle Designated Landmark

Manufacturing Industrial Centers

- Ballard-Interbay MIC
- Duwamish MIC

Industrial Lands Subareas

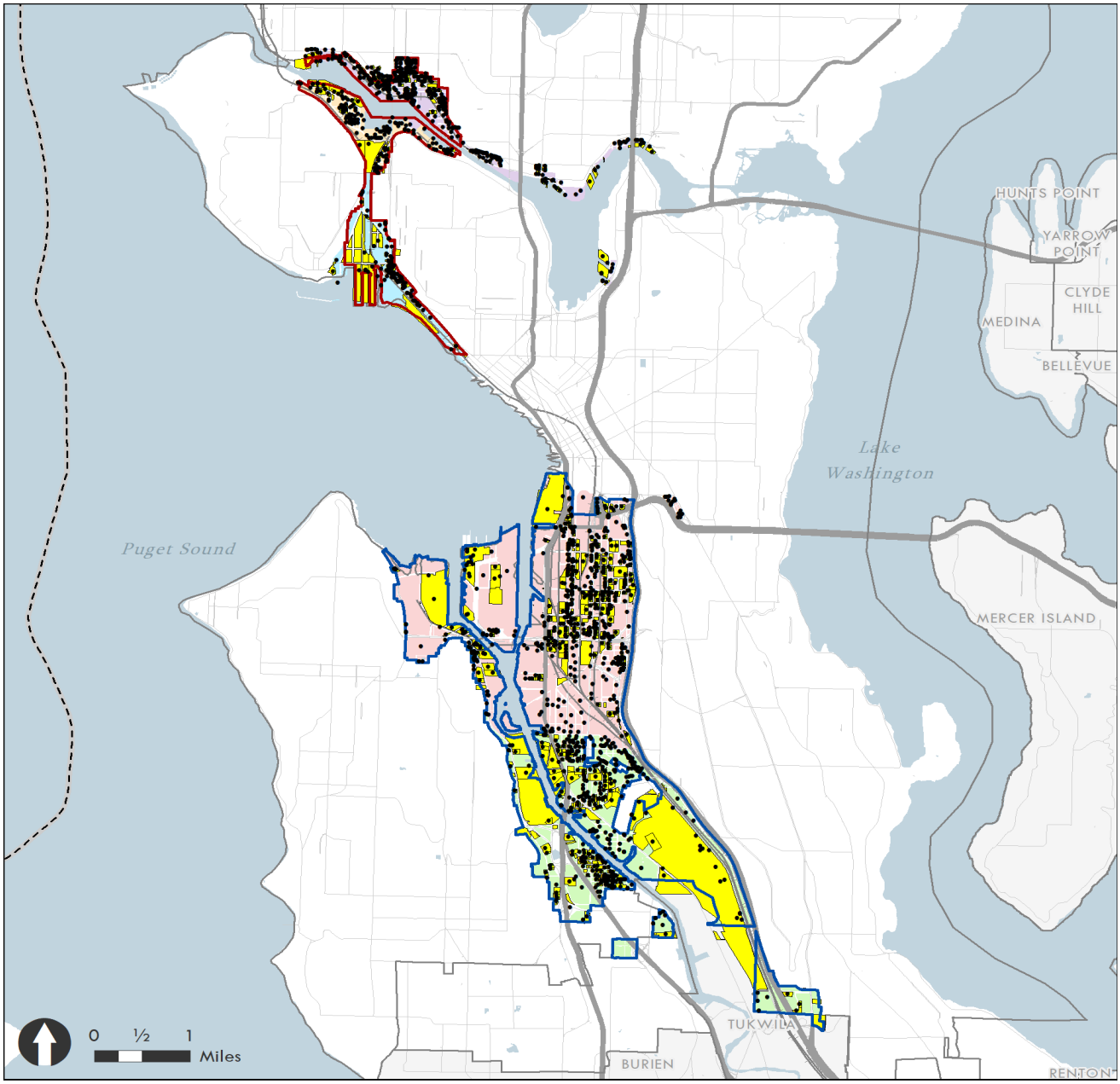
- Ballard
- Georgetown
- Interbay Dravus
- Interbay Smith Cove
- SoDo Stadium

BERK

Map Date: 12/1/2021

Source: HRA, 2021.

Exhibit - Recorded Historic Period Buildings, Structures, and Objects in the Study Area



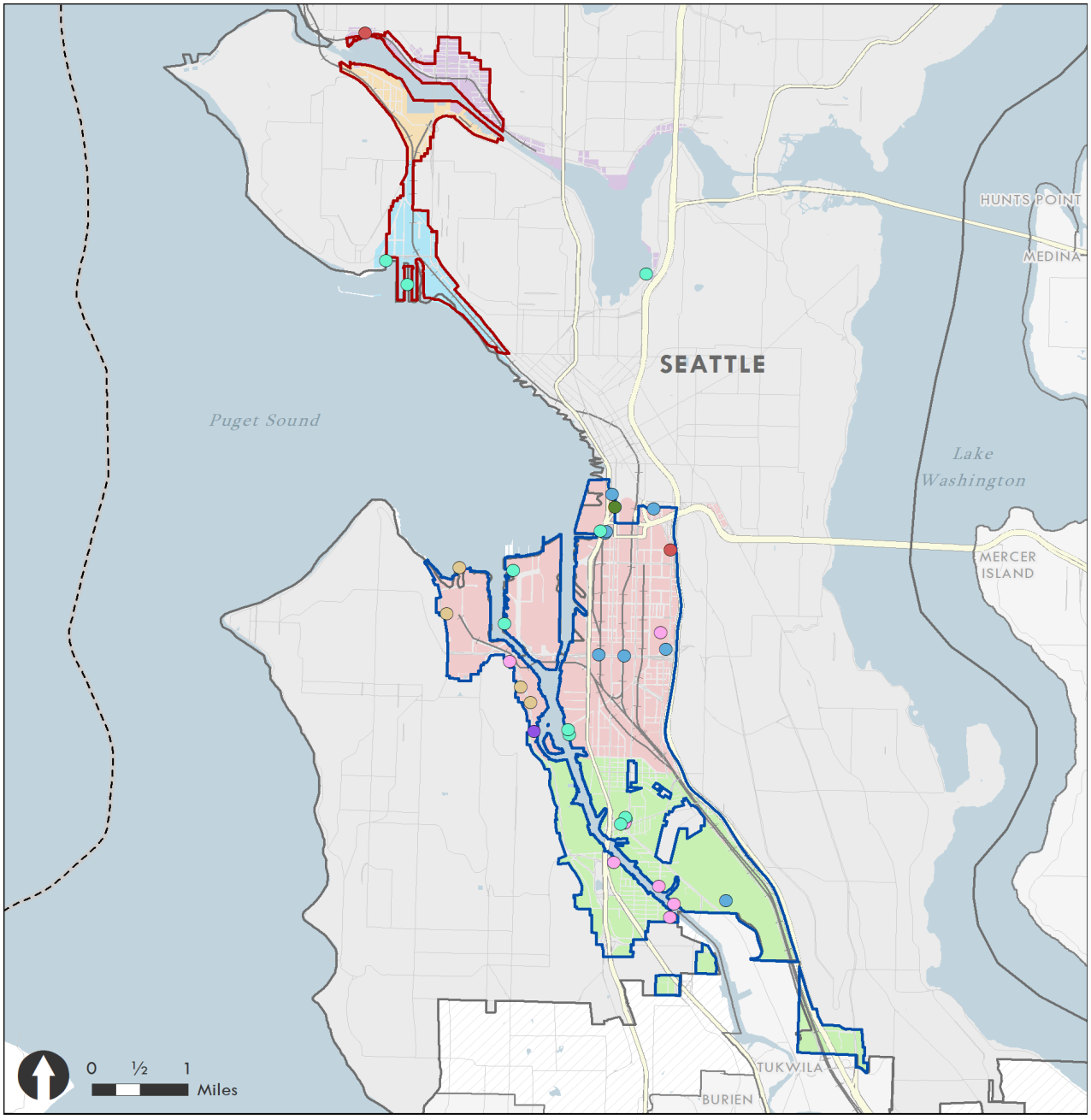
Source: HRA, 2021.

