

Government Island Management Plan



March 2021

Land Acknowledgement

We acknowledge that the Port of Portland is located on lands that have been occupied and stewarded since time immemorial by people from the Bands of Chinook, Clackamas, Cowlitz, Kalapuya, Kathlamet, Multnomah, Molalla, Tualatin, and Wasco.

Many other indigenous peoples have their homes in, travel through, harvest and use the plentiful natural resources of the Columbia River, Willamette River, and the other lands and waters within the Port's district.

The Port of Portland respects the history of the federally recognized sovereign Tribal Nations of the Northwest, whose people were forcibly dispossessed and removed from their homes and lands by the United States government following treaties entered into between 1851 and 1855.

And we are committed to recognizing the ongoing relationship that exists between indigenous peoples and these places.



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ABBREVIATIONS

AAHU Average Annual Habitat Units (associated with HEP)

BPA Bonneville Power Administration

Bti- *Bacillus thuringiensis* subspecies *israelensis*

City City of Portland

Corps United States Army Corps of Engineers

CREST Columbia River Estuary Study Taskforce

DEI Diversity, Equity, and Inclusion

DSL Oregon Department of State Lands

FAA Federal Aviation Administration

HEP Habitat Evaluation Procedure

IGA Intergovernmental Agreement

MCVC Multnomah County Vector Control

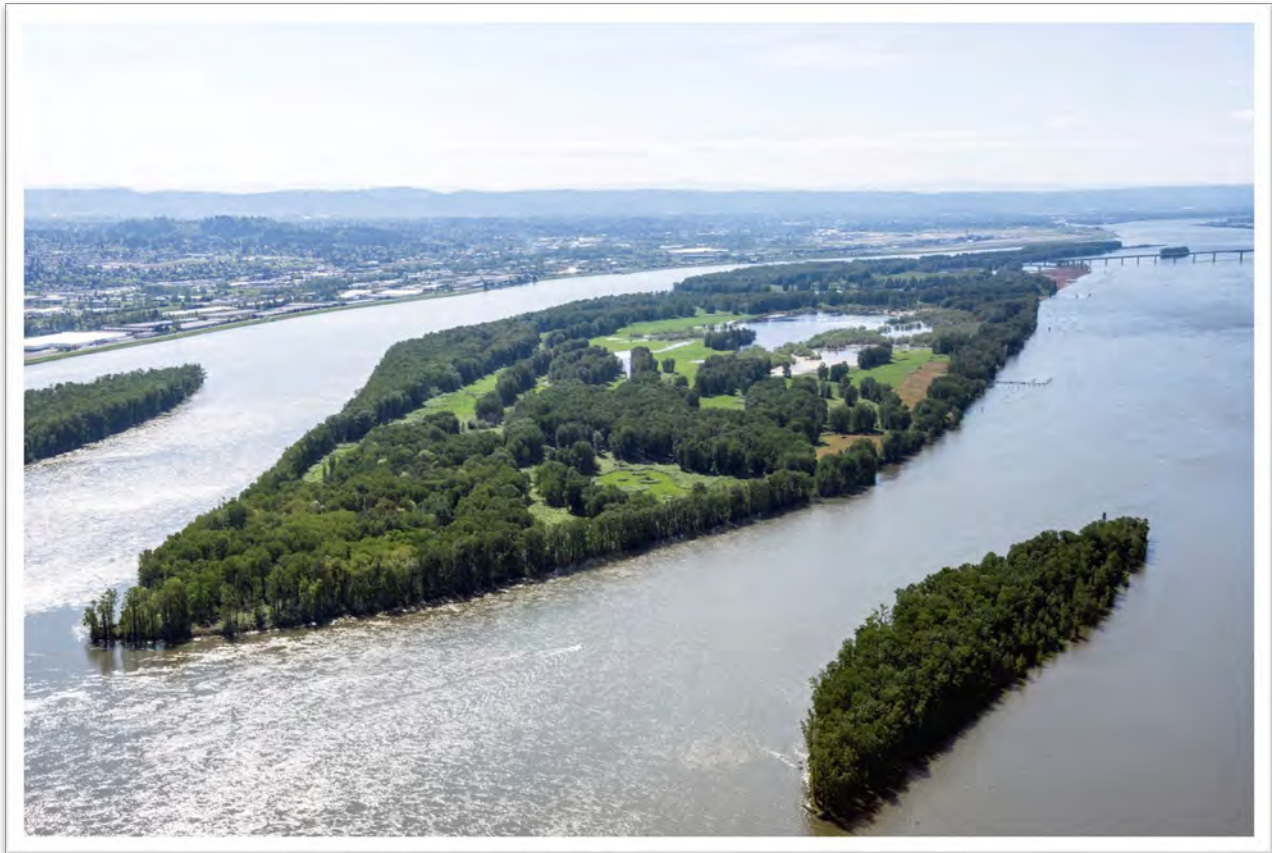
MOA Memorandum of Agreement

MYC Multnomah Youth Corps

NOAA National Oceanic and Atmospheric Administration

NRI Natural Resource Inventory

NWYC Northwest Youth Corps
ODFW Oregon Department of Fish and Wildlife
ODOT Oregon Department of Transportation
OPRD Oregon Parks and Recreation Department
ORBIC Oregon Biodiversity Information Center
OSMB Oregon State Marine Board
PDX Portland International Airport
Port Port of Portland
USACE United States Army Corps of Engineers
USCG United States Coast Guard



GOVERNMENT ISLAND MANAGEMENT PLAN

Introduction

Purpose

Government, Lemon and McGuire Islands are part of an island complex located in the Columbia River, northeast of the Portland International Airport. These islands are owned by the Port of Portland (Port). In 2002, the *Government Island Management Plan* was developed for the Port to guide management decisions and activities. Since 2002 there have been many changes to the islands and the Port's priorities, necessitating an update to the management plan. This updated management plan reevaluates management needs through a conservation lens as natural resources conservation has been determined to be the highest and best use for these lands.

The purpose of the management plan is to establish clear management goals, objectives and conservation targets against which all activities proposed for the islands will be managed. This management plan provides a framework to facilitate agency/organization coordination and resource protection and enhancement. It is expected that this plan will be updated every ten years, or as needed, and that the management goals, objectives, conservation targets and potential projects will be reevaluated to consider the latest best available science and adaptive management practices.

Property Information

Lemon, McGuire and Government Islands are located in the Columbia River between River Miles 112 and 118 in Multnomah County, Oregon. They were acquired by the Port in 1969 from the Oregon State Game Commission for the purpose of airport expansion. Although the islands were not purchased using FAA funds, they are included in the airport layout plan, in which certain activities are subject to FAA approval.

The Government Island complex is made up of a series of seven islands: Government, Lemon, McGuire, Tri-club, Ackerman and two unnamed islands (one of which is connected to a tax lot of McGuire Island). Government Island is the largest (approximately 1,927 acres) and is connected by a land bridge throughout most of the year to Lemon Island (approximately 97 acres) located downstream. McGuire Island (approximately 170 acres) is on the upstream end of Government Island on the left bank of the river, south of the eastern end of Government Island. Island areas provided were based on Multnomah County tax lot data available at the time of this report. The other islands are not addressed in this management plan as they are not owned by the Port. See Figure 1: Government Island Overview.

The islands are a popular boating and camping destination during the summer months. However, public use is restricted to the perimeter below the vegetation line and in a few upland areas where a picnic shelter and tables have been installed. Access to the interior of the island is restricted to authorized personnel from the OPRD, the Port and its contractors. A permit and right of entry must be obtained from the Port for third party access to the interior of the islands for specific proposed projects or activities.

The Government Island complex is zoned as Exclusive Farm Use District by Multnomah County (the islands are outside of the City of Portland boundary). The purpose of the Exclusive Farm Use District are to preserve and maintain agricultural lands for farm use consistent with existing and future needs for agricultural products, forests and open spaces; to conserve and protect scenic and wildlife resources, to maintain and improve the quality of the air, water and land resources of the County and to establish criteria and standards for farm uses and related and compatible uses which are deemed appropriate (Multnomah County Land Use Planning 2020).

History

The lower Columbia River was once home to people from the Bands of Chinook, Clackamas, Kathlamet, Multnomah and others whose villages were encountered by explorers, traders, missionaries and settlers during the first half of the nineteenth century (Zenk 2016). In addition, people from other northwest Tribes frequently used the lower Columbia River for travel, fishing, and trade. The villages of the Neerchokioo and Nechakolee peoples resided in closest proximity to Government Island on the south shore of the Columbia River across from the island at opposite ends (Ellis 2013). On November 3, 1805, Lewis and Clark camped on Government Island which they named “Dimond Island” due to its shape. They described the island in their journals as “mostly prairie with a large pond full of swans, geese and ducks”. In April of 1806 the Lewis and Clark party was back in the vicinity of Government Island where they encountered members of the villages Neerchokioo and Nechakolee, the latter of which was likely located where Blue Lake Park is today. The Journals of Lewis and Clark, cited here, include many observations of fishing, hunting of deer and elk and the gathering of wapato by the native peoples in the vicinity of Government Island (University of Nebraska 2005).

The islands were surveyed in 1841; the nautical chart from this survey shows that Government Island was once divided into three separate islands called Romer, Sandy, and Douglass; Lemon Island was called Smith and McGuire Island was not visible on the survey (Figure 2: 1841 Nautical Chart). In February 1850 the U.S. government reserved Romer, Sandy, and Douglass Islands to raise hay for government horses at Fort Vancouver; from then forward they were called Government Island (McArthur et. al. 2003). In 1902 the U.S. Coast and Geodetic Survey surveyed the island complex; by that time natural sedimentation processes had merged the three islands; forest and marsh habitat were configured similar to current conditions (Figure 3: 1902 USCGS Survey).

Historic studies provide a partial history of the islands from the late 1800’s to present time. A historic evaluation of the Hood Ranch on Government Island conducted by OPRD (Curtis 2007) concluded that there was at least one ranch on the island by 1870, and by the 1930’s there were five families living on the island. In the 1950’s the Oregon State Game Commission purchased and began managing the islands. McGuire, Lemon and Government Islands were acquired by the Port from the Oregon Game Commission in 1969. The escalation of island use by boaters and campers prompted the Port to enter into a 99-year ground lease with OPRD in 1999, which was terminated and replaced with a management agreement between the Port and OPRD in 2016. In 1999 Metro purchased a 224-acre parcel located at the eastern tip of Government Island; the Port reacquired that parcel from Metro in 2019.

Prior to dredging, damming and the construction of levees in the Columbia River, the adjacent floodplains and islands were inundated annually during winter floods and spring freshets. The islands provided elevated areas on the numerous shoals in the Columbia River. Survey maps from the mid-1800s show that the river in the Portland-Vancouver reach was a complex of shallow shoals and bars,

with no clear navigable channel. The average depth of the river was 8 feet prior to the formation of a channel dredging association by citizens of Vancouver which eventually became the Port of Vancouver. The Port of Portland was created in 1891 to dredge a shipping channel from Portland to the ocean. A portion of the material dredged from the Columbia River by the Port and the U.S. Army Corps of Engineers was placed on Government and Lemon Islands from 1958 to 1984. See Figures 4a-4d: Historical Aerials.



Historic image showing Hood family herding cattle on the ranch 1939-40. Photo from the collection of Muriel Cushman as provided in Curtis, 2007.

