

The Sand Point Peninsula, known today as Magnuson Park, was once covered in wetlands, lowland forest, and even a small lake. But forest and wetlands were forever altered when the peninsula was graded from rolling hills into a flat plain to serve as a Naval Air Station. Water from the surrounding hills and the site itself was diverted into underground pipes, essentially turning wetlands to dry land.

Today, Magnuson Park is reversing that action, making stormwater a unifying element in the park. Starting at the hills and historic structures to the west and weaving its way eastward through sports fields and ponds, stormwater now moves through re-created wetlands. These wetlands provide wildlife habitat and improve the water's quality before it enters Lake Washington.

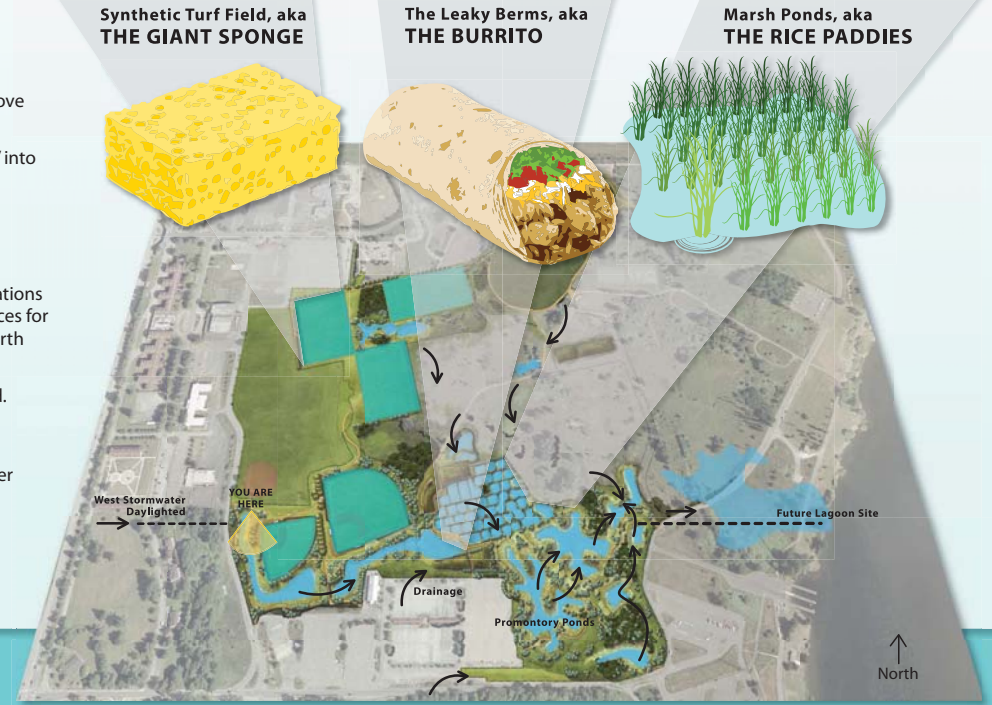


This curved overlook, as well as the downstream weir that forms this wetland, are constructed from salvaged sections of the Beacon Hill Light Rail tunnel. Look for other relics that have been salvaged for use throughout the park, including demolished concrete tarmacs, salvaged vaults and old airstrip lighting.

MOVING WATER

The flattened site required significant re-grading and redesign of site elements to allow water to move eastward to Lake Washington.

- Stormwater from the hills to the west is treated to remove pollutants prior to being “daylighted” into wetlands from a stormwater pipe under the site.
- Athletic fields act as sponges, absorbing rainwater and slowly releasing it into wetlands downstream, much like the forest floor did before the site was cleared, filled and compacted.
- A leaky “burrito” berm allows water movement between wetland areas while minimizing fluctuations in water level. The “burrito” consists of rocks wrapped in geotextile fabric that creates open spaces for the movement of water. Park paths can be constructed and vegetation planted on mounded earth above the berm.
- Drainage from parking lots and roads to the south once flowed into Lake Washington untreated. Now, this drainage is kept separate from wetlands as it passes through naturalistic treatment elements in which plantings remove automobile-generated pollutants.
- Marsh Ponds or “Rice Paddies” provide a series of shallow wetlands with seasonally variable water levels, ideal breeding habitat for amphibians and migrating shorebirds.
- The Promontory Ponds provide permanent deep-marsh and pond habitats for waterfowl and aquatic insects.
- A future lagoon off Lake Washington may one day directly connect the wetlands to the lake.



At the time this photo was taken, wetlands, then referred to as swamps, were considered as having little value. This photo shows the wetlands being filled to serve the naval station. (Also, note the hill in the distance, Sand Point Head, being leveled.) We now recognize that wetlands, such as those in front of you today, have great value ecologically.



WHAT IS NATURAL?

This site was forever altered in the early 1900s when the Lake Washington Ship Canal opened, lowering the lake by 9 feet. Later, the site was graded flat as part of the Naval Air Station formerly located here. Unfortunately, the park cannot restore the once-pristine conditions. The marsh ponds before you are anything but natural. As man-made as the runway that once stood here, they fill, then overflow, one into the next, similar to rice paddies. This condition provides a broad range of habitat functions. While the shapes of the ponds begin as squares, oriented along a taxiway once on this site, their forms become more organic to the east. But, regardless of their shape, they all provide valuable habitat that will evolve into an increasingly complex ecosystem over time.



The Magnuson wetland complex was largely built around existing stands of red alder and black cottonwood. These groves naturally established themselves after the naval station was decommissioned. While their location appears random, these trees established on soils that were less impacted by the airstrip and the decommissioning process. Retaining these older trees provided a 30-year head start on re-establishing forests. The trees maintain valuable habitat throughout construction and create a microclimate that benefits the establishment of new vegetation.