Archaeological Resources

Within the full study area, there are 31 archaeological sites recorded by 83 previous studies that included archaeological investigations **(Exhibit 3.11-3**). One precontact site is listed in the NRHP and WHR, one historic period site has been determined eligible for inclusion in the NRHP, eleven historic period sites have been determined not eligible for inclusion in the NRHP, and the remaining sites, all of which date to the historic period, have not been formally evaluated.

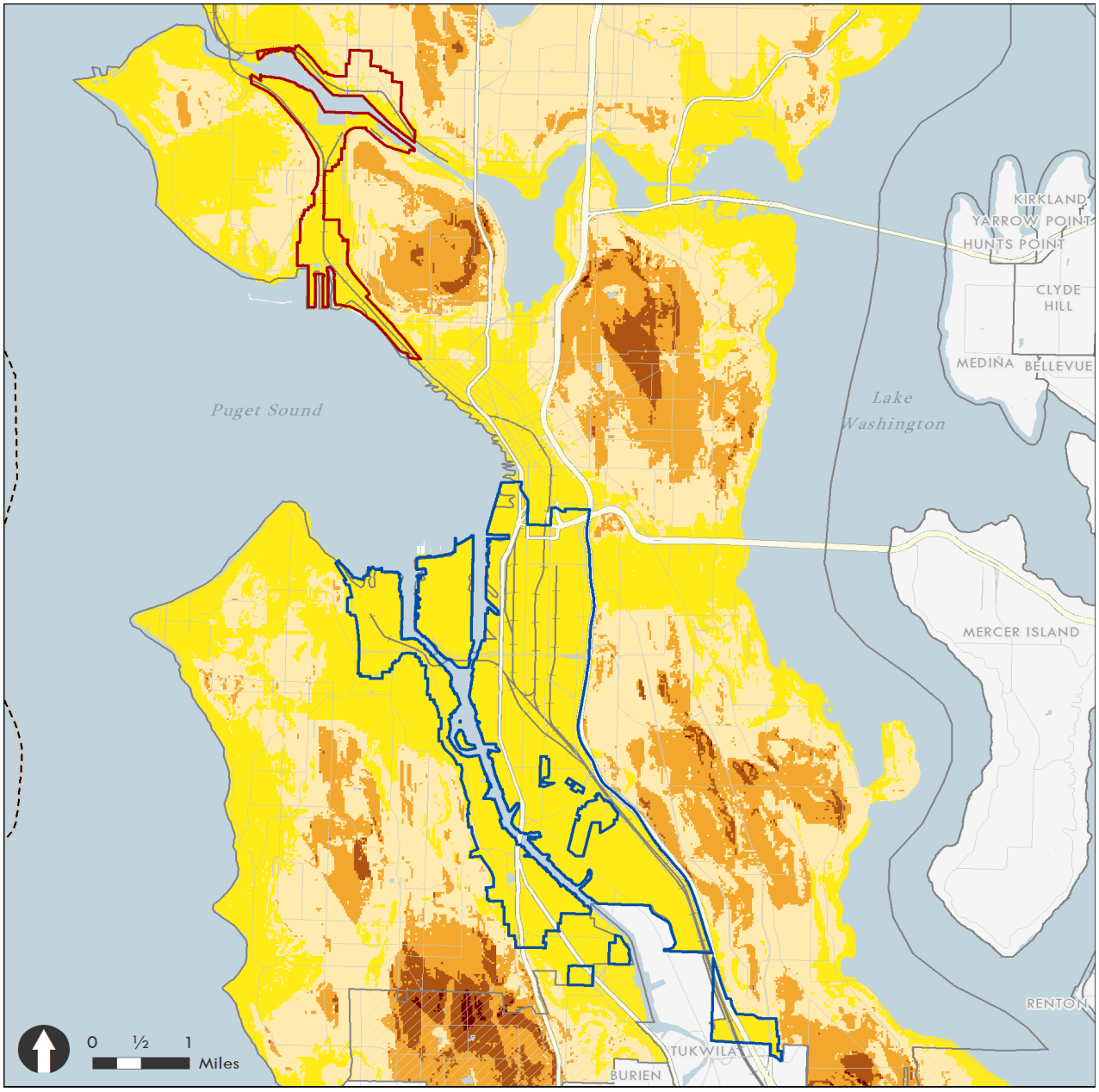
All of the project subareas are considered of High or Very High Risk to contain precontact archaeological resources by DAHP's precontact archaeological site probability model (**Exhibit 3.11-4**).

Exhibit 3.11-3 Recorded Archaeological Resources



Source: HRA, 2021.

Exhibit 3.11-4 Map Showing Archaeological Sensitivity from DAHP Model



Source: HRA, 2021.