Historic image showing barn, silo and outbuilding at Hood Ranch ca. 1940. From the collection of Muriel Cushman as provided in Curtis, 2007.



Historic image of Hood Place #1 during the flood of 1948 (Vanport Flood). Photo from the collection of Muriel Cushman as provided in Curtis, 2007.

Table 1: Historic Timeline

YEAR	EVENTS
Precontact History	Indigenous peoples lived, hunted, fished and gathered food and materials in the vicinity of Government Island
1805	Lewis and Clark camped on Government Island referring to it as "Dimond island" due to its shape ¹
1841	U.S. Government completed survey of the island complex
1850	U.S. Government reserved the island for hay production
1891	Port of Portland was created to dredge shipping channel
1902	U.S. Coast and Geodetic Survey completed a survey of the island complex
1948	Major flood event coined the "Vanport Flood"
1950	Oregon State Game Commission purchased Hood family ranch on the island
1958	USACE began placing dredged material on Government and Lemon Islands
1969	Port purchased McGuire, Government and Lemon islands from the Oregon State Game Commission to use for future airport development at PDX that was never realized.
1984	Last known year that dredged material was placed on Government Island east of I-205 bridge
1993	Jewett channel weir installed in conjunction with establishment of Jewett Lake Wetland Mitigation site
1996	Major flood (River Stage reached 26 feet)
1999	Metro purchased the 224-acre parcel located at the eastern end of Government Island
1999	OPRD entered into a 99-year ground lease with Port of Portland to manage recreation
2000	Port first mapped vegetation communities of the island complex
2000	Regulating agencies released the Port of further obligations related to Jewett Lake Wetland Mitigation site
2002	Port developed first Government Island Management Plan
2007	Port completed Natural Resources Inventory of Government Island
2009	Cattle removed from islands in December and barged to Sauvie Island for transport
2015	Port seeded 50-acre Phase I Grassland Enhancement Project
2016	OPRD and Port terminate ground lease, and enter into Management Agreement to manage recreation and public access to Government Island
2019	Port took ownership of 224-acres Metro parcel located at the eastern end of Government Island
2019	Jewett channel weir removed as part of the CREST Project
2020	Port submitted final annual report for Phase I Grassland Enhancement Project

Ecological Context and Natural Resources

The Government Island complex is typical of lower Columbia River islands that have had multiple uses since the influx of European settlers in the nineteenth century. The wetland, riparian and upland

¹ At the time Lewis and Clark explored this area, what is now called Government Island was several smaller islands including Dimond Island and White Goose Island.

habitats are a mixture of native and non-native plant species; some of these vegetation communities, such as the cottonwood forest, are relics of historic conditions (i.e. pre-dam hydrology).

The seasonally inundated depositional areas, or fluvial surfaces, represented by in-channel bars, shoals, islands, and floodplains adjacent to the channel provided the conditions required for establishment of floodplain vegetation communities dominated by black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), willows (*Salix* sp.), Oregon ash (*Fraxinus latifolia*) and other species. These extensive floodplain areas provided abundant habitat for the fish and wildlife communities of the lower Columbia River. These areas were important rearing habitats for juvenile salmonids and may have provided spawning habitat for some salmonid species.

The ecology of the islands has been impacted and altered by historical agriculture, grazing, damming, diking, dredging and disposal of dredged materials on island shores. Currently, the lower Columbia River has a greatly reduced area of functional floodplain that provides the habitats previously described. Former fluvial surfaces are now typically above high water as a result of changes to the annual river hydrograph resulting from river regulation via dams and isolation of former floodplains by diking and filling. Seasonally wet fluvial surfaces in and along the river are now scarce compared to 150 years ago and large areas of non-native invasive plant species, such as Himalayan blackberry (*Rubus armeniacus*) and reed canarygrass (*Phalaris arundinacea*) now occupy areas once dominated by native floodplain vegetation.

Today's island configuration and habitats are influenced by Columbia River levels, which are higher than they were historically and higher during the winter and spring. Higher river levels in some years inundate island edges, a narrow low-lying area through the downstream end of Government Island, and the interior Jewett Lake. This occasional seasonal inundation supports certain wetland habitats on the island and provides habitat for fish and waterfowl species.

Vegetation Communities

The island complex contains a mosaic of vegetation communities typical of the Columbia River floodplain. Deciduous cottonwood, ash and willow stands cover much of the island with abandoned pasture, wetlands and blackberry thickets making up the remainder. Low lying areas of the island, prone to regular flooding and inundation are characterized by emergent wetlands surrounded by wet meadow or forested wetlands, off-channel riverine systems and remnant sloughs. These low-lying riparian areas adjacent to the river support greater densities of ash and willow as do the lower elevation areas of forested wetlands throughout the interior of the island. Large swaths, historically used for agriculture and grazing, remain open and are dominated by non-native pasture grasses, broadleaf weeds and encroaching blackberry. Areas of higher elevation are generally upland prairie or upland deciduous forests. The island's vegetation communities can be classified into several broad generalized types described below. The Port NRI (2007) has a much more detailed breakdown (see Figure 5: Natural Resource Inventory and Appendix A).

Emergent / Aquatic - approximately 123 acres: The emergent / aquatic community contains surface water for approximately 9-12 months of the year that reaches up to 6.5 feet deep. Water gradually becomes shallower to dry from August through October or until the fall rainy season begins. Vegetation is dominated by water smartweed (*Polygonum amphibium*), common spikerush (*Eleocharis palustris*),

water milfoil (*Myriophyllum species*) and pondweed (*Potamogeton* spp.). It also includes softstem bulrush (*Schoenoplectus tabernaemontani*), wapato (*Sagittaria latifolia*), bur-reed (*Sparganium emersum*), hairy waterclover (*Marsilea vestita*), broad-leaf cattail (*Typha latifolia*), marsh seedbox (*Ludwigia palustris*) and rough cocklebur (*Xanthium strumarium*).

Emergent Wetland - approximately 118 acres: The emergent wetland community is typically dominated by reed canarygrass. This community contains surface water for approximately 7-9 months of the year that is up to 4 feet deep. Other common species include Columbia sedge (*Carex aperta*), slough sedge (*Carex obnupta*), knotgrass (*Paspalum distichum*), spotted lady's thumb (*Polygonum persicaria*), and sneezeweed (*Helenium autumnale*).

Wetland Meadow - approximately 46 acres: The wetland meadow community is located on higher ground in saturated soils surrounding emergent areas; vegetation is dominated by reed canarygrass, colonial bentgrass (*Agrostis capillaris*), white clover (*Trifolium repens*), sneezeweed, Canada goldenrod (*Solidago canadensis*), western goldentop (*Euthamia occidentalis*) and pennyroyal (*Mentha pulegium*).

Wetland Forest - approximately 171 acres: Forested wetland communities are characterized by an overstory of Pacific willow (*Salix lucida* ssp. *lasianдра*) with reed canarygrass dominating understory. Other common constituents include stinging nettle (*Urtica dioica*), Oregon ash, cow parsnip (*Heracleum lanatum*) and smartweed (*Polygonum* sp.). Lower elevation forests contain surface water for 7-9 months of the year that can be up to 4 feet deep.

Upland Forest black cottonwood - approximately 795 acres: Drier upland riparian forest communities are dominated by black cottonwood in the canopy with snowberry (*Symphoricarpos albus*) and stinging nettle in the understory. Other common species include wild rose (*Rosa* sp.), California blackberry (*Rubus ursinus*), and Indian plum (*Oemleria cerasiformis*). Common non-native species throughout the understory include Himalayan blackberry and poison hemlock (*Conium maculatum*).

Upland Meadow - approximately 649 acres: The herbaceous upland meadow community is dominated by pasture grasses including Italian ryegrass (*Lolium perenne*), rough bluegrass (*Poa trivialis*), creeping bentgrass (*Agrostis stolonifera*), sweet vernal grass (*Anthoxanthum odoratum*) and tall fescue (*Schedonorus arundinaceus*) with scattered forbs including white clover, narrowleaf plantain (*Plantago lanceolata*) and common dandelion (*Taraxacum officinale*). It also includes large weedy patches of thistle (*Cirsium arvense*), Fuller's teasel (*Dipsacus fullonum*), and Himalayan blackberry. With the removal of cattle from the island and a reduction in mowing, invasive species are encroaching on some upland meadow areas.

Phase I Grassland Enhancement - 60 acres including buffers: Planted in 2015, this enhancement project converted a former pasture to a grassland prairie dominated by native grasses and forbs.

Himalayan Blackberry - approximately 400 acres: Himalayan blackberry forms dense thickets throughout the herbaceous upland community and forest margins. Species locations were mapped according to areas visible in aerial imagery and may underestimate areas hidden by tree cover. Since 1999, when the vegetation communities were first mapped, the blackberry cover has increased from approximately 73 acres to over 400 acres in 2019.

Dredge material/sands - approximately 222 acres: Dominant vegetation in the dredge material/sand community includes hare's foot clover (*Trifolium arvense*) and rattail fescue (*Vulpia myuros*). Other

common species include sheep sorrel (*Rumex acetosella*), diffuse knapweed (*Centaurea diffusa*), Himalayan blackberry, black cottonwood, evening primrose (*Oenothera biennis*) and sand bur (*Cenchrus* sp.).



Dredge Material/Sand



Emergent Wetlands



Himalayan Blackberry



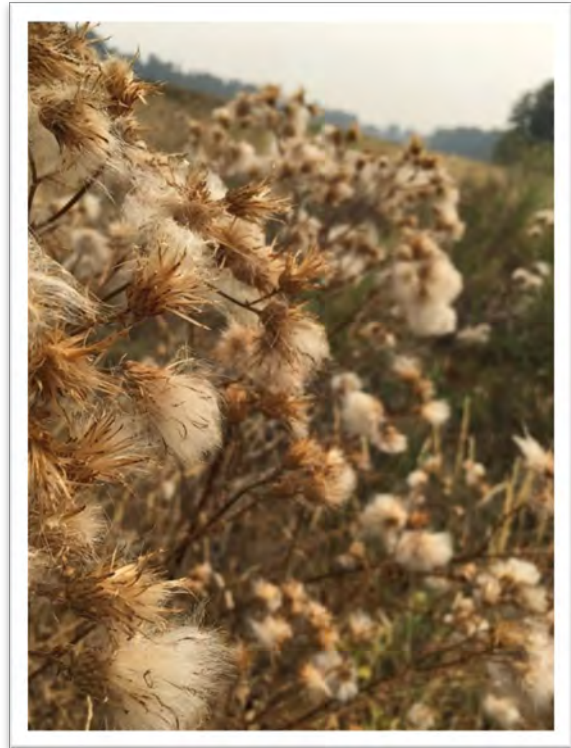
Phase I Grassland Enhancement

Invasive Species

A variety of invasive species are present throughout the unmanaged areas of Government Island. The Port is committed to controlling nuisance species within established mitigation and enhancement areas of the island, especially the Phase I Grassland Enhancement Project and portions of the CREST Project area (see Mitigation and Enhancement, pg. 10). Much of the forested understory and wetland areas of the island are dominated by Himalayan blackberry and reed canarygrass and open areas are generally dominated by non-native pasture grasses and broadleaf weeds such as Canada thistle, bull thistle (*Cirsium vulgare*), common teasel, diffuse knapweed and common tansy (*Tanacetum vulgare*). OPRD staff and paid youth groups conduct control measures for a number of species that pose a risk within the Columbia Gorge Management Unit including Scotch broom (*Cytisus scoparius*), diffuse knapweed, burdock (*Arctium* sp.), common toadflax (*Linaria vulgaris*), garlic mustard (*Alliaria petiolata*), rush skeleton weed (*Chondrilla juncea*), herb Robert (*Geranium yeoi*), purple loosestrife (*Lythrum salicaria*), yellow flag iris (*Iris pseudacorus*) and blessed milk thistle (*Sylibum marianum*).