EMERGENT WETLANDS

The marsh ponds are emergent wetlands; with a depth no greater than 18 inches, they are only seasonally wet. They fill up from rains in late fall and maintain a stable water level until rains cease in late spring. They dry out in summer, as do many natural marshes. Marsh ponds provide the following important functions:

- The ponds provide breeding habitat for Pacific Chorus Frogs (tree frogs). In late winter, the frogs lay their eggs amongst thin-stemmed plants that grow in the shallow, stable water levels from mid-winter to late spring.
- Seasonal mudflats provide excellent feeding locations for migratory shorebirds.
- Surrounding native-shrub and woodland habitats provide critical upland habitat, which native amphibians use during their life-cycle.
- Shallow marshes and seasonal mudflats allow insect populations to flourish—and insects are the primary food source for many birds and amphibians.
- Marshes that naturally dry out in late spring prevent successful breeding by non-native bullfrogs—potential predators to our native species.



FORMER AIRFIELD

A 1958 photo (bottom left) shows the constructed airfield on the now leveled and filled Sand Point Peninsula. While the naval station is gone, many of its features, visible and invisible, continue to shape the park you see today.

This more recent photo (left) shows how the park has evolved through both man-made and natural processes.

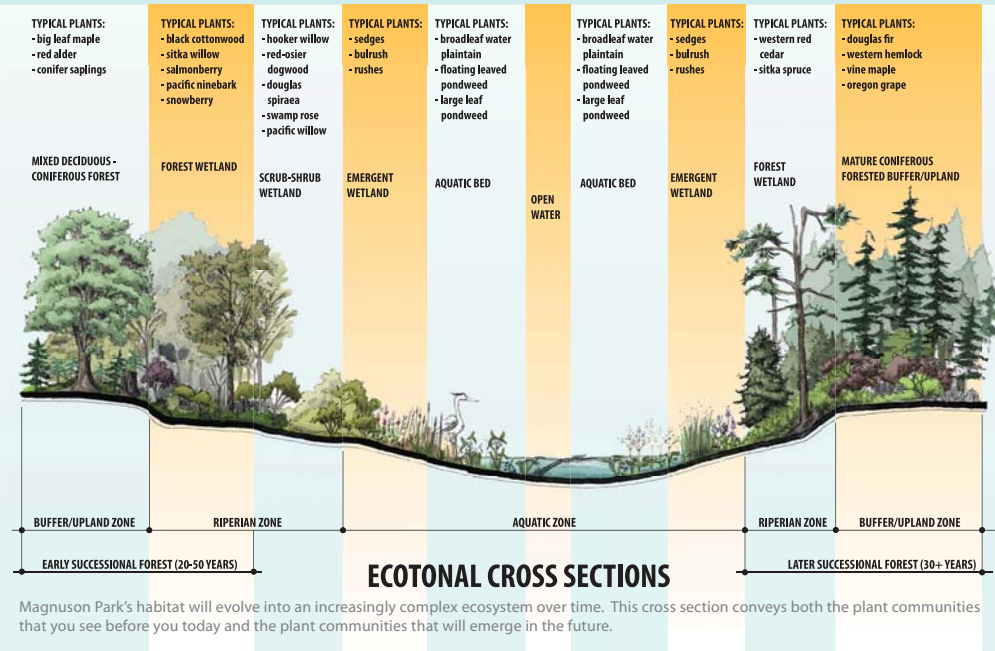


Named after Promontory Point (the hill to the south), the Promontory Ponds are the deepest wetlands in Magnuson Park, reaching depths of up to 10 feet. During their construction, acres of impervious tarmac were removed (once part of the Naval Air Station that existed on the site), while the surrounding black cottonwood groves were preserved.

In time, restored habitat surrounding the ponds will be linked to existing and restored forests to the north, south and west. This will create corridors of connected habitats across the site. The ponds will become home to a diversity of life, from waterfowl such as Buffleheads and Teal, to dragonflies whose larvae will live for months in the shallows. The open water of the ponds provides ever changing views of Magnuson Park's habitat, even during the leafy height of summer.

PROMONTORY PONDS

- Are deep marshes with year-round open water and emergent marsh edges.
- Provide habitat for waterfowl that are shy and tend to avoid large, open-water lakes. The peninsulas on the ponds allow birds to rest near shore out of the sight of humans.
- Create a broad range of wetland community types adjacent to upland forest and shrub communities, providing the full range of habitats needed for many species of wildlife.
- Focus the human activity around the southern and eastern edges of the ponds, which creates a refuge for wildlife to the north, where human access is restricted.
- Maintain a constant water elevation and function as the endpoint of the wetland system, with water draining into Lake Washington through existing storm lines.
- Are designed to allow a future lagoon which would connect the wetland system directly to Lake Washington.



WHERE IS MUD LAKE?

The Sand Point Peninsula was once wooded hills and wetlands, including a 15-acre lake commonly referred to as Mud Lake. The peninsula changed considerably in 1916 when the Lake Washington Ship Canal opened and Lake Washington dropped by 9 feet, dehydrating much of Mud Lake and the surrounding wetlands and peat bogs.

Mud Lake was filled in the 1930s when the entire site was graded and flattened for a naval airstrip. The Promontory Ponds that exist here today are not a restoration of Mud Lake itself, which was forever destroyed. The ponds were carved from the fill and underlying peat bogs that once surrounded the lake, a shadow of the open-water wetland complex formerly on the peninsula.

In 1938, Mud Lake was still visible, though it was already shrinking. Forever altered by the lowering of Lake Washington, Mud Lake was soon to be filled by the expanding airfield to the north.