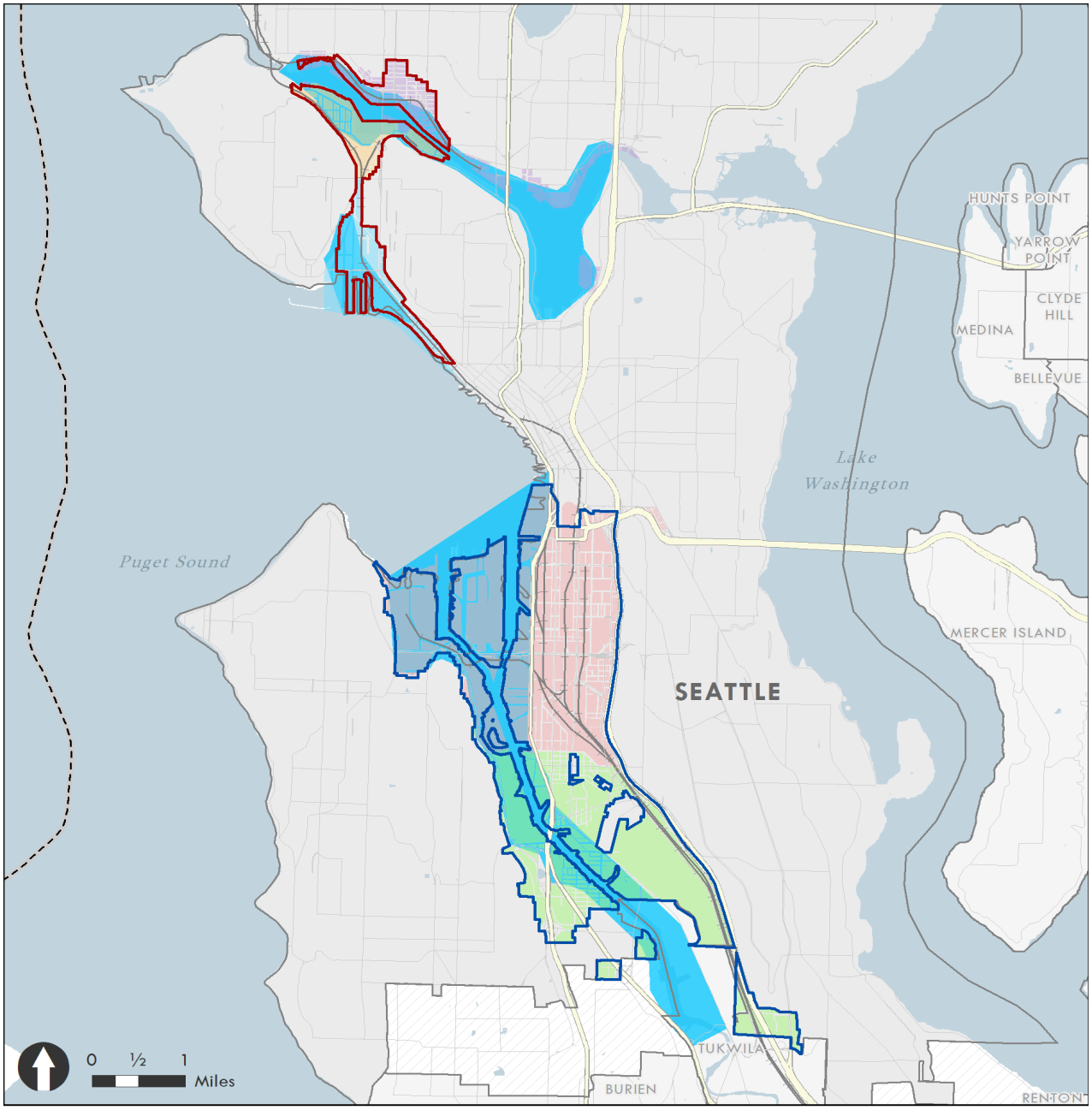
Maritime Washington National Heritage Area

The Maritime Washington National Heritage Area (MW NHA) was designated by Congress in 2019 as a place recognized for its nationally important natural, cultural, historic, and recreational resources, which combine to form a nationally important landscape. The MW NHA stretches along 3,000 miles of coastline from Grays Harbor County to the Canadian border. The MW NHA encompasses 18 federally recognized Tribes, 13 counties, 32 incorporated cities, and 30 port districts in Washington state. The MW NHA is non-regulatory but is controlled by grassroots organizations and is facilitated by the Washington Trust for Historic Preservation (WTHP), Washington's statewide nonprofit historic preservation organization, with technical assistance and funding from the National Park Service (NPS). The MW NHA is a cooperative organization with regional representation that is supportive of tourism and economic development, and functions to build partnerships to support communities in maintaining and sharing their unique resources and telling the stories of those places.

After receiving designation, the WTHP with partners and community stakeholders were tasked with developing a management plan that typically includes an education plan, rehabilitation strategy for historic sites or vessels, a tourism enhancement strategy, a strategy for improvement of local museums, and other related activities. After completion of the management plan, the MW NHA will be able to receive grants and other federal funds, should funding be available.

Exhibit 3.11-5 shows the portion of the MW NHA that occurs within the study area of this EIS. For more information, go to the WTHP website, http://www.preservewa.org/wp-content/uploads/2019/04/NationalMaritimeHeritageAreaStudy.pdf.

Exhibit 3.11-5 Maritime Washington Heritage Area that Occurs Within the Study Area



Source: HRA, 2021.

Ballard

There are three NRHP-listed historic districts and six individually listed resources within or adjacent to the BINMIC, all of which are found in the Ballard Subarea. Also, there is one WHR-listed resource within the area.

The first district is the Ballard Avenue Historic District, which is immediately adjacent to the MIC boundary. The District was designated a Seattle Landmark and listed in the NRHP in 1976. The District is associated with a pattern of events that contributed to the development of Ballard (Criterion A), under the themes of commerce, industry, politics/government, and transportation, and the District embodies the distinctive characteristics of modest commercial architecture (Criterion C), with a period of significance 1890–1930, and, when nominated, contained around 50 contributing resources.

The second is the Chittenden Locks and Lake Washington Ship Canal Historic District, which was listed in the NRHP in 1978. With a period of significance of 1906–1917, the District is significant under Criterion A for its contributions to commerce and politics/government, and under Criterion C under the themes landscape engineering, engineering, and architecture. The District encompasses about 16 contributing resources, including the dam, double locks, channels, and various associated accessory buildings/structures.

The third NRHP-listed historic district is the Gas Works Park Historic Landscape, which was listed was listed in 2013 with a period of significance 1950–1974, and 1975–2000. The landscape is significant under Criterion A, for the theme of industry, and under Criterion C under the themes of landscape architecture/engineering. The District contains 20 contributing resources, including sites, structures, objects, and buildings such as the north lawn, concrete railroad trestle, tanks, generator towers, the Foamite house, and others.

Also found within the Ballard Subarea is the NRHP-listed Ballard Bridge. Listed in 1982 under the Historic Bridges and Tunnels in Washington State Multiple Property Documentation form (MPD), the Ballard Bridge is significant under Criterion A for its contributions to transportation and under Criterion C under the theme of engineering as a double-leaf bascule bridge. The bridge has a period of significance of 1900–1924.

Three additional bridges adjacent to the Ballard Subarea were listed in the NRHP under the Historic Bridges and Tunnels in Washington State MPD in 1982. They are the University Bridge (1919), under Criterion C under the theme of engineering as a double-leaf trunnion bascule bridge; the Fremont Bridge (1919), under Criterion C under the theme of engineering as a double-leaf trunnion bascule bridge; and Aurora Avenue Bridge (1931), under Criterion C under the theme of engineering as a cantilever truss bridge.

Two ships in the Ballard Subarea were listed in the NRHP. One is the *Wawona* schooner (1897), which was listed in 1977 under Criterion A for the themes of commerce, industry, and maritime transportation. The second is the *Zodiac* schooner (1924), which was listed in 1982, under Criterion C, for its architectural significance.