Blessed Milkthistle



Canada Thistle

Wildlife and Habitat Value

As described previously, the habitat types on the island are diverse and range from deep forest to open prairie to seasonally flooded shallow lakes. This variety of habitat types not only have the potential to support species specialized to certain ecological niches, but also provides an abundance of edge habitat for more generalist species.

The large size of the island complex, limited human disturbance, and interspersions of riparian canopy, grassland, wetland and water resources provides habitat diversity that supports considerable species richness. Forest habitat provides protective cover close to wetlands and water resources. It also provides diverse opportunities for nesting, roosting, and perching. Snags and downed large woody debris are abundant in both upland and wetland forest communities. Dead branches and snags provide potential cavity nesting sites for cavity nesting species. Large woody debris from tree fall provides abundant refugia for small wildlife species (e. g. amphibians, reptiles, and small mammals) and provides important nutrients for plants to absorb. The interspersions of grassland and prairie habitat provides foraging and nesting opportunities for grassland associated species.

The wildlife values of the island complex are also related to its ecological and landscape context. The islands are part of a larger network of natural resource areas in the lower Columbia River corridor and are positioned to be used by wildlife moving upstream and downstream along the corridor between the Sandy River and Sauvie Island as well as annual north-south migration. The larger natural resource units along the corridor provide increased habitat diversity and space to accommodate a variety of migrant and resident wildlife species.

The open water and emergent wetlands attract waterfowl, wading birds, shorebirds and wetland associated species. In the winter and early spring high water levels in Jewett Lake and the protection afforded by the riparian canopy attract a variety of waterfowl including large numbers of Canada geese, mallard, northern shoveler, northern pintail, bufflehead, ring-necked duck, and various gull species; as well as smaller numbers of wood duck, pied-billed grebe, lesser scaup, common goldeneye, American wigeon, green-winged teal, gadwall, hooded merganser, ruddy duck and American coot. Some waterfowl remain to nest (mallard, Canada goose, hooded merganser, cinnamon teal and wood duck).

In May large numbers of aerial insectivores arrive and forage over ponds, fields and the Columbia River (barn swallow, tree swallow, cliff swallow, bank swallow, Vaux's swift, purple martin). The tree and violet green swallows remain and nest in cavities in snags and dead branches of willow and cottonwood trees adjacent to seasonal ponds; purple martin nest in nest boxes installed on docks and in natural cavities; and several colonies of bank swallows nest on the sandy cut-banks adjacent to the river. Other insectivores include lazuli bunting, western kingbird and western blue bird. There are about thirty blue bird nest boxes installed on fence posts adjacent to Jewett Lake that have been used primarily by violet green swallows, house wrens and mice.

Great blue heron are present year-round attracted by a plentiful food source in the shallow waters of Jewett Lake and West Pond. As the seasonal ponds dry out, mudflats attract migrating shorebirds such as greater yellowlegs, least sandpiper, killdeer, dowitchers, and common snipe.

The riparian community provides habitat for other species. Raptors are attracted to the high tree perches used for roosting or stalking prey; bald eagle, red-tailed hawk, red-shouldered hawk, northern harrier, Cooper's hawk, great horned owls, short-eared owls, osprey, merlin, American kestrel, and peregrine falcons have been observed. Tundra swan and great egret have also been observed.

Many songbirds utilize the islands during spring and fall migration including: olive sided flycatcher, Hammond's flycatcher, western kingbird, solitary vireo, Nashville warbler, western tanager, black-throated sparrow, Lincoln's sparrow, golden and white crowned sparrow, purple finch, pine siskin, American pipits, white-throated sparrow, and chipping sparrow.

Others are likely to nest on the island in riparian and riparian/edge habitat. These include cavity nesters (downy, hairy and pileated woodpecker, flicker, blackcapped chickadee, brown creeper, house wren, purple martin, American kestrel), sparrows (savannah, song, white crowned, golden crowned, Lincoln), bushtit, Swainson's thrush, robin, starling, cliff swallow, warbling vireo, orange-crowned warbler, common yellowthroat, red-winged blackbird, brown-headed cowbird, Bullock's oriole, black-headed grosbeak, lazuli bunting, house finch, purple finch, spotted towhee, osprey, bald eagle, great-blue heron, great-horned owl, red-tailed hawk, common merganser, American crow, belted kingfisher, willow flycatcher, western kingbird, California quail and hummingbirds (Anna's and rufous).

Abandoned pasture and open fields, including the 60-acre native prairie enhancement site, provide habitat for grassland species such as western meadowlark, Northern harrier, short-eared owl, killdeer, pipit, Savannah sparrow and American kestrel. Bird surveys have been conducted in some of the grassland areas since 2012 which has documented the species abundance and richness of wintering, migratory and breeding birds in this area.

Observations of mammals include nutria, beaver, vole, squirrel, cottontail, mole, black-tailed deer, striped skunk, coyote, opossum, raccoon, river otter, harbor seal, California sea lion, feral cat, deer mouse, gopher and shrew (PSU 2000; OPRD, Port of Portland staff observations). Two nights of bat surveys were conducted in 2005 in which 3 species were captured and 2 others were detected acoustically. The species captured were the big brown bat, little brown bat, and Yuma myotis. The two species detected acoustically were the hoary bat and the silver-haired bat. There were also several other calls that could not be determined to species level. Significant roosts were located under the I-205 bridge which crosses the island towards the western end. (Ormsbee 2005)

A population of western painted turtles was identified in 2011 by community science observations submitted to the Oregon Native Turtle Working Group. These observations were confirmed within Commodore Cove in 2013 by Port staff. Western painted turtles have also been reported by OPRD, Port and ODFW staff within interior wetland areas of the island. Observations of northern red-legged frog, long-toed salamander, salamander species, pacific chorus frog and garter snake species have been documented by Port and OPRD staff.

Special Status Species

Due to the variety of habitats, including upland forested, grassland, scrub-shrub, wetland and off-river channels the island complex supports a variety of Special Status species. The Oregon Conservation Strategy identifies 294 Strategy Species, which are Oregon's "Species of Greatest Conservation Need." Strategy Species are defined as having small or declining populations, are at-risk, and/or are of management concern. Oregon's Strategy Species include 17 amphibians, 58 birds, 29 mammals, 5 reptiles, 60 fish, 62 invertebrates, and 63 plants and algae. Special Status and federally listed species that have been recorded near or within the island complex are listed in Table 2.

Table 2: Special Status Species of Lemon, McGuire and Government Islands

SPECIES	STATE ¹	FEDERAL ²	ORBIC ³
*FISH			
Lower Columbia River Chinook	S, CS	LT	1
Upper Willamette River spring-run Chinook	SC, CS	LT	1
Upper Columbia River spring-run Chinook	S, CS	LE	4
Snake River spring-summer-run Chinook	LT, CS	LT	1
Snake River fall-run Chinook	LT, CS	LT	1
Columbia River Chum	S, CS	LT	1
Lower Columbia River Coho	LE, CS	LT	1
Snake River Sockeye	-	LE	1-ex
Lower Columbia River Steelhead	S, CS	LT	1
Upper Willamette River Steelhead	S, CS	LT	1
Middle Columbia River Steelhead	S, CS	LT	1
Upper Columbia River Steelhead	SC	LT	-
Snake River Basin Steelhead	S, CS	LT	1
Southern Green Sturgeon	S, CS	LT	3
Eulachon	CS	LT	2

SPECIES	STATE ¹	FEDERAL ²	ORBIC ³
REPTILES			
Western Painted Turtle	SC, CS, PW	-	2
AMPHIBIANS			
Northern Red-legged Frog	S, CS, PW	-	4
BIRDS			
Bald Eagle	-	BGEPA	4
†Burrowing Owl	S, CS	SOC	4
†Loggerhead Shrike	S, CS	-	4
Olive-sided Flycatcher	S, CS	-	4
Peregrine Falcon	S, CS	-	2
Pileated Woodpecker	S, CS	-	4
Purple Martin	SC, CS	-	4
Short-eared Owl	S, CS	-	3
Western Bluebird	S, CS	-	4
Western Meadowlark	SC, CS	-	4
White-breasted Nuthatch	S, CS	-	3
Willow Flycatcher	S, CS	-	4
Yellow-breasted Chat	SC, CS	-	4
MAMMALS			
†California Myotis	S, CS, PW	-	4
Hoary Bat	S, CS, PW	SOC	3
†Long-legged Myotis	S, CS, PW	SOC	4
Little Brown Myotis	PW	-	4
†Pallid Bat	S, CS, PW	SOC	2
†Western Red Bat	PW	-	-
Silver-haired Bat	S, CS, PW	SOC	4
†Western Small-footed Myotis	PW	SOC	4
Yuma Myotis	PW	SOC	4
INVERTEBRATES			
†California Floater Freshwater Mussel	CS, PW	-	3

*Fish species listed identified by NMFS to occur within five miles of Lemon, McGuire and Government Islands. Fish are listed due to the potential to now access Jewett Lake during high water.

†Species observed on Port property near the Columbia River within 6 miles of Government Island (may include West Hayden Island, Portland International Airport and Troutdale Reynolds Industrial Park)

¹LE=Listed Endangered, LT=Listed Threatened, S=Sensitive, SC=Sensitive-Critical, CS=Conservation Strategy Species, PW=Protected Wildlife under Oregon Administrative Rule 635-044

²LE=Listed as an Endangered Species, LT=Listed as a Threatened Species, SOC=Species of Concern, BGEPA=Bald and Golden Eagle Protection Act

³ORBIC=Oregon Biodiversity Information Center, 1=Threatened or Endangered Throughout Range, 2=Threatened, Endangered or Extirpated from Oregon, but Secure or Abundant Elsewhere, 3=Review, 4=Watch, 1-ex=Extirpated in Oregon, threatened or endangered throughout the rest of its range

Note: species listed in **bold** text have been recorded as observed on Government, Lemon or McGuire islands.



Song Sparrow



Northern Red-Legged Frog



Western Painted Turtles



Bald Eagle

Current Land Uses

Three primary activities are currently recognized on the island complex; ecological enhancement, limited recreation, and outreach/education. While the islands were formerly used for dredged material placement there is currently no need for dredge placement sites in the adjacent portion of the Columbia River. Current land uses, projects and constraints are described in detail below.

