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FREQUENTLY ASKED QUESTIONS:

MAURY ISLAND NATURAL AREA RESTORATION RECOMMENDATIONS

What are the primary ecological values of Maury Island Natural Area?

Drift Cell

Drift cells are systems in which sediment is suspended by waves or currents and transported along the shoreline in a cycle of suspension and deposition. Drift cells nourish sand and gravel beaches, provide fine sediments to tide flats, and maintain sand spits and other coastal landforms.

The site contains 5,000 feet of shoreline in a 5.6 mile long drift cell that extends from Point Robinson to Piner Point. This drift cell is 30% percent armored and has lost close to 13% of its historic sediment sources through bulk heading. Preserving sediment supply to beaches is one of the most important factors for maintaining ecological functions of the shoreline. The functions include: forage fish spawning, salt marsh formation, eelgrass and other plant habitat functions, controlling zonation of various intertidal invertebrates and salmon and marine fish feeding, refuge and migration.

Feeder Bluffs

Feeder bluffs are coastal cliffs or headlands that provide sediment to beaches down current as the result of wave action on the bluff.

Almost 4500 feet of the Natural Area's shoreline is classified as either exceptional feeder bluff or feeder bluff, only 100 feet is considered armored.

Marine Riparian Area

The site's marine riparian area includes 1,000 feet of high quality dense overhanging trees along with 300 feet of dense trees adjacent to the shoreline. Vegetation overhanging marine shorelines is an important source of insects and plant material for feeding juvenile salmon and is also valuable bird and wildlife habitat.

Forage Fish Areas

The now-protected mile of undeveloped shoreline is recognized as one of the most important forage fish areas in Puget Sound, providing critical food supplies for south Sound's resident orca pods and for Chinook salmon. Herring spawning occurs along 3,200 feet of the beach and surf smelt spawning along 1,000 feet; conservation of the site also protects 150 feet of dune grass marsh area.

Nearshore

The nearshore environment along the reserve is a complex, productive environment that provides important habitat structures and ecosystem functions for a wide variety of aquatic flora and fauna. Development has altered much of Central Puget Sound's nearshore environment, makes conservation of remaining unaltered nearshore habitat a crucial component of the aquatic environment.

Drift Logs/Large Woody Debris (LWD)

The Natural Area's contains 3,380 feet of shoreline with drift logs and 700 feet of LWD attached to the shoreline edge would be protected

Upland Forest

The upland contains one of the largest contiguous madrone bluff ecosystems that remain in Puget Sound; in addition, large blocks of low elevation forest are increasingly rare in central Puget Sound. The large intact forest helps mediate both the flows and pollutants in stormwater to both Puget Sound and groundwater provides a protected wildlife corridor between Quartermaster Harbor and Puget Sound including a rich habitat for a wide diversity of birds, including priority species such as bald eagles, pileated woodpeckers, band-tailed pigeons, and olive-sided flycatchers.

Sole Source Aquifer

The entire site is part of a sole source aquifer for the island. Due to the existing soils, large portions of the site are listed as having 'moderate' potential of groundwater contamination. Conservation of the site ensures that the aquifer recharge will not be degraded or increase risk to contaminating the sole source of water on Maury Island, supplying clean drinking water to thousands of people.

What are the restoration recommendations for restoration of the Natural Area?

Reclamation will trigger need for native species replanting in key areas of the site, helping initiate some initial restoration through reestablishment of native species communities. Restoration will also focus on protecting and restoring the shoreline's natural processes that create different structures important for forage fish, salmon, terrestrial insects and large wood structures.

Invasive Weed Removal and Native Species Plantings

Since much of the site has been impacted by former mining operations it contains an extensive amount of invasive weeds. Due to similar conditions between the sites, restoration occurring currently on Maury Island Marine Park will provide useful information about how to control invasives and establish native vegetation at the Natural Area.

The priority for native plant restoration will be within the 200' shoreline area; currently the site contains about 1300 feet of healthy shoreline, while 3700 feet (or about 18.5 acres need habitat improvement). Initial restoration will focus on

focusing on areas that are accessible, contain native soils; build upon existing native vegetation pockets, where structure removals have occurred and in areas not proposed for recreation access.

Structure Removals

The following structures are recommended for removal, facilitating restoration of the site and its resources:

- Intertidal remnant concrete structure located on the east shoreline.
- Dock and pilings (which will reduce shade and remove creosote, known to be toxic for forage fish larvae)
- Concrete footing in shoreline area near dock

What if I have additional questions about restoration at Maury Island Natural Area?

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