Listed in the WHR in 2001, was the tugboat, *Chickamauga*, with its period of significance 1915, the year it was built. The ship was listed for its significance related to events as first diesel powered tugboat in the U.S. (Criterion 3), for its association with Arthur McNealy (Criterion 6), for its engineering as a representative example of the transition from steam to diesel power (Criterion 7), and for its design by Leslie Edward "Ted" Geary (Criterion 8).

King County Tax Assessor records show that within the Ballard Subarea, there are 156 historic-period buildings. Of these, 141 are commercial/industrial buildings, while the remaining 15 are residential buildings.

DAHP records show 274 individual historic-period architectural resources have been documented on HPI forms within the Ballard Subarea. Of these, only 9 were determined eligible for listing in the NRHP.

DAHP records show seven cultural resources studies that included archaeological resources investigations have been conducted within the Ballard Subarea. Two sites were recorded by these studies.

Interbay Dravus

There are two NRHP-listed resources found partially within the boundaries of the Interbay Dravus Subarea of the BINMIC. They are the aforementioned Chittenden Locks and Lake Washington Ship Canal Historic District, and the southern end of the NRHP-listed Ballard Bridge. Also found in the Interbay Dravus Subarea is one SL designated building, Alexander Hall.

According to the King County Tax Assessor, within the Interbay Dravus Subarea, there are 56 historic-period buildings, all of which are commercial or industrial buildings. DAHP records show 141 individual historic-period architectural resources have been recorded on HPI forms within the Interbay Dravus Subarea. Of these, 2 were determined eligible for listing in the NRHP.

DAHP records show three cultural resources studies that included archaeological resources investigations have been conducted within the Interbay Dravus Subarea. No sites were recorded by these studies.

Interbay Smith Cove

There are five SL-designated historic-period architectural resources within the Interbay Smith Cove Subarea of the BINMIC. These are the 14th Avenue W Group and include 2000, 2006, 2010, 2014, and 2016 14th Avenue W. There are no NRHP-, NHL-, or WHR/WHBR-listed architectural resources in this Subarea. Adjacent to the Interbay Smith Cove Subarea is one NRHP-listed architectural resource, the Admiral's House, 13th Naval District (Quarters A). Listed in 2013, the Admiral's House is significant under Criterion A, for its association with the U.S.

Navy and its role in Seattle, and under Criterion C, as a representative example of the Colonial Revival style. The property has a period of significance of 1944–1960.

According to the King County Tax Assessor, within the Interbay Smith Cove Subarea, there are 35 historic-period buildings, of which, 23 are commercial or industrial buildings, and the remaining 12 are residential buildings. DAHP records show 96 individual historic-period architectural resources have been documented on HPI forms within the Interbay Smith Cove Subarea. Of these, 8 were determined eligible for listing in the NRHP.

DAHP records show seven cultural resources studies that included archaeological resources investigations have been conducted within the Smith Cove Subarea. Two historic period sites were recorded, but the sites have not been formally evaluated.

SODO/Stadium

Within the boundaries of the SODO/Stadium Subarea are nine historic properties listed in the various registers. Listed in 1976 in both the NRHP and SL is the Triangle Hotel and Bar, also known as the Flatiron Building. The building is significant under Criterion A for commerce and Criterion C for architecture, with a period of significance 1909–1910. The A. L. Palmer Building was listed in the NRHP in 2008 for its contributions to commerce and industry (Criterion A) and under the theme of architecture (Criterion C), with a period of significance of 1910. The Bay View Brewery was listed in the NRHP in 2013, under Criterion A for commerce and industry, Criterion B for its association with brewery owners and operators, Andrew Hemrich and Emil Sick, and Criterion C for architecture. The building's period of significance is 1886–1962. The Ford Motor Company Assembly Plant is also found in this subarea. Listed in 2013, this resource is significant for its contributions to industry and commerce (Criterion A), and for its architecture (Criterion C). The building has a period of significance of 1932, the date of its initial construction.

There are two WHR-listed architectural resources in the SODO/Stadium Subarea. One is the First Service Station Site, which was listed in 1970, as the World's First Service Station. It was listed under Criterion A, for commerce, industry, and transportation, with a period of significance of 1907, the date of its initial construction. The second is the *USS Nebraska* Launching (1904) and Skinner and Eddy Shipyard (1916–1920), which was listed in the WHR in 1970 for its significant contributions to Maritime and Naval history, industry, and transportation (Criterion A), and for engineering (Criterion C).

The SODO/Stadium Subarea also contains three SL-designated resources, including Fire Station #14, the Duwamish Railroad Bridge, and the Flatiron Building. Additionally, located immediately adjacent to the northern boundary of the SODO/Stadium Subarea of the Greater Duwamish MIC is the Pioneer Square Preservation District, an SL-designated district.

According to the King County Tax Assessor, within this subarea, there are 331 historic-period buildings, 310 of which are commercial or industrial buildings, and the remaining 21 are residential buildings. DAHP records show 620 individual historic-period architectural resources

have been documented on DAHP HPI forms within the SODO/Stadium Subarea. Of these, 38 were determined eligible for listing in the NRHP.

DAHP records show 40 cultural resources studies that included archaeological resources investigations within the SODO/Stadium Subarea. One precontact site, a 2.25-acre shell midden site, was discovered in 1975 when the landowner demolished houses on a portion of the site. Subsequent archaeological investigations led to the site being listed in the NRHP and WHR. The current Duwamish longhouse is located in the vicinity of this site (see **Exhibit 3.8-9**). Of the 15 historic period sites recorded, one has been determined eligible for inclusion in the NRHP and the WHR, nine have been determined not eligible for inclusion in the NRHP or the WHR, and five sites have not been formally evaluated.

Georgetown/South Park

Within the boundaries of the Georgetown/South Park Subarea are three historic properties listed in the NRHP and WHR. The Seattle Electric Company Georgetown Steam Plant was listed in the NRHP in 1978, for its significant contributions to the theme of engineering under Criterion C. Built in 1906, the property has a period of significance of 1900–1924. The property achieved NHL status in 1984. Listed in the WHR, are the Maple Donation Claim and Gorst Field. The Maple Donation Claim was listed in the WHR in 1970 for its significant contributions to local history (Criterion A), with a period of significance of 1851, the date the Donation Land Claim was staked. The final historic property in this subarea is Gorst Field. Listed in 1970 in the WHR, Gorst Field is significant for its contributions to commerce, industry, and transportation under Criterion A, and engineering under Criterion C. The field had a period of significance of 1920–1928.

According to the King County Tax Assessor, within this subarea, there are 286 historic-period buildings—219 of these are commercial or industrial buildings, and the remaining 67 are residential buildings. DAHP records show 434 individual historic-period architectural resources have been documented on HPI forms within or immediately adjacent to the Georgetown/South Park Subarea. Of these, 15 were determined eligible for listing in the NRHP.