Mitigation and Enhancement

As a large expanse of open space with a variety of habitat types, Government Island offers a unique opportunity for habitat enhancements and mitigation. The island has been degraded by years of cattle grazing, non-native and invasive plant encroachment, hydrologic alteration associated with hydroelectric dam manipulation, dredge material placement and other human disturbance. This presents the Port with potential opportunities for restoring and improving ecological function on the island while mitigating for impacts that occur elsewhere. There are enhancement opportunities to upland, wetland, and shallow water habitats on the islands. Currently there are multiple project

examples including the Jewett Lake wetland mitigation site, the Phase I Grassland Enhancement Project and an off-channel salmon habitat enhancement that was completed by CREST on behalf of the Bonneville Power Administration (BPA). These projects are summarized below and significant details are provided in Table 3. Figure 6 shows the locations of mitigation and restoration projects on Government Island.

Table 3: Existing Mitigation and Enhancement Projects

PROJECT	DESCRIPTION	DATE COMPLETED	DATE RELEASED	ACRES	PERMITS / AGREEMENTS	LONG-TERM PROTECTION
Jewett Lake	Wetland mitigation	1993	2003	427	MOA 1994, USACE 9753, DSL 6273, DSL 21869	Restrictive Covenant 03-039, 2/14/2003
Phase I Grassland Enhancement	Upland grassland enhancement	2015	2020	58	IGA Port/City of Portland 2011-066	n/a
CREST Government Island Restoration Project	Off-channel habitat restoration	2019	TBD	2.2	DSL 61772-RF, USACE NWP-2018-558-1	n/a

Existing mitigation and enhancement sites are managed under the Port's Mitigation Management Program except for the CREST project. On-going site maintenance may include invasive species control, limited inter-planting and other enhancements such as seeding/planting where invasive species are removed. Fencing and signage are evaluated as needed. Trash removal occurs during scheduled maintenance. All three existing projects are summarized below.

Jewett Lake Wetland Mitigation

The Jewett Lake wetland mitigation site was partial compensation for the filling of wetlands at the SW Quad site adjacent to Portland International Airport, primarily to reduce the risk wildlife species of concern (geese) pose to safe airport operations. The 427-acre Jewett Lake site was a shallow basin that had been connected to the Columbia River by a constructed channel. The channel allowed water to flow into the lake whenever river elevations exceeded 10.7 feet. However, water also flowed out of the lake when river levels dropped below this elevation, which resulted in the lake and wetlands drying in the summer. The mitigation plan was designed to increase water retention in the lakebed by installing a water control structure at the confluence of the Columbia River and the constructed channel while also enhancing and restoring adjacent wetlands. The structure was completed in 1993. Under changing river conditions and regulations, removal of this structure was the key to the CREST Government Island Restoration Project summarized at the end of this section.

Permit conditions for the Jewett Lake mitigation project required using a habitat evaluation procedure (HEP) as the methodology for measuring mitigation success. An interagency HEP review team was assembled to determine HEP methodology, species model assumptions, and assess field data. Wildlife habitat conditions at both the SW Quad and Jewett Lake were documented with HEP analyses before

filling and mitigation actions and again at Jewett Lake 5 years after construction. Compliance monitoring began in 1993 and was completed in 1999. The final monitoring report, including the Jewett Lake HEP review analysis, was submitted to USACE and DSL in January 2000. The HEP analysis demonstrated that the mitigation site had exceeded predictions resulting in the creation of 58 acres of wetlands and an additional 100 average annual habitat units (AAHU). The Jewett Lake mitigation site was released from monitoring and reporting requirements by the regulatory agencies in 2003.



Aerial oblique of Jewett lake from the east end looking northwest - 2017

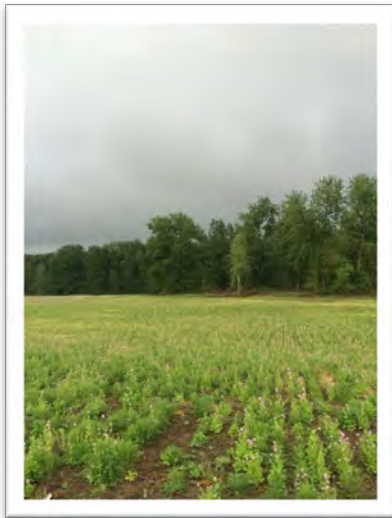
Phase I Grassland Enhancement

The Phase I Grassland Enhancement project was initiated to offset future impacts to four properties at PDX and is a mitigation obligation that resulted from an Intergovernmental Agreement (IGA) between the City of Portland (City) and the Port as part of the Airport Futures planning process. The IGA, which is effective for 25 years, includes up to 300 acres of grassland enhancement on Government Island located roughly 6,230 feet (1.2 miles) from the north runway at PDX. The first 50 acres of grassland enhancement which included 10 additional acres of managed buffer, occurred in advance of development and was initially seeded in 2015 after 3 years of site prep. Formal monitoring and reporting of this project were completed in 2019; however Port staff continue limited monitoring, maintenance and reporting under the Airport Futures Program and the Port's Mitigation Management Program.

The Phase I Grassland Enhancement was intended to provide the grassland habitat features suitable for grassland associated species including grassland birds, small mammals and pollinator species. Although grassland birds were the focus of the City's designation of PDX properties as Special Habitat, the Phase I Grassland Enhancement was not limited to improving habitat exclusively for grassland birds. Instead, the goal was to create a mosaic of diverse micro-habitats to benefit a variety of grassland species. To increase the ecological value of the project, elements were designed to improve pollinator habitat within the project area. Many native pollinators, that are in decline regionally, rely on native flowering forbs that are found in grasslands. The mitigation plan was designed to include a variety of native forbs that will provide a nectar source for pollinators throughout the growing season. In effect, the Port took an ecosystem-based approach to this enhancement to create a site that is not focused on a single species.

General habitat conditions for the Phase I Grassland Enhancement site were targeted and agreed upon by the Port and City of Portland. One of these targets was the control of invasive species and the Port is committed to continued maintenance of invasive species within the site through the Mitigation Management Program as articulated in our Site Status Report: *"Once the permit requirements are satisfied, voluntary maintenance and site inspections continue, but they can be gradually reduced over time as the site becomes more self-sustaining. The Port uses adaptive management to meet the changing conditions of each site. Site maintenance and monitoring is completed by Port mitigation staff, experienced consultants, and contractors. There is a strong commitment from the mitigation management team and Port management to meet the program goals".*

The second phase of grassland mitigation on Government Island will occur when development on one of the four PDX properties exceeds 25 acres. It is unknown when development of these properties will take place. However, the Port is conducting limited work in the second 50-acre field to prepare for the start of the next phase of mitigation.



First spring after seeding - 2016



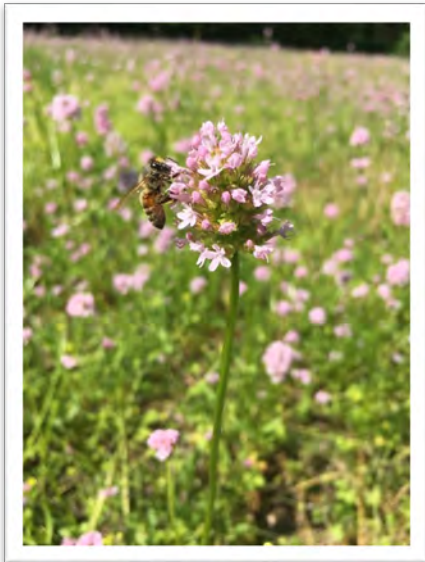
Summer - 2016



May – 2020



Lupine and bumblebee



Honeybee on Sea Blush



Vegetation Survey (Riverbank Lupine)



Large-flowered Collomia



Common Madia

CREST Government Island Restoration Project

In coordination with the Port, CREST completed the Government Island Restoration Project in 2019. The project will benefit juvenile salmonids, while balancing the Port's existing mitigation requirements at Jewett Lake. CREST will be responsible for maintenance and monitoring for a minimum of two growing seasons after project completion. Once the project is released by the regulating agencies, the Port will resume long-term management of the site. The project was comprised of several actions in two geographically separate locations on Government Island:

- Removal of a tide gated water control structure that excludes fish access from much of the floodplain interior habitats of Government Island;
- Large wood installation to facilitate fish passage, herptile and beaver habitat enhancement, and maintenance of the Port's waterfowl mitigation wetland acreage;
- Removal of riprap bank protection that was impeding the occurrence of natural physical processes;
- Reconnection of a historical wetland swale along the upstream portion of the island to enhance fish and wildlife access and habitat function;
- Removal of invasive plant species and revegetation with a native plant palette specified by habitat zones (e.g. low to mid-elevation emergent marsh, high marsh, and riparian/upland); and,
- Enhancement of riparian and upland wildlife habitats through construction of hibernacula and habitat piles.



Water control structure at Jewett Channel confluence prior to removal – 2016



Jewett Channel reconnected to river – 2020



Reconnected historic channel – 2020



Revegetated Jewett Channel – 2020

Recreation

The Columbia River is the most utilized waterbody in the state of Oregon according to an Oregon State Marine Board (OSMB) survey (2017). Boater activity is highest from Memorial Day weekend to Labor Day weekend. Use of the island complex as a boating destination and day use area is facilitated by four public launch sites in the vicinity. See Figure 7: Recreation.

Recreational uses are managed and regulated by OPRD through a management agreement with the Port. The Multnomah County Sheriff's River Patrol stationed nearby at M. James Gleason Memorial Boat Ramp provides assistance as needed. Rules and regulations are posted at multiple popular camping areas throughout the island complex. OPRD monitors recreational use year-round with boat and tent counts and stay length enforcement. In 2019 the number of visitors was estimated at over 11,561. Based on OPRD annual reports to the Port, visitation to the islands has generally increased over time since 2001.

Two docks on the north side of the island including the Sandy Beach Landing and Bartlett Landing support large boats. Bartlett Landing is protected with a log boom and both docks have shore access where composting toilets and picnic tables are located; there is a small covered pavilion for picnicking at Bartlett Landing. Small boats also land and anchor on beaches throughout the island complex where there is high volume of day and overnight use.

Camping is regulated by OPRD and is only allowed at a few designated camping areas below the vegetation line. Users must limit their stay to 14 days and no permanent shelters are allowed; interior access is restricted within protected natural areas. No tree cutting or damage to trees is allowed.

Popular camping areas are equipped with pit toilets and fire rings; campfires are limited to beaches. Campers are responsible for hauling out garbage including burnt items and ensuring that campsites are left clean and in a natural state. Dogs must always be leashed to protect plants, wildlife and people.

OPRD maintains over five miles of trails and unimproved roads throughout the islands. The upland trail between the two boat docks on the north side of Government Island is the only trail authorized for use by the public. Bikes and motorized vehicles are prohibited on the islands except by authorized personnel. Existing unpaved roads on Government Island are maintained for maintenance vehicle and emergency access only and are not open to the public.

Hunting is not allowed on the interior of the islands and 'No Hunting' signs are posted throughout the island complex. DSL allows waterfowl hunting below the vegetation line (Ordinary High Water) surrounding the islands.

The presence and oversight of OPRD is critical to the overall management of the island complex from a recreational standpoint, however since it is not practical for OPRD to provide constant surveillance over the 2,200 acres of open space, the risk of theft or vandalism of equipment left on the islands is high and has occurred. This is a consideration for management and project planning on the island complex. The Port monitors the impacts associated with trespass and continues to evaluate management options.

