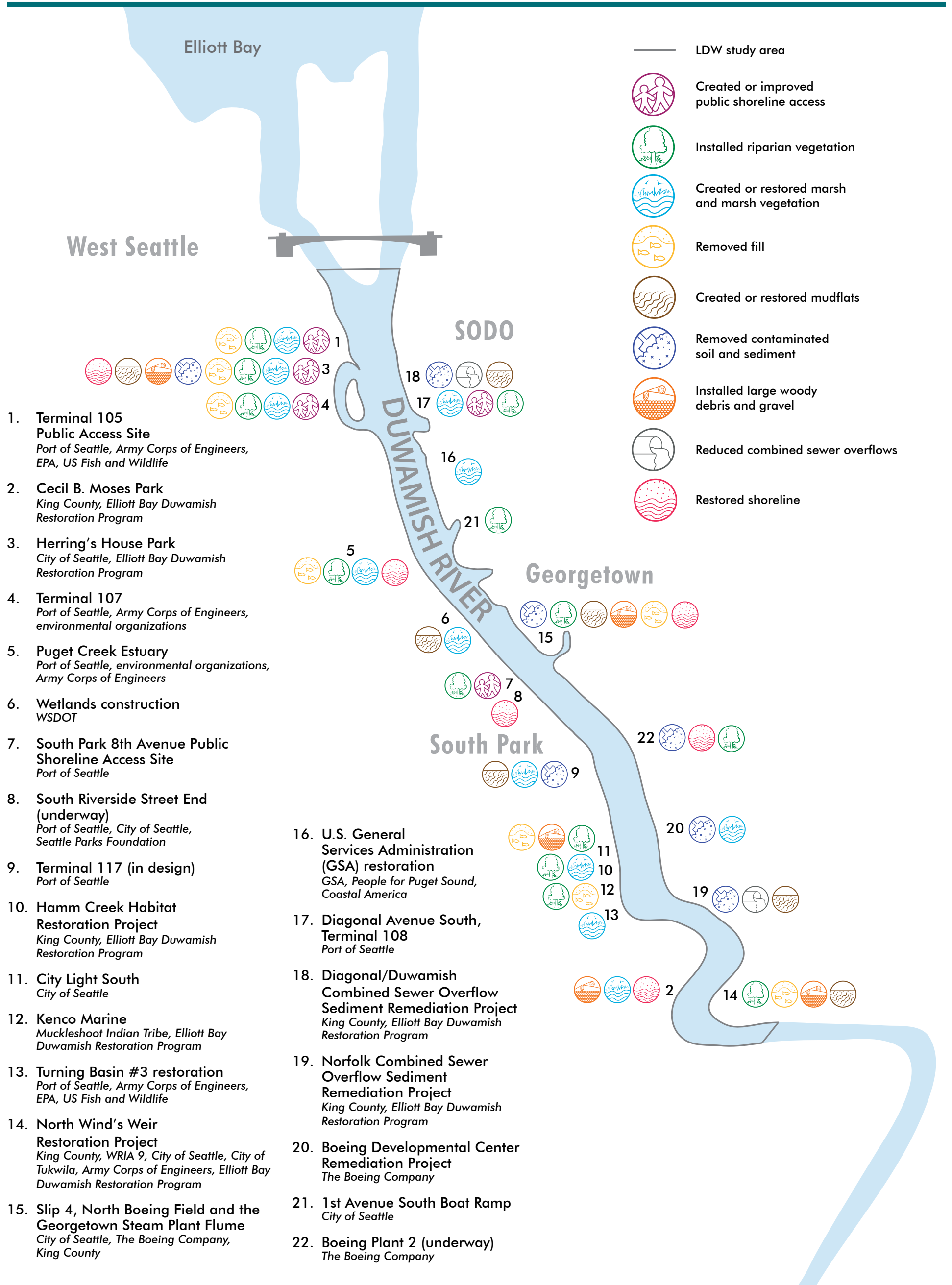


# Habitat Restoration along the Lower Duwamish Waterway



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At one time, the Duwamish River meandered across lush tidal marshes and mudflats to meet Elliott Bay, providing ideal habitat for fish, birds, and wildlife. A century of development put ever-increasing stresses on the natural resources of the river, particularly in its lower reaches.

In the late 1960s, the tide began to turn, as public concern led to many initiatives to mitigate these stresses. While the Lower Duwamish Waterway (LDW) may never return to its pre-industrialized state, much progress has been made.

The many efforts underway and already completed are focused on areas where habitat is scarce and essential for fish and wildlife in the LDW.

Habitat restoration can have many elements. Restoring and/or creating marshes and mudflats are a top priority. Riparian areas or buffers, especially those adjoining marsh habitats, are also targeted because they support wildlife, filter runoff and provide material inputs. The riparian area is the interface or area between a river and the land. Riparian vegetation is the plant habitat along the river banks. The addition of large woody debris such as logs, stumps, boulders, and brush can provide cover habitat for fish to hide from predators, a base for macroinvertebrates (insects, worms, clams, crabs and snails, etc.) to attach to or live on, and structure to vary river flows and enhance diversity.

Other important habitat enhancing activities include restoring the natural shape of the shoreline, removing trash and contaminated soils, and reducing pollution entering the waterway.

## In addition to the restoration and enhancement work on the map, some other notable activities include:

- The City of Seattle has leased several City properties to Bluefield Holdings in an innovative agreement to transform City properties along the Duwamish into healthy wildlife and marine life habitat. Under the agreement, Bluefield restores the shoreline, then sells environmental liability credits to businesses that have contributed to Duwamish contamination that are in need of credits to apply toward their Natural Resource Damage Assessment liabilities. The City properties slated for eventual restoration include:
  - ✓ Spokane St. Bridge Shoreline Layback-Bluefield Masterlease
  - ✓ Harbor Island Shoreline Layback - Bluefield Masterlease
  - ✓ Other sites may be developed as well
- To date, King County has reduced combined sewer volumes entering the Lower Duwamish Waterway by more than 90 percent. They are now focusing their efforts on the five (out of a total of 10) remaining Duwamish Combined Sewer Overflows (CSO).
- At Turning Basin #3, studies of benthic invertebrates by the Port of Seattle demonstrated the restoration project has been a success. Also, as part of the restoration work, a derelict ferry boat hull was removed.
- At Plant 2, Boeing has demolished the buildings where many of the World War II B-17s were built, removed 500 creosote-coated pilings and built a state-of-the-art treatment system to clean stormwater to residential standards before being released into the Duwamish Waterway.
- At Hamm Creek, the connection to the Duwamish was designed to be “fish-passable” to allow access to Hamm Creek for salmonid spawning.
- At the Puget Creek Estuary, the old mouth of Puget Creek was re-established.

## For further information about the Lower Duwamish Waterway habitat restoration and cleanup visit these websites

Environmental Protection Agency: [yosemite.epa.gov/r10/cleanup.nsf/sites/lduwamish](https://yosemite.epa.gov/r10/cleanup.nsf/sites/lduwamish)

Duwamish River Cleanup Coalition/Technical Advisory Group: [duwamishcleanup.org](https://duwamishcleanup.org)

Lower Duwamish Waterway Group: [www.LDWG.org](https://www.LDWG.org)