DAHP records show 26 cultural resources studies that included archaeological resources investigations have been conducted within the Georgetown/South Park Subarea. Eleven historic period sites have been recorded, two of which have been determined not eligible for inclusion in the NRHP or the WHR, and the remaining have not been formally evaluated.

3.11.2 Impacts

This section considers the impacts of the alternatives on historic, archaeological, and cultural resources within the study area.

Impacts Common to All Alternatives

Full Study Area

All the alternatives have the potential to affect districts, sites, buildings, structures, or objects (BSOs) that have been listed in the NRHP and other historic registers, including the WHR, WHBR, and SL, and those resources that have been determined eligible for listing in the NRHP. Additionally, the alternatives could potentially affect the numerous BSOs and undiscovered archaeological sites that have yet to be surveyed and assessed for potential eligibility to the NRHP.

Impacts to historic, archaeological, and cultural resources in the study areas from the No Action Alternative and three Action Alternatives were identified by assessing potential for both above- and below-ground changes. Such impacts generally include physical alteration, damage, or destruction of all or part of a resource; alteration of the characteristics of the surrounding environment that contribute to the property's significance; and the introduction of visual or audible elements that are out of character with the property. In other words, actions that would alter, directly or indirectly, any of the characteristics of a historic property in such a way that would diminish its integrity of location, design, setting, materials, workmanship, feeing, and association, and would affect its eligibility to qualify for inclusion in the NRHP or other historic registers.

All Action Alternatives would result in the implementation of the Industrial and Maritime Strategy meant to support and retain maritime businesses that contribute to the maritime history of the study area. The strategy supports continued implementation of the Seattle Shoreline Master Program jointly adopted by the City and the Washington Department of Ecology according to the State Shoreline Management Act which promotes ports and shoreline industry, while protecting environmental and cultural resources. See a summary of the strategy in **Exhibit 2.2-2**.

The Action Alternatives also include proposed land use concepts such as incentivizing investments by industrial businesses to expand industrial sites; changes to development and landscaping standards addressing street frontages and parcels; incentivizing development and densification of multi-story buildings; limited caretakers' quarters and makers studios in industrial areas and some areas of mixed-use residential construction in selected locations (see **Exhibit 2.4-4**). Historic-period BSOs located in the study area could be subject to demolition for new construction, incompatible alterations/additions, and inappropriate renovation of existing buildings for reuse under all alternatives. Such demolition and construction projects could require substantial below-ground work, thus negatively and irreversibly impacting below-

ground archaeological and cultural resources. DAHP's archaeological predictive model used to establish probabilities for precontact cultural resources, depicts almost all the land within the MICs as within a Very High Risk area, primarily because of proximity of Puget Sound, Salmon Bay, Lake Union, Elliott Bay, and the Duwamish River, and the use history throughout the precontact and historic periods.

Since development may occur in any location in the study area under any alternative, it is possible that cultural resources could be impacted under each alternative. Changes to zoning that allows a wider range of industrial or non-industrial uses could spur redevelopment in those locations. This could occur, for example, where the Industry and Innovation or Urban Industrial Districts allow for more mixed industrial/office near station areas, or caretakers' quarters and makers studios for live/work options throughout the study area. This could also occur where areas are removed from the MIC and allowed for mixed-use residential near Georgetown and South Park. Even where there are no formally designated historic landmarks, there are numerous properties with historic period buildings, or a very high or high risk of archaeological resources. A qualitative summary of areas of zoning change are listed in **Exhibit 3.11-6** below.

Exhibit 3.11-6 Acres of Zoning or Land Use Concept and Qualitative Relationship to Mapped Cultural Resources

Zoning Districts	Alt 1 Acres	Land Use Concept	Alt 2 Acres	Alt 2 Zone Acres Change Description	Alt 3 Acres	Alt 3 Zone Acres Change Description	Alt 4 Acres	Alt 4 Zone Acres Change Description	Relationship to Mapped Resources
Industrial General (IG1/IG2)	6,273	Maritime, Manufacturing, and Logistics (MML)	6,251	Increase in Ballard near Lock. Small increase near West Marginal Way. Otherwise, similar to IG Zone.	5,968	Increase in Ballard near Lock. Small increase near West Marginal Way. Otherwise, similar to IG Zone. Reduced where UI or II is applied.	6,035	Increase in Ballard near Lock. Small increase near West Marginal Way. Otherwise, similar to IG Zone. Reduced where UI or II is applied.	Some acres of zoning change near listed and mapped resources (e.g., National Register Resources, Historic Period Buildings, and Very/High Risk of Archaeological Sensitivity).
Industrial Buffer (IB)	316	Urban Industrial (UI)	222	Increase/relocation in Interbay Dravus south of Ballard Bridge and near Duwamish River at city limits in South Park. Other UI similar to IB zone location.	426	Increase in Ballard north of Leary and along Lake Washington (e.g., near Gas Works Park). Similar to Alternative 2 UI extent south of Ballard Bridge. Small increase in Interbay Smith Cove. Similar to IB zone extent elsewhere.	279	Greater area of UI than Alternative 2 but less than Alternative 3 in Ballard and Interbay. Similar to Alternative 2 in SODO.	Some acres of zoning change are near or encompass listed and mapped resources (e.g., National Register Resources, Historic Period Buildings, and Very/High Risk of Archaeological Sensitivity).
Industrial Commercial (IC)	347	Industry and Innovation (II)	463	Small area added in Ballard south of NW Market. Area added in SODO area near 4th Avenue. Mostly applied in similar locations as IC zone or in place of IB zone.	516	In Ballard and Interbay, mostly applied in similar locations as IC zone, except where UI is expanded. Expanded in SODO along 1st and 4th Avenues.	600	Increase in Ballard north of Leary Way. Mostly applied in similar locations as IC zone. Greatest expansion in SODO along 1st and 4th Avenues.	Some acres of zoning change are near or encompass listed and mapped resources (e.g., National Register Resources, Historic Period Buildings, and Very/High Risk of Archaeological Sensitivity).
Mixed-Use Commercial				Not applicable.	26	Increased in Georgetown and South Park.	22	Increased in Georgetown and South Park.	Some acres of zoning change are near or encompass listed and mapped resources (e.g., Historic Period Buildings, Recorded Archeological Resources, and Very/High Risk of Archaeological Sensitivity).
Total	**6,936**		**6,936**		**6,936**		**6,936**		

Source: BERK, 2021.

Ballard

All alternatives have the potential to affect the known and unknown historic, archaeological, and cultural resources in the Ballard Subarea. The Ballard Subarea contains three NRHP-listed historic districts and six individually listed resources, one WHR-listed resource, and numerous historic-period buildings, some of which have been documented on HPI forms, and nine of those determined eligible for listing in the NRHP. Due to the area's concentration of historic-period buildings, structures, and objects—many of which have yet to be surveyed—it is plausible that many could be determined eligible for listing in the NRHP and local registers. Two known archaeological sites have been previously recorded in the Ballard Subarea; however, due to the area's very high probability for archaeological and cultural resources, many more unknown sites could be present.