Research, Education and Outreach

Due to the location of the Government Island complex adjacent to the Portland metro area there is a lot of curiosity and interest about the islands from the local community. The Port recognizes the importance of providing outreach to the community to enable engagement and keep the community informed of the positive ecological impacts of the Port's enhancement projects and overall management of the island complex. Activities associated with existing mitigation projects are reported out in the Port of Portland Mitigation Management Program Site Status Report available on the Port of Portland [website](#).

The Port has a long history of partnering with academic institutions, non-profit organizations, and local agencies to provide research and outreach opportunities to community members on Port-owned lands. On Government Island since the late 1990's, the Port has partnered with PSU, Xerces Society, Institute for Applied Ecology, ODFW, CREST and the NWYC for research and enhancement projects; some of these efforts are detailed below.

Since about 2009, OPRD has engaged the Multnomah Youth Cooperative (MYC) to conduct weed control and trail work on the island. MYC is a high school conservation program run as a partnership between the Reynolds School District and the Oregon Youth Conservation Corps. Their mission is to create opportunities, experience, and a connection with the community for students in East Multnomah County through a combination of hands on experiential learning in the field and project-based learning in the classroom.

The NWYC has worked on a variety of projects within the Phase I Grassland Enhancement and surrounding areas since 2016. Each project has included an educational or practical job training component in which the group has learned about the history of the island, the different job titles and responsibilities of the people who manage it and why it's important to maintain the enhanced natural areas within the island. The NWYC's mission statement is to offer a challenging education and job-

training experience that helps youth and young adults from diverse backgrounds develop the skills they need to lead full and productive lives. Projects completed include manual removal of invasive species, fence removal/repair and native shrub and tree planting. In 2019, the NWYC completed a large planting project along Commodore Cove, adjacent to the Phase I Grassland Enhancement. Native plants installed by the group will help improve water quality and reduce management costs at the enhancement site over time.

The Port also partnered with CREST and Tetra Tech in 2019 to monitor hibernaculum installed as part of the CREST Restoration Project. Hibernacula were created using materials removed during the channel enhancement project and monitoring results were to be presented at the Columbia River Estuary Conference to highlight the beneficial alternative use of materials produced in similar projects.

In 2016-2017 the National Oceanic and Atmospheric Administration (NOAA) conducted a radio telemetry study from Government Island to collect data regarding the movement and survival of spring Chinook salmon and monitor the predatory activities of sea lions in the Columbia River.



NWYC preparing to boat to Government Island



NWYC breaking to view the solar eclipse

Constraints, Easements and Access Agreements

There are a number of constraints associated with Government Island that limit the type of activities that may occur, how the islands are managed, and who has permission to access the interior of the island. As previously mentioned, the islands were originally purchased by the Port for airport expansion and are included on the PDX Airport Layout Plan requiring development on the island, and potential releases of land for other uses, subject to FAA approval. In addition, Lemon Island and the western tip of Government Island are located within the FAA recommended separation distance of 10,000 feet as described in FAA AC 150/5200-33 and the PDX Wildlife Hazard Management Plan (WHMP), therefore any proposed activities must undergo a review by the FAA Qualified Airport Wildlife Biologist according to FAA AC 150/5200-38. This review considers anything that may attract wildlife that are considered hazardous to areas near the airport. A careful review of the project, planting plans and best management practices are conducted.

The Port entered into a 99-year ground lease with OPRD in 1999 to manage recreation and public facilities on the islands. The lease was terminated in 2016, and the Port and OPRD entered into a

management agreement under which OPRD is responsible for performing functions related to the management of recreation and public facilities. Public recreation is restricted to the beaches and outer edges of the islands and camping is limited to two weeks maximum stay. Public access to the interior of the islands is prohibited without a Port issued permit for a specific project or activity approved by the Port. OPRD enforces these public access limitations pursuant to the management agreement.

Multnomah County Vector Control (MCVC) holds an access agreement with the Port to monitor mosquito populations and mosquito-borne diseases on Port properties including the Government Island complex. MCVC conducts field monitoring and sampling to determine mosquito populations, identify species that may carry disease and provide control measures. Typically, mosquitoes on Government Island are managed at the larval state using *Bacillus thuringiensis* subspecies *israelensis* (Bti) in a granular form that may be applied on the ground or via helicopter. Bti is a soil bacterium found throughout the environment and is not known to affect other aquatic biota.

The U.S Coast Guard (USCG) is party to an agreement with the Port granting them the right to use a 40 square-foot area to maintain two lighted navigation aids (Government Island Upper Range Front and Rear Lights) located at the northeastern end of Government Island and on McGuire Island. USCG has the right to access these lights, along with the right to repair, maintain, and replace the lights during the term of the agreement. The current agreement may be amended annually through September 30, 2027.

As previously noted, there are currently multiple mitigation projects located on Government Island including the Jewett Lake wetland mitigation site, the Phase I Grassland Enhancement and the off-channel salmon habitat enhancement that was completed by CREST. The Jewett Lake wetland mitigation site is protected in perpetuity through a restrictive covenant (See Table 3 and Appendix B).

Management Concerns

Safety / Emergency Response

Emergency response on the Island complex is accomplished through a cooperative agreement between several agencies. The City of Portland Fire Department has primary responsibility response for Lemon and Government Island, where as Gresham Fire Department has responsibility for McGuire Island. Because the Port of Portland Fire Department is in close proximity and has a boat outfitted for water rescue, they would likely be the first responders in the event of an emergency situation. OPRD maintains a network of unimproved roads throughout Government Island for access in the event of fire.

Camping and trespass issues are primarily enforced by OPRD with support from Port staff and the Multnomah County sheriff. OPRD maintains a regular presence on site while conducting duties associated with maintenance of the recreational facilities and actively tracks camping and trespass pursuant to the management agreement between OPRD and the Port. As previously mentioned, camping is allowed in designated areas below the vegetation line and stays are limited to 14 days. A permit and right of entry from the Port is required for access to the interior of the island. Signage, both Port and OPRD, provides guidance for visitors to the islands.

Existing Structures

There are a number of structures on the island, some built in the late 1800's that were associated with a family ranch. Although these structures were determined to not be eligible for inclusion on the National Historic Register, they are locally significant in that they are associated with the history of the island and are the only standing remains of the once thriving agricultural community that was present on the island (OPRD 2007). Structures include some of these historic out-buildings, old farm fencing, a modified single-wide trailer and a shipping container once used to store vehicles on the island.

One structure, a large barn thought to have been built in the late 1890's or later (OPRD 2007), collapsed in January 2019 during a windstorm. Materials from the collapsed barn are still onsite, ideally, they would be removed from the island and re-used or properly disposed of offsite but there are logistic challenges associated with that so they may remain on the island. The Port would also like to have the single-wide trailer and shipping container removed as these tend to attract unauthorized access to the interior of the island.

Barbed wire farm fencing can be found throughout Government Island, especially around the Jewett Lake mitigation site and was installed to manage cattle and restrict them from accessing the wetland. Cattle were removed from the islands in 2009. The Port is evaluating the fencing for relevancy and functionality and then removing, maintaining, or replacing it with wildlife friendly designed fencing as appropriate.



Former barn and fencing

Management Goals and Objectives

The Port's goals are to manage the islands as open space for habitat conservation and to allow mitigation, limited public access, research, and enhancement that supports habitat for native fish, wildlife, and plants while ensuring that activities on the islands are in compliance with regulatory requirements and are compatible with the needs and requirements of airport operations.

Objectives:

- Seek mitigation and enhancement opportunities that are in line with the Management Goals and Conservation Targets.
- Ensure mitigation and enhancement does not result in an increase wildlife risk to safe airport operations and implement adaptive management when needed.
- Maintain partnership and Management Agreement with OPRD to confine recreation to exterior island edge and minimize public access to interior of island to support Management Goals.
- Support education, outreach and research proposals that align with Management Goals and Port DEI Plan.

Management Opportunities

Conservation Targets and Potential Projects

Port Natural Resource staff have developed Conservation Targets for the Government Island complex that align with the ODFW's Conservation Strategies for the Hayden Island-Government Island Conservation Opportunity Area (#055). Conservation Targets are listed below in Table 4 along with potential projects that align with each target. Like ODFW's Conservation Strategies, the Port's Conservation Targets are meant to focus on the same species and habitats including grassland associated species, bats, amphibians, turtles and fish. In addition to maintaining and enhancing existing projects (See Table 3 and Figure 6), we will seek opportunities and consider future projects that align with these Conservation Targets.

Some potential opportunities include the expansion of grassland enhancement, channel enhancement for turtles and amphibians, and the long-term monitoring and maintenance of the CREST project which benefits salmon.

Table 4: Conservation Targets and Potential Projects List

CONSERVATION TARGETS	POTENTIAL PROJECTS
Improve grassland habitats to benefit grassland associated species	<ul style="list-style-type: none"> • Future Phases of Grassland Mitigation • Fence removal • Blackberry removal from open fields
Protect habitat values from recreational uses and other human impact	<ul style="list-style-type: none"> • Barn removal and material reuse/recycling • Removal of single wide trailer/home • Removal of storage container in wooded area

CONSERVATION TARGETS	POTENTIAL PROJECTS
Improve or create habitats for sensitive wildlife species and species in decline	<ul style="list-style-type: none"> • Habitat enhancement of channel for turtles and amphibians • Create purple martin nesting areas • Create native bee nesting blocks • Create hibernaculum for amphibian and reptiles • Create turtle nesting areas
Protect and enhance existing wetlands and riparian habitats	<ul style="list-style-type: none"> • Expand scrub-shrub habitat • In riparian forested areas, remove and control blackberry patches and plant native trees
Provide off-channel refugia for migrating and juvenile fish	<ul style="list-style-type: none"> • Long-term monitoring and maintenance of CREST project
Support conservation outreach and education	<ul style="list-style-type: none"> • Partner with community organizations and student/youth groups for outdoor education and citizen science projects • Partner with Universities to identify potential research projects for graduate students • Partner with area tribes and native community organizations to identify shared projects and management interests

Channel Enhancement for Turtles and Amphibians

There are at least two key areas on Government Island that could be enhanced to improve habitats for turtles and amphibians. One feature known as Commodore Cove is a partially ephemeral channel located north of the Phase I Grassland Enhancement project and east of the I-205 bridge. The second area is an historic forested channel located northwest of Jewett Lake. These two areas could be improved for habitat by decreasing slope angle, adding basking structure, improving emergent vegetation structure and by providing turtle nesting habitat in the uplands. Western painted turtles and red-legged frogs have been observed in both areas.

Long-term Monitoring and Maintenance of the CREST Project Supporting Salmon

As previously mentioned, CREST completed the Government Island Restoration Project in 2019 and will monitor and maintain the project through at least 2021. Once the project is released by the regulating agencies, the Port will resume long-term management of the site which may include general monitoring, continued hibernacula monitoring, invasive species control and wildlife surveys.

Education, Research and Outreach

As described previously, the Port has a long history of partnering with other organizations to provide research and outreach opportunities to community members on Government Island. The Port receives regular inquiries to access the interior of the island for a variety of reasons but generally related to education and research. The Port is open to considering access agreements if the purpose aligns with the Management Goals and Objectives of the island. For instance, information resulting from research

conducted on the island could help to inform future management actions that could support enhancements of ecological functions using the best available science. The Port will continue to engage with the local community and partners to seek opportunities for research and enhancement projects and education and outreach that support diversity, equity and inclusion and habitat conservation in alignment with the Management Goals and Objectives for Government Island.