Interbay Dravus

All alternatives have the potential to affect the known and unknown historic, archaeological, and cultural resources in the Interbay Dravus Subarea. The Interbay Dravus Subarea contains a NRHP-listed historic district, an individually listed resource, one SL-designated resource, and numerous historic-period buildings and structures, many of which have been documented on HPI forms, with two of those determined eligible. Due to the area's concentration of historic-period buildings, structures, and objects—many of which have yet to be surveyed—it is plausible that many could be determined eligible for listing in the NRHP and local registers. No archaeological sites have been previously recorded in the Interbay Dravus Subarea; however, due to the area's very high probability for archaeological and cultural resources, many more as yet unknown sites could be present.

Interbay Smith Cove

All alternatives have the potential to affect the known and unknown historic, archaeological, and cultural resources in the Interbay Smith Cove Subarea. While the Interbay Smith Cove Subarea contains no NRHP-, WHR-, WHBR-listed resources, there are five SL-designated historic-period architectural resources within this subarea, and numerous historic-period buildings and structures, many of which have been documented on HPI forms, with eight of those determined eligible. Also, immediately adjacent to the subarea's western boundary is a NRHP-listed resource. Due to the subarea's concentration of historic-period buildings, structures, and objects—many of which have yet to be surveyed—it is plausible that many could be determined eligible for listing in the NRHP and local registers. Two archaeological sites have been previously recorded in the Interbay Smith Cove Subarea but not formally evaluated; however, due to the area's very high probability for archaeological and cultural resources, many more as yet unknown sites could be present.

SODO/Stadium

All alternatives have the potential to affect the known and unknown historic, archaeological, and cultural resources in the SODO/Stadium Subarea. Four NRHP-listed, two WHR-listed, and three SL-designated historic-period architectural resources within the SODO/Stadium Subarea, and numerous historic-period buildings and structures, many of which have been documented on HPI forms, with 38 of those determined eligible. Also, immediately adjacent to the subarea's northern boundary is a SL-designated historic district. Due to the area's concentration of historic-period buildings, structures, and objects—many of which have yet to be surveyed—it is plausible that many could be determined eligible for listing in the NRHP and local registers. One precontact archaeological site was listed in the NRHP and WHR and 16 historic-period sites have been previously recorded in the SODO/Stadium Subarea. One has been determined eligible for the NRHP, nine have been determined not eligible, and five sites have not been formally evaluated. Due to the area's very high probability for archaeological and cultural resources, many more as yet unknown sites could be present.

Georgetown/South Park

All alternatives have the potential to affect the known and unknown historic, archaeological, and cultural resources in the Georgetown/South Park Subarea. The Georgetown/South Park Subarea contains one NRHP-listed resource that has achieved National Historic Landmark (NHL) status, two WHR-listed resources, and numerous historic-period buildings and structures, many of which have been documented on HPI forms, with 15 of those determined eligible. Due to the area's concentration of historic-period buildings, structures, and objects—many of which have yet to be surveyed—it is plausible that many could be determined eligible for listing in the NRHP and local registers. In the Georgetown/South Park Subarea, eleven archaeological sites have been previously recorded, with two determined not eligible and nine not formally evaluated. However, due to the area's very high probability for archaeological and cultural resources, many more as yet unknown sites could be present.

Equity & Environmental Justice Considerations

In 2015, Seattle established the City of Seattle Equity and Environment Initiative (EEI) to address the connection between race and social justice and the environment. The Community Partners Steering Committee (CPSC), working with City staff, defined EEI populations as people of color, immigrants, refugees, people with low incomes, and people with limited-English proficiency (CPSC 2016:1–8). Studies by the National Trust for Historic Preservation (NTHP) have noted that while rezoning and redevelopment can address some of the particular issues in neighborhoods with high EEI populations of historically marginalized communities, such as poor air and water quality, soil contamination, noise pollution, climate change, and unsafe, disconnected, and inaccessible neighborhoods, some of the land use concepts and strategies could lead to adverse impacts of economic displacement, and loss of locally owned small businesses, and potentially loss of fair and affordable housing. Equitable development and redevelopment

should include the voices of the EEI populations to share in the decision-making process (Canaan, et al 2021:54–55; NTHP 2021:10; Rypkema 2004).

See **Chapter 2** for a description of the City's process to develop the Industrial and Maritime Strategy and to engage EEI populations. The scoping and Draft EIS comment periods are an opportunity to gain input from EEI populations as well.

Under all alternatives, should redevelopment occur within high EEI population neighborhoods in the study areas, benefits could be realized such as reinvestment in aging buildings, increased levels of homeownership/business ownership in newly rehabilitated buildings, and renovation/adaptive re-use of vacant and abandoned properties. However, there could also be adverse impacts from these benefits such as rising rents and property taxes, loss of "power" and "ownership" by long-term residents, and rising potential for conflicting priorities between new and long-term residents (Ryberg 2010:265–266; Rypkema 2004). These adverse impacts disproportionately affect EEI populations.

All alternatives have the potential to affect historic and cultural resources in historically marginalized neighborhoods in the study areas, such as the southern end of the Seattle-Chinatown International District, SODO/Industrial District, Highland Park, South Park, Greater Duwamish, and Georgetown (OPCD 2020:2). Specifically, impacts to historic-period architectural resources could occur under all alternatives as a result of alteration, demolition, damage, or destruction. In addition, development under all alternatives could increase the probability of inadvertent discovery of archaeological and cultural resources because of foundation, circulation, and landscaping work.

Additionally, Indigenous populations may lose access to both known and potentially unrecorded cultural or spiritual sites, due to redevelopment on their traditional lands in the study areas. As the locations of such resources are considered restricted information, specifics will not be discussed here without permission from the appropriate Tribes.

Impacts of Alternative 1 No Action

Alternative 1 No Action maintains the status quo within the existing industrial zones, with no changes to current Comprehensive Plan policies, development standards, or zoning. Redevelopment and development projects due to market pressures under Alternative 1 No Action would continue to affect historic, archaeological, and cultural resources, with such impacts as alteration, demolition, damage, or destruction. Alternative 1 No Action includes no additional protections or improvements in planning for consideration of impacts to historic, archaeological, and cultural resources.

Impacts of Alternative 2

Alternative 2 (Future of Industry—Limited) applies the proposed land use concepts of Maritime Manufacturing and Logistics (MML), Industry and Innovation (II) and Urban Industrial (UI).

Typically, the II and UI are located in places where similar IC and IB zoning is applied today but with expanded use allowances and development standards. These new II and UI zones could incentivize development to increase floor area and height limits that would allow construction of dense multi-story buildings. The UI zone would allow adaptive reuse of buildings and adds flexibility for larger size of use for combination industry-retail or industry-office space. Additionally, Alternative 2 expands non-industrial ancillary uses and reduces stand-alone non-industrial size of use limits. Some areas of zoning change include increased or altered boundaries of the UI zone in the Interbay Dravus area south of the Ballard Bridge, and near the Duwamish River near South Park. The II zone is added in Ballard south of NW Market Street. An area of II is added in SODO area near 4th Avenue S. As mapped in the Affected Environment and described in **Exhibit 3.11-6** some acres of zoning change abut listed historic or recorded archaeological resources or contain mapped resources sensitivity areas (e.g., Historic Period Buildings, and Very/High Risk of Archaeological Sensitivity).

Impacts to historic, archaeological, and cultural resources could occur under Alternative 2 as a result of alteration, demolition, damage, or destruction. In addition, development under Alternative 2 could increase the probability of inadvertent discovery of archaeological and cultural resources as compared to Alternative 1 No Action because of substantial foundation work needed for multi-story buildings. Additionally, without design guidelines, preservation incentives, or review, allowed adaptive reuse projects could impact historic-period architectural resources by allowing for inappropriate alterations, changes, additions, and loss of character-defining features and historic building materials. However, appropriate adaptive reuse projects guided by the *Secretary of the Interior Standards for Rehabilitation* or new city-level rehabilitation guidelines and incentives, could save some historic-period architectural resources from demolition.

Impacts of Alternative 3

Alternative 3 (Future of Industry—Targeted) also applies the MML, II, and UI land use concepts, but with a greater share than Alternative 2. This includes 7% of the land area and up to 0.50 mi around transit stations, expanding the transition area in Ballard, removing small nodes of land in Georgetown/South Park from the MIC for rezoning to mixed-use to advance community goals, allows lodging, and expands limited industry-supporting housing (610 units), such as new caretaker's quarters, makers studios, and existing non-conforming housing. Additionally, Alternative 3 expands non-industrial ancillary uses and reduces stand-alone non-industrial size of use limits.

Impacts to historic, archaeological, and cultural resources from alteration, demolition, damage, or destruction under Alternative 3 are similar to Alternative 2. Like Alternative 2, development under Alternative 3 could increase the probability of inadvertent discovery of archaeological and cultural resources as compared to Alternative 1 No Action because of substantial foundation work needed for new development and multi-story buildings.

Some areas of UI would increase in Ballard north of Leary Way NW and along Lake Washington (e.g., near Gas Works Park). Similar to Alternative 2 the UI would extend south of Ballard Bridge.

There is a small increase in Interbay Smith Cove. The II is expanded in SODO along 1st and 4th Avenues. These areas of change are near or encompass listed and mapped resources sensitivity areas (e.g., National Register Resources, Historic Period Buildings, and Very/High Risk of Archaeological Sensitivity).

Industry-supporting housing and those areas in the Georgetown/South Park Subarea removed from the MIC to allow for mixed-use—especially in those historic commercial areas rezoned to Seattle Mixed where few surveys have been done—could also add to demolitions of historic-period architectural resources. The areas of zoning change to Seattle Mixed are in areas mapped with Historic Period Buildings, Recorded Archeological Resources, and Very/High Risk of Archaeological Sensitivity. A 2014 Georgetown survey noted that the great majority of the historic residential and commercial properties exhibit some degree of alteration; however, they remain generally intact and continue to convey historic character (Krafft 2015).

Additionally, without design guidelines, incentives, and project review, allowed adaptive reuse projects could impact historic-period architectural resources by allowing for inappropriate alterations, changes, additions, and loss of character-defining features and historic building materials.

Impacts of Alternative 4

Alternative 4 (Future of Industry—Expanded) also applies the MML, II, and UI land use concepts of, but with a greater share than Alternative 3, and includes 8% of the land area and wider than 0.50 mi around transit stations including land near potential stations Ballard ST3 and Stadium ST3, expanding the transition area in the Stadium district, removing small nodes of land in Georgetown/South Park from the MIC and rezoned to mixed-use to advance community goals, and allows all lodging with larger size of use limits. This alternative also allows unlimited market housing in the areas removed from the MIC and industry-supporting housing (2,195 units).

Under Alternative 4, there would be a greater area of UI zoning than Alternative 2 but less than Alternative 3 in Ballard and Interbay. The extent of UI zoning would be similar to Alternative 2 in SODO. There would be an increase in II in Ballard north of Leary Way. II is mostly applied in similar locations as IC zone. The greatest extent of II is in SODO along 1st and 4th Avenues. Some acres of zoning change are near or encompass listed and mapped resources sensitivity areas (e.g., National Register Resources, Historic Period Buildings, and Very/High Risk of Archaeological Sensitivity).

Impacts to historic, archaeological, and cultural resources from alteration, demolition, damage, or destruction under Alternative 4 are similar to alternatives 2 and 3. Like alternatives 2 and 3, development under Alternative 4 could increase the probability of inadvertent discovery of archaeological and cultural resources as compared to Alternative 1 No Action because of substantial foundation work needed for new development, multi-story buildings, and new housing.

Due to market pressures, unlimited market housing in areas removed from MICs, especially in the Georgetown/South Park Subarea, and industry-supporting housing would invariably add to demolitions of historic-period architectural resources and impacts to archaeological and cultural resources. The greater allowances for caretakers/artist residences under Alternative 4 compared to all other alternatives may result in greater pressure for conversion of properties that may contain historic period structures, or that are mapped as having a high or very high risk of archaeological resources. The MIC reduction areas that would be rezoned to Seattle Mixed are near or encompass listed and mapped resources sensitivity areas (e.g., Historic Period Buildings, Recorded Archeological Resources, and Very/High Risk of Archaeological Sensitivity).

Additionally, without the implementation of design guidelines. Incentives, or project review, allowed adaptive reuse projects could impact historic-period architectural resources by allowing for inappropriate alterations, changes, additions, and loss of character-defining features and historic building materials.

3.11.3 Mitigation Measures

Incorporated Plan Features

The Action Alternatives include some land use concepts that may mitigate adverse impacts to historic, archaeological, and cultural resources, such as expansion of new land use concepts and updates to industrial land use policies to anticipate future innovations and trends that may incentivize adaptive re-use of historic-period architectural resources.

Regulations & Commitments

Federal

Projects implemented under this EIS may require compliance with a number of federal, state, and local regulations, including the National Historic Preservation Act of 1966, as amended, Archaeological Resources Protection Act of 1979, National American Graves Protection and Repatriation Act, National Environmental Protection Act of 1969, as amended, Washington Executive Order 21-02 (formerly 05-05), and the Washington State Environmental Protection Act.

- National Historic Preservation Act (NHPA) of 1966, as amended, commonly referred to as Section 106, has implementing regulations (36 CFR Part 800), that require Federal agencies (or others who have received Federal grants or funds, or a Federal permit or license) to take into account the effects of their undertakings on historic properties, by identifying historic properties, assessing adverse effects, and resolving those adverse effects.
  - The NHPA authorized the NRHP as the program to coordinate and support the Act. To be considered a historic property, resources must be determined eligible for listing in the NRHP by meeting at least one of the four established Criteria of Evaluation and retaining sufficient integrity to express its significance.