Long-term management of the Government Island complex could support many opportunities for education, research and outreach that would align with the Port's Diversity, Equity and Inclusion (DEI) initiative and the Management Goals and Objectives for the island. The Port will continue to explore community partnerships that support our management goals and provide opportunities to engage Indigenous community members in restoration and management opportunities. Additionally, these sites provide unique opportunities to increase access and experiences for Indigenous, Black and youth of color to learn about and gain exposure to practical experience and professional opportunities.

Long-term Protection

The Port has opted to preserve the island complex for ecological enhancement and mitigation. Currently there are 427 acres protected under a restrictive covenant for the Jewett Lake mitigation site (see Appendix B). The CREST project is protected by default as a state and federally permitted mitigation project. Although the Phase I Grassland Enhancement project has no formal protection, the Port is committed to long-term management and habitat conservation in accordance with the Conservation Targets. The value of the Government Island complex to the Port is in enhancement and conservation of its natural resources. As mitigation and enhancement projects are identified and implemented within the island complex, additional long-term protection instruments will be explored and executed.



Sea Blush with Red Admiral Butterfly



Pacific Chorus Frog

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- Public Trail
- Port Property
- WingDam

Figure 1: Government Island Overview

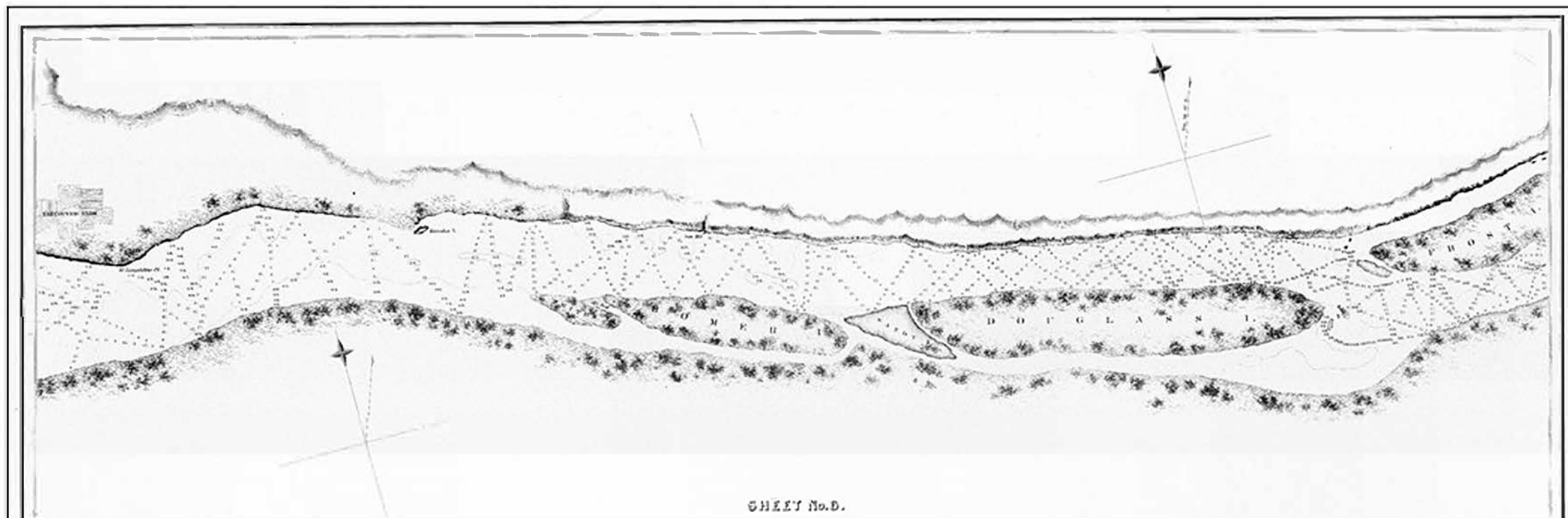


Figure 2: 1841 Nautical Chart

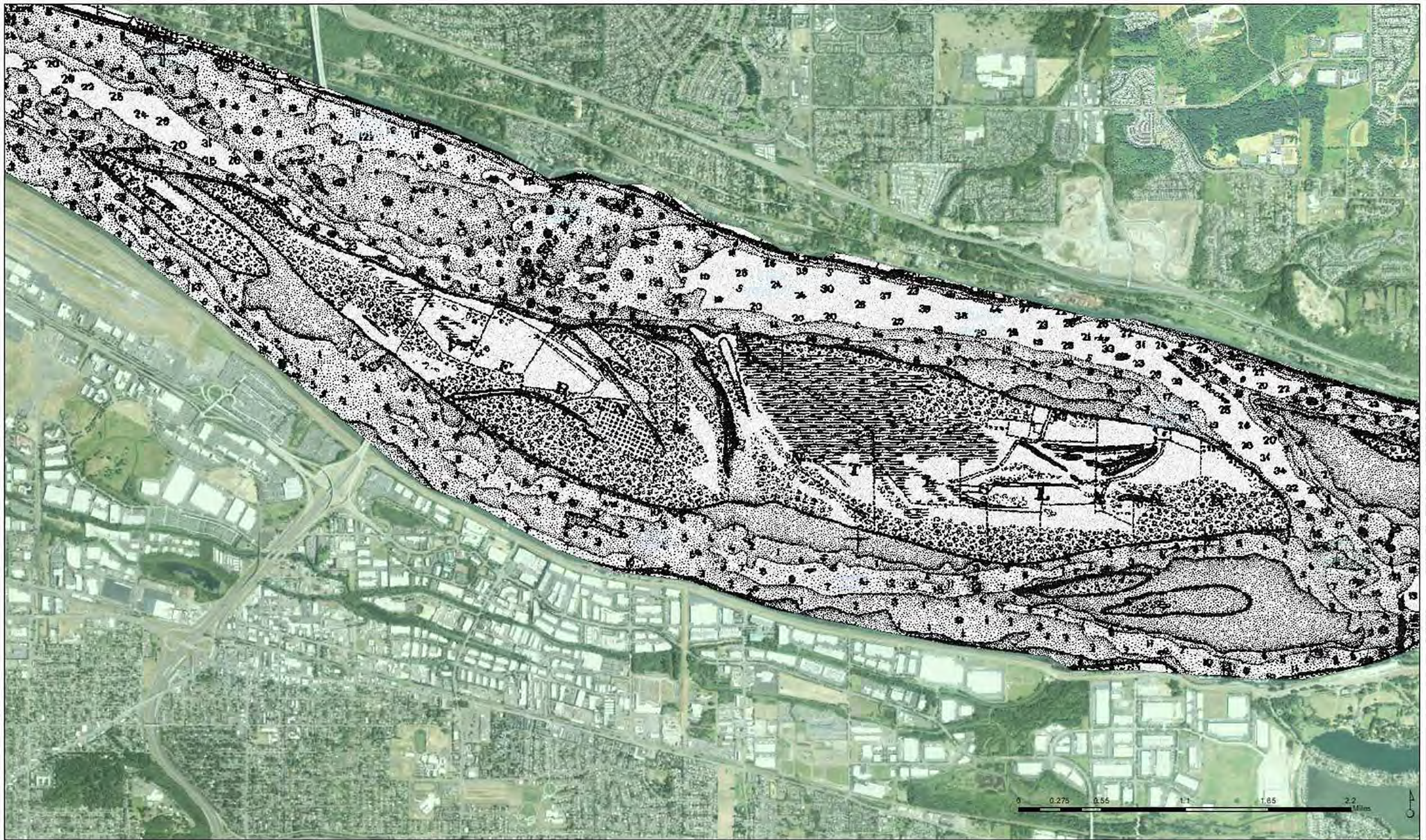


Figure 3: 1902 USCGS Survey

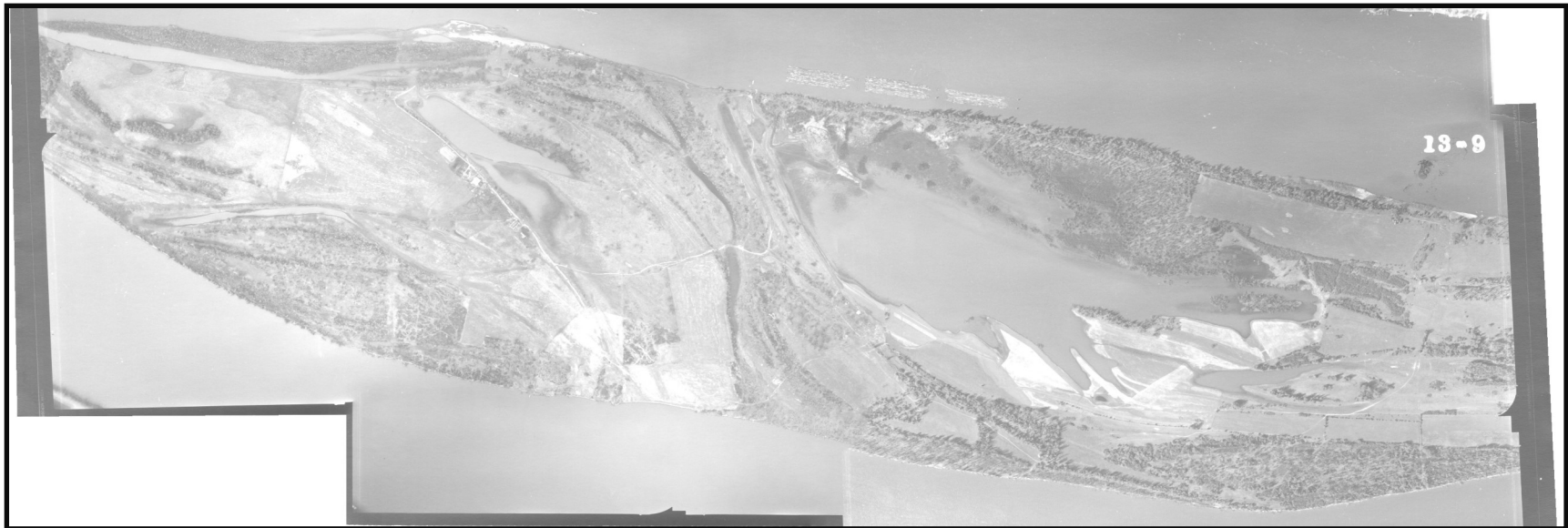


1935



1948

Figure 4a: Historical Aerials 1935 and 1948



1956



1964

Figure 4b: Historical Aerials 1956 and 1964



1970



1974

Figure 4c: Historical Aerials 1970 and 1974



1980



1990

Figure 4d: Historical Aerials 1980 and 1990



- | | |
|--------------------------------|---|
| Blackberry Scrub-Shrub | Herbaceous Upland |
| Cottonwood Gallery | Hydrophytic Vegetation |
| Cottonwood, Willow Scrub-Shrub | River Beach - Natural |
| Cottonwood, Willow, Ash Forest | Unimproved Pasture - No Active Management |
| Grassland - Restoration | |