  - The National Historic Landmarks (NHL) Program functions to honor historic properties that are nationally and exceptionally significant in American history and culture. Properties must meet one of six NHL Criteria and possess a high degree of integrity.
- Archaeological Resources Protection Act (ARPA) of 1979, protects archaeological resources.
- National American Graves Protection and Repatriation Act (NAGPRA) creates protections for Native American burial sites, remains, and cultural objects.
- National Environmental Protection Act (NEPA) of 1969, as amended, requires federal agencies to assess whether a major federal action has the potential to significantly affect the human environment prior to making decisions. This is done through the preparation of an Environmental Assessment (EA) or an EIS.

State

- Washington Executive 21-02 (formerly 05-05) requires that impacts to cultural resources must be considered as part of any state-funded project or investment and must include consultation with DAHP and with Tribal governments.
- Washington State Environmental Protection Act (SEPA) has a process to identify and analyze environmental impacts to cultural resources associated with governmental decisions such as issuing permits, constructing public facilities, or adopting regulations, policies, and plans. This is accomplished through the SEPA Checklist.
- Washington State Archaeological Sites and Resources Protection Act (RCW 27.53) requires a permit to excavate or remove any archaeological resource located on public or Tribal lands.
- Registration of Historic Archaeological Resources on State-Owned Aquatic Lands (25-46 WAC) establishes to establish registration procedures for previously unreported historic archaeological resources discovered on, in, or under state-owned aquatic lands as provided for in chapter 27.53 RCW.
- The Washington Heritage Register (WHR) is an official state listing of significant sites and properties and is administered by DAHP. The list is honorary and the effects of listing in the WHR are parallel to the NRHP. Properties listed in the NRHP are automatically listed in the WHR.
- The Washington Heritage Barn Register (WHBR) honors the barns of the State that are historically significant. Administered by DAHP, the heritage barn designation allows the property owners access to matching grant funds.

Local

- King County's Historic Preservation Program (HPP) provides a number of preservation-related services including the Regional Preservation Program, Historic Resource Inventory, and the Landmarks Ordinance that is implemented through the county Landmarks Commission to ensure that the historic places, material culture, and traditions that reflect the region's history are preserved. County landmark designation and regulation is limited by law to the unincorporated area. The City of Seattle contracts with the county for archaeological review services (King County 2018).City of Seattle's Historic Preservation Program, through the Seattle Landmarks (SL) program, protects designated landmark sites, buildings, structures,

objects, and districts city wide. Protections of designated landmarks is provided by design review of proposed alterations and the issuance of a Certificate of Approval.

Other Potential Mitigation Measures

When elimination, minimization, or avoidance of impacts to historic, archaeological, and cultural resources is impossible, appropriate and meaningful mitigation should be developed in accordance with DAHP Mitigation Options and Documentation Standards and in coordination with the area's Tribes, the lead agency, and all other consulting parties. Developing a mitigation plan should be an iterative and collaborative process using a diversity of lenses, which results in mitigation that improves the public's understanding and enriches technical knowledge of the impacted resource(s) (Douglass and Manney 2020).

Some examples of mitigation for impacts for architectural resources, might include:

- Preparing DAHP Level I (Historic American Building Survey/Historic American Engineering Record [HABS/HAER]) Documentation.
- Preparing DAHP Level II Documentation.
- Funding to DAHP for improvements to WISAARD to improve mapping of resources.
- Funding City-initiated proactive landmark nominations for properties and potential historic districts identified in new neighborhood surveys.
- Prioritizing City funding for retrofitting Unreinforced Masonry (URM) buildings to those properties that meet eligibility requirements for designation as a landmark or for listing in the National Register of Historic Places.
- Developing of cultural landscape contexts, including within historically marginalized communities.
- Preparing histories of the area including Indigenous perspectives. The City could work with tribes and others to develop context statements. A context statement focused on Historical Planning and Land Use Decisions is drafted in **Section 3.8 Land & Shoreline Use**.
- Funding City-led thematic historic context inventories that focus on marginalized or underrepresented immigrant communities and preparing thematic context statements relating to those resources.
- Conducting neighborhood survey and inventory projects within underrepresented or marginalized communities
- Considering potential impacts to historic resources during development review specifically that are associated with marginalized or underrepresented immigrant communities as part of project level SEPA review, or during the design review process.
- Including development incentives for preservation of architectural resources including adaptive reuse projects in the proposed Urban Industrial zone, such as an exemption from the floor area ration calculation, or flexibility for allowable uses within the structure. Such adaptive reuse projects could follow the *Secretary of the Interior Standards for Rehabilitation* or the City could develop new rehabilitation guidelines for adaptive reuse.

- For alternatives 3 and 4, exploring or studying the possible addition of a new Seattle Landmark District for the mixed-use area of Georgetown.
- Establishing new conservation districts in order to encourage preservation of older structures (referred to in SMC as "character structures"). Establishing Transfer of Development Rights (TDR) programs within new conservation districts to provide incentives for property owners to keep existing character structures.
- Adding regulatory authority to identify resource-specific mitigation before demolition occurs.
- Requiring project proponents to nominate buildings for landmark review when demolition of properties that are over 50 years old is proposed, regardless of City permitting requirements, by modifying the SEPA exemptions thresholds in the Seattle Municipal Code at Table A for section 25.05.800, and Table B for section 25.05.800.

Mitigation for adverse impacts to archaeological or cultural resources, could include:

- Archaeological testing, excavation and data recovery/collection of artifacts, documentation, analysis, and archiving, possibly in a repository for future research.
- Public education and outreach, including interpretive signage and/or a museum exhibit.
- Interpretive signage and educational programs for the National Maritime Heritage Area.
- Development of digital and other media content, including film, to share holistic stories of the impacted resource(s).

3.11.4 Significant Unavoidable Adverse Impacts

All the alternatives have the potential for significant adverse impacts to historic, archaeological, and cultural resources in the MICs. Such impacts can include physical alteration, damage, or destruction of all or part of a resource; alteration of the characteristics of the surrounding environment that contribute to the property's significance; and the introduction of visual or audible elements that are out of character with the property. Such impacts could alter the characteristics of a historic property in such a way as to diminish its integrity thus affecting its eligibility to qualify for inclusion in the NRHP. No additional significant adverse impacts are anticipated under the Action Alternatives as compared to Alternative 1 No Action.

Advanced planning to eliminate, minimize, or avoid impacts to cultural resources is crucial under all of the alternatives. Appropriate mitigation should be established and implemented by coordinating with the area's Tribes, the lead agency, and all other stakeholders and consulting parties in accordance with DAHP Mitigation Options and Documentation Standards. The ultimate outcome of such mitigation is to moderate the adverse impacts to historic, archaeological, or cultural resources before they are lost or significantly altered. With mitigation, significant impacts to historic, archaeological, and cultural resources can be avoided.