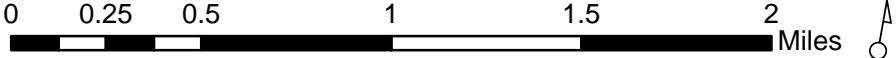
Figure 5: Natural Resource Inventory



Figure 6: Mitigation and Restoration Projects



Figure 7: Recreation



APPENDIX A

Plant Species on Government Island

Botanical Name	Common Name	Native Status
<i>Acer macrophyllum</i>	big-leaf maple	N
<i>Acer negundo</i>	boxelder	I
<i>Achillea millefolium</i>	Western yarrow	N
<i>Agrostis alba</i>	redtop	I
<i>Agrostis capillaris</i>	colonial bentgrass	I
<i>Agrostis exarata</i>	spike bentgrass	N
<i>Agrostis</i> sp.	bentgrass sp.	UNK
<i>Agrostis stolonifera</i>	creeping bentgrass	I
<i>Ailanthus altissima</i>	tree of heaven	I
<i>Alchemilla occidentalis</i>	western lady's mantle	N
<i>Alisma subcordatum</i>	American water plantain	N
<i>Alliaria petiolata</i>	garlic mustard	I
<i>Alopecurus aequalis</i>	short-awn foxtail	N
<i>Alopecurus geniculatus</i>	water foxtail	N
<i>Alopecurus pratensis</i>	meadow foxtail	I
<i>Amsinckia menziesii</i>	common fiddleneck	N
<i>Anagallis arvensis</i>	scarlet pimpernel	I
<i>Anagallis minima</i>	chaffweed	N
<i>Anthemis cotula</i>	stinking chamomile	I
<i>Anthoxanthum odoratum</i>	sweet vernalgrass	I
<i>Aphanes arvensis</i>	field parsley piert	I
<i>Arabidopsis thaliana</i>	mouse-ear cress	I
<i>Arctium minus</i>	common burdock	I
<i>Artemisia</i> spp.	unknown	UNK
<i>Athyrium filix-femina</i>	lady fern	N
<i>Azolla microphylla</i>	Mexican mosquito fern	N
<i>Betula papyrifera</i>	paper birch	N
<i>Bidens frondosa</i>	devil's beggartick	N
<i>Brassica</i> sp.	mustard sp.	UNK
<i>Bromus hordeaceus</i>	soft brome	I
<i>Bromus tectorum</i>	cheatgrass	I
<i>Callitriche</i> sp.	water-starwort sp.	UNK
<i>Camassia quamash</i>	small camas	N
<i>Capsella bursa-pastoris</i>	shepherd's purse	I
<i>Cardamine hirsuta</i>	hairy bittercress	I
<i>Carex aperta</i>	Columbia sedge	N
<i>Carex obnupta</i>	slough sedge	N
<i>Carex</i> sp.	sedge sp.	UNK
<i>Cenchrus</i> sp.	sandbur sp.	UNK
<i>Centaurea diffusa</i>	diffuse knapweed	I

Botanical Name	Common Name	Native Status
<i>Centaurea stoebe ssp. micranthos</i>	spotted knapweed	I
<i>Cerastium fontanum</i>	common mouse-ear chickweed	I
<i>Cerastium glomeratum</i>	sticky chickweed	I
<i>Chamaesyce maculata</i>	spotted sandmat	N
<i>Chondrilla juncea</i>	rush skeleton weed	I
<i>Cirsium arvense</i>	Canada thistle	I
<i>Cirsium brevistylum</i>	clustered thistle	N
<i>Cirsium vulgare</i>	bull thistle	I
<i>Clarkia pulchella</i>	farewell to spring	N
<i>Collomia grandiflora</i>	large flowered collomia	N
<i>Conium maculatum</i>	poison hemlock	I
<i>Convolvulus arvensis</i>	field bindweed	I
<i>Conyza canadensis</i>	Canadian horseweed	N
<i>Cornus sericea</i>	redosier dogwood	N
<i>Corylus avellana</i>	common filbert	I
<i>Crataegus douglasii</i>	black hawthorn	N
<i>Crataegus laevigata</i>	smooth hawthorn	I
<i>Crataegus monogyna</i>	oneseed hawthorn	I
<i>Crepis setosa</i>	bristly hawksbeard	I
<i>Crypsis alopecuroides</i>	foxtail pricklegrass	I
<i>Cytisus scoparius</i>	Scotch broom	I
<i>Dactylis glomerata</i>	orchardgrass	I
<i>Danthonia californica</i>	California oatgrass	N
<i>Daucus carota</i>	Queen Anne's lace	I
<i>Deschampsia cespitosa</i>	tufted hairgrass	N
<i>Deschampsia elongata</i>	slender hairgrass	N
<i>Digitaria sanguinalis</i>	hairy crabgrass	I
<i>Dipsacus fullonum</i>	Fuller's teasel	I
<i>Echinochloa crus-galli</i>	barnyardgrass	I
<i>Eleocharis ovata</i>	ovate spikerush	N
<i>Eleocharis palustris</i>	common spikerush	N
<i>Elodea canadensis</i>	Canadian waterweed	N
<i>Elymus glaucus</i>	blue wildrye	N
<i>Elymus repens</i>	quack grass	I
<i>Epilobium ciliatum</i>	fringed willowherb	N
<i>Epilobium densiflorum</i>	denseflower willowherb	N
<i>Epilobium</i> sp.	willowherb sp.	UNK
<i>Equisetum arvense</i>	field horsetail	N
<i>Equisetum hyemale</i>	scouringrush horsetail	N
<i>Eriophyllum lanatum</i>	common woolly sunflower	N
<i>Erodium cicutarium</i>	redstem stork's bill	I
<i>Euthamia occidentalis</i>	western goldentop	N

Botanical Name	Common Name	Native Status
<i>Festuca myuros</i>	rattail fescue	I
<i>Festuca occidentalis</i>	western fescue	N
<i>Festuca roemerii</i>	Roemer's fescue	N
<i>Festuca rubra</i>	red fescue	N
<i>Festuca</i> sp.	fescue sp.	UNK
<i>Fraxinus latifolia</i>	Oregon ash	N
<i>Galium aparine</i>	stickywilly	N
<i>Galium</i> sp.	bedstraw sp.	UNK
<i>Geranium columbinum</i>	longstalk cranesbill	I
<i>Geranium dissectum</i>	cutleaf geranium	I
<i>Geranium molle</i>	dovefoot geranium	I
<i>Geranium yeoi</i>	herb Robert	I
<i>Gilia capitata</i>	bluehead gilia	N
<i>Gnaphalium palustre</i>	western marsh cudweed	N
<i>Gnaphalium</i> sp.	cudweed sp.	UNK
<i>Gnaphalium uliginosum</i>	marsh cudweed	I
<i>Grindelia integrifolia</i>	Puget Sound gumweed	N
<i>Hedera helix</i>	English ivy	I
<i>Helenium autumnale</i>	common sneezeweed	N
<i>Heracleum lanatum</i>	common cow parsnip	N
<i>Holcus lanatus</i>	common velvetgrass	I
<i>Hordeum brachyantherum</i>	meadow barley	N
<i>Hypericum perforatum</i>	common St. Johnswort	I
<i>Hypochaeris radicata</i>	hairy cat's ear	I
<i>Hypochaeris</i> sp.	cat's ear sp.	UNK
<i>Impatiens capensis</i>	jewelweed	I
<i>Iris psuedacorus</i>	yellow flag iris	I
<i>Juncus bufonius</i>	toad rush	N
<i>Juncus</i> sp.	rush sp.	UNK
<i>Juncus tenuis</i>	poverty rush	N
<i>Koeleria macrantha</i>	prairie Junegrass	N
<i>Lactuca serriola</i>	prickly lettuce	I
<i>Lactuca</i> sp.	wild lettuce sp.	UNK
<i>Lapsana communis</i>	common nipplewort	I
<i>Lemna minor</i>	common duckweed	N
<i>Leontodon taraxacoides</i>	lesser hawkbit	I
<i>Linaria vulgaris</i>	common toadflax	I
<i>Lolium perenne</i>	Italian ryegrass	I
<i>Lolium</i> sp.	rye grass sp.	UNK
<i>Lotus unifoliolatus</i>	American bird's-foot trefoil	N
<i>Ludwigia palustris</i>	marsh seedbox	N
<i>Lupinus polyphyllus</i>	bigleaf lupine	N

Botanical Name	Common Name	Native Status
<i>Lupinus rivularis</i>	riverbank lupine	N
<i>Lythrum portula</i>	spatulaleaf loosestrife	I
<i>Lythrum salicaria</i>	purple loosestrife	I
<i>Madia elegans</i>	common madia	N
<i>Malus</i>	apple tree	N/I
<i>Marsilea vestita</i>	hairy waterclover	N
<i>Matricaria discoidea</i>	disc mayweed	I
<i>Mazus pumilus</i>	Japanese mazus	I
<i>Medicago lupulina</i>	black medick	I
<i>Mentha arvensis</i>	wild mint	N
<i>Mentha pulegium</i>	pennyroyal	I
<i>Mollugo verticillata</i>	green carpetweed	N
<i>Myosotis discolor</i>	changing forget-me-not	I
<i>Myosotis laxa</i>	bay forget-me-not	N
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	I
<i>Oemleria cerasiformis</i>	Indian plum	N
<i>Oenanthe sarmentosa</i>	water parsley	N
<i>Oenothera biennis</i>	common evening primrose	N
<i>Panicum capillare</i>	witchgrass	N
<i>Parentucellia viscosa</i>	yellow glandweed	I
<i>Paspalum distichum</i>	knotgrass	N
<i>Persicaria hydropiperoides</i>	swamp smartweed	N
<i>Phalaris arundinacea</i>	reed canarygrass	I
<i>Phleum pratense</i>	timothy	I
<i>Plagiobothrys figuratus</i>	fragrant popcornflower	N
<i>Plagiobothrys scouleri</i>	Scouler's popcornflower	N
<i>Plantago lanceolata</i>	narrowleaf plantain	I
<i>Plantago major</i>	common plantain	I
<i>Plectritis congesta</i>	shortspur seablush	N
<i>Poa compressa</i>	Canada bluegrass	I
<i>Poa pratensis</i>	Kentucky bluegrass	I
<i>Poa</i> sp.	bluegrass sp.	UNK
<i>Poa trivialis</i>	rough bluegrass	I
<i>Polygonum amphibium</i>	water smartweed	N
<i>Polygonum aviculare</i>	prostrate knotweed	I
<i>Polygonum hydropiper</i>	marshpepper smartweed	I
<i>Polygonum hydropiperoides</i>	swamp smartweed	N
<i>Polygonum lapathifolium</i>	curlytop knotweed	N
<i>Polygonum persicaria</i>	spotted ladies thumb	I
<i>Polygonum punctatum</i>	dotted smartweed	N
<i>Polygonum</i> sp.	smartweed sp.	UNK
<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	black cottonwood	N

Botanical Name	Common Name	Native Status
<i>Potamogeton</i> spp.	pondweed	UNK
<i>Potentilla gracilis</i>	slender cinquefoil	N
<i>Prunella vulgaris</i>	common selfheal	N
<i>Pseudognaphalium</i> sp.	cudweed sp.	UNK
<i>Pseudotsuga menziesii</i>	Douglas fir	N
<i>Ranunculus hebecarpus</i>	delicate buttercup	N
<i>Ranunculus parviflorus</i>	smallflower buttercup	I
<i>Ranunculus repens</i>	creeping buttercup	I
<i>Ranunculus scleratus</i>	cursed buttercup	N
<i>Ricciocarpos natans</i>	fringed heartwort	UNK
<i>Robinia pseudoacacia</i>	black locust	I
<i>Rorippa curvisiliqua</i>	curvepod yellowcress	N
<i>Rosa</i> sp.	rose sp.	UNK
<i>Rubus armeniacus</i>	Himalayan blackberry	I
<i>Rubus ursinus</i>	California blackberry	N
<i>Rumex acetosella</i>	common sheep sorrel	I
<i>Rumex conglomeratus</i>	clustered dock	I
<i>Rumex crispus</i>	curly dock	I
<i>Sagittaria latifolia</i>	broadleaf arrowhead	N
<i>Salix lucida</i> ssp. <i>Lasiandra</i>	Pacific willow	N
<i>Schedonorus arundinaceus</i>	tall fescue	I
<i>Schoenoplectus tabernaemontani</i>	softstem bulrush	N
<i>Senecio jacobaea</i>	skinking willie	I
<i>Sidalcea campestris</i>	meadow checkerbloom	N
<i>Silybum marianum</i>	blessed milkthisle	I
<i>Sisymbrium officinale</i>	hedgemustard	I
<i>Solanum dulcamara</i>	climbing nightshade	I
<i>Solanum nigrum</i>	black nightshade	I
<i>Solidago canadensis</i>	Canada goldenrod	N
<i>Sonchus asper</i>	spiny sowthistle	I
<i>Sparganium emersum</i>	European burreed	N
<i>Sparganium eurycarpum</i>	broadfruit bur-reed	N
<i>Stachys</i> sp.	hedgenettle sp.	UNK
<i>Stellaria media</i>	common chickweed	I
<i>Stellaria</i> sp.	chickweed sp.	UNK
<i>Symphoricarpos albus</i>	common snowberry	N
<i>Taeniatherum caput-medusae</i>	medusahead rye	I
<i>Tanacetum bipinnatum</i>	Lake Huron tansy	I?
<i>Tanacetum vulgare</i>	common tansy	I
<i>Taraxacum officinale</i>	common dandelion	N/I
<i>Taraxicum</i> sp.	dandelion sp.	UNK
<i>Tragopogon dubius</i>	yellow salsify	I

Botanical Name	Common Name	Native Status
<i>Trifolium arvense</i>	rabbitfoot clover	I
<i>Trifolium dubium</i>	suckling clover	I
<i>Trifolium pratense</i>	red clover	I
<i>Trifolium repens</i>	white clover	I
<i>Trifolium</i> sp.	clover sp.	UNK
<i>Tsuga heterophylla</i>	western hemlock	N
<i>Typha latifolia</i>	broadleaf cattail	N
<i>Urtica dioica</i>	stinging nettle	N/I
<i>Verbascum blattaria</i>	moth mullein	I
<i>Verbascum thapsus</i>	common mullein	I
<i>Veronica serpyllifolia</i>	thymeleaf speedwell	N/I
<i>Veronica</i> sp.	speedwell sp.	UNK
<i>Vicia hirsuta</i>	tiny vetch	I
<i>Vicia sativa</i>	garden vetch	I
<i>Vicia</i> sp.	vetch sp.	I
<i>Vulpia bromoides</i>	brome fescue	I
<i>Vulpia myuros</i>	rattail fescue	I
<i>Xanthium strumarium</i>	rough cocklebur	N

Notes:

♦Naming conventions follow the PLANTS database (<https://plants.sc.egov.usda.gov/java/>), (USDA, NRCS 2021).

♦List includes species observed and recorded in addition to native species planted and seeded on Government Island. This is *not* a comprehensive or exhaustive inventory of all species found on Government Island.

03-039

APPENDIX B

Jewett Lake

After recording return to:
Port of Portland *plu 2/14/03*
121 NW Everett St.
Portland OR 97209
Attn: Manager, Property & Development

Recorded in MULTNOMAH COUNTY, OREGON
C. Swick, Deputy Clerk
E31 4
Total : 34.00
ATKLM

2003-035689 02/14/2003 02:56:23pm

Send all tax statements to:
No change.

DECLARATION OF RESTRICTIVE COVENANT

A. The Port of Portland, a port district of the State of Oregon (the "Port"), is the owner in fee simple of certain real property consisting of approximately 426.20 acres located in the City of Portland, Multnomah County, Oregon, commonly known as the Jewett Lake Mitigation Site, which property is legally described on **Exhibit A** and more particularly shown on **Exhibit B** hereto (the "Site").

B. The Port desires to perform mitigation of wetlands on the Site, and wishes to place a restrictive covenant against the Site. Said covenant will protect the Site in perpetuity, with respect to the Port and all future owners of all or any portion of the Site, as an area to be used exclusively for natural habitat, with management for non-native species removal and weed control.

C. This Declaration of Restrictive Covenant (this "Declaration") is granted subject to all recorded and unrecorded easements. In making this Declaration, the Port reserves the right for itself and its assigns to access and use the Premises or to grant easements for the purpose of installing, maintaining, repairing, replacing and removing new or existing utilities related to the operation or use of Port properties, provided that such easements do not conflict with the purposes of this Declaration, including the preservation of the Site as natural habitat, and that any grades and vegetation within the Site which are disturbed during such work are completely restored upon completion of the work.

D. The Port further reserves the right, subject to prior approval by the Oregon Division of State Lands, to amend the boundaries of the Site as described in **Exhibit A** and shown on **Exhibit B**, provided that the Port shall not reduce the total acreage protected as wetlands under this Declaration.

1 - Declaration of Restrictive Covenant

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final.doc

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IN WITNESS WHEREOF, the Port has set its hand this 14 day of February, 2003.

THE PORT OF PORTLAND

By: Bill Wyatt
Bill Wyatt, Executive Director

APPROVED AS TO LEGAL SUFFICIENCY
FOR THE PORT OF PORTLAND

By: Joni Kilgus
Counsel for Port of Portland

STATE OF OREGON)
) ss.
COUNTY OF MULTNOMAH)

This instrument was acknowledged before me on February 14, 2003, by Bill Wyatt as Executive Director of the Port of Portland.

Troy A. Graham
Notary Public for Oregon

My Commission Expires: December 29, 2004

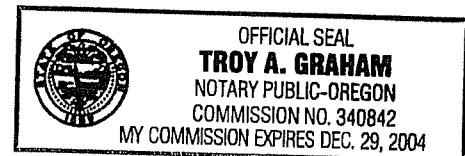
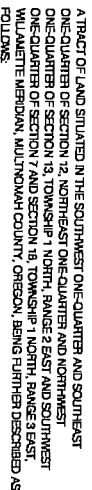


EXHIBIT "A"
JEWETT LAKE MITIGATION SITE LEGAL DESCRIPTION

A TRACT OF LAND SITUATED IN THE SOUTHWEST ONE-QUARTER AND SOUTHEAST ONE-QUARTER OF SECTION 12, NORTHEAST ONE-QUARTER AND NORTHWEST ONE-QUARTER OF SECTION 13, TOWNSHIP 1 NORTH, RANGE 2 EAST AND SOUTHWEST ONE-QUARTER OF SECTION 7 AND SECTION 18, TOWNSHIP 1 NORTH, RANGE 3 EAST, WILLAMETTE MERIDIAN, MULTNOMAH COUNTY, OREGON, BEING FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 4 1/2" DIAMETER BRASS DISC IN CONCRETE, SAID CORNER BEING THE CENTER-EAST ONE-SIXTEENTH CORNER OF SAID SECTION 18; THENCE SOUTH 18° 12' 10" WEST, 452.50 FEET TO AN EXISTING FENCE CORNER AND THE TRUE POINT OF BEGINNING; THENCE, ALONG THE OUTBOUNDS OF SAID DESCRIPTION THE FOLLOWING TWENTY-NINE (29) COURSES: 1) NORTH 82° 21' 20" WEST, 2110.41 FEET; 2) THENCE NORTH 88° 38' 26" WEST, 133.72 FEET; 3) THENCE NORTH 78° 04' 39" WEST, 1072.93 FEET; 4) THENCE NORTH 66° 59' 10" WEST, 613.26 FEET; 5) THENCE NORTH 70° 08' 29" WEST, 1620.26 FEET; 6) THENCE NORTH 42° 52' 44" WEST, 895.66 FEET; 7) THENCE NORTH 46° 33' 26" WEST, 612.77 FEET; 8) THENCE NORTH 36° 38' 11" WEST, 826.05 FEET; 9) THENCE NORTH 20° 05' 32" WEST, 555.51 FEET; 10) THENCE NORTH 01° 12' 25" WEST, 214.15 FEET; 11) THENCE NORTH 28° 49' 17" EAST, 95.26 FEET; 12) THENCE NORTH 16° 01' 37" WEST, 571.88 FEET; 13) THENCE NORTH 04° 04' 02" EAST, 403.05 FEET; 14) THENCE SOUTH 71° 10' 26" EAST, 156.75 FEET; 15) THENCE SOUTH 65° 22' 25" EAST, 376.39 FEET; 16) THENCE SOUTH 78° 59' 42" EAST, 208.26 FEET; 17) THENCE SOUTH 89° 33' 14" EAST, 662.42 FEET; 18) THENCE SOUTH 15° 41' 46" WEST, 234.65 FEET; 19) THENCE SOUTH 68° 18' 21" EAST, 317.14 FEET; 20) THENCE NORTH 22° 03' 37" EAST, 177.56 FEET; 21) THENCE SOUTH 75° 39' 55" EAST, 3488.81 FEET; 22) THENCE SOUTH 13° 00' 09" WEST, 377.83 FEET; 23) THENCE SOUTH 52° 01' 18" EAST, 571.50 FEET; 24) THENCE SOUTH 60° 30' 57" EAST, 622.05 FEET; 25) THENCE SOUTH 67° 25' 25" EAST, 141.29 FEET; 26) THENCE SOUTH 67° 16' 44" EAST, 514.26 FEET; 27) THENCE SOUTH 13° 04' 14" WEST, 1046.00 FEET; 28) THENCE SOUTH 88° 46' 57" EAST, 999.01 FEET; 29) THENCE SOUTH 05° 44' 20" WEST, 1199.55 FEET TO THE POINT OF BEGINNING, CONTAINING 426.20 ACRES, MORE OR LESS.

THE BEARINGS IN THIS DESCRIPTION ARE BASED UPON NORTH AMERICAN DATUM 1983. DISTANCES ARE GROUND IN INTERNATIONAL FEET.

[illegible]

1) THE PURPOSE OF THIS SURVEY IS TO PROVIDE A LEGAL DESCRIPTION OF THE JEWETT LAKE MITIGATION SITE LOCATED ON GOVERNMENT ISLAND.

- 2) THE OUTBOLDS OF THE SITE WAS SURVEYED USING GPS-RX EQUIPMENT. THE DATA WAS COLLECTED IN A STATEPLANE COORDINATE SYSTEM AND THEN SCALED TO GRID/UD COORDINATES USING A CONVERSION SCALE FACTOR OF 0.999920355.
- 3) THE PERIMETER FENCE OF THE MITIGATION SITE WAS USED IN ESTABLISHING THE OUTBOLDS. PER THE DIRECTION OF OUR PROPERTIES AND ENVIRONMENTAL STAFF,

[illegible]