

# Fidalgo Bay Aquatic Reserve

## PROTECTING UNIQUE HABITATS

### Protecting and preserving Fidalgo Bay

In 1999, Skagit Land Trust acquired the area south of the railroad trestle (behind you) and, in 2006, some of the area north of the trestle. These lands were then gifted to the state for DNR to manage. The land trust holds a conservation easement on the land to ensure that it is managed primarily to preserve habitat for fish and wildlife. The aquatic reserve designation offers additional protection by preserving the environmental, scientific, and educational value of these public lands. Reserves are established for 90 years, starting when the site-specific management plan is adopted. This means the Fidalgo Bay Aquatic Reserve and the special conservation it provides will be in place until 2098.



Around you lies the Fidalgo Bay Aquatic Reserve—780 acres of state-owned aquatic lands designated in 2000 by the Washington State Department of Natural Resources (DNR) to preserve the unique habitats and species in the area. Within this reserve you'll find tidal flats, salt marshes, small "pocket" estuaries, sand and gravel beaches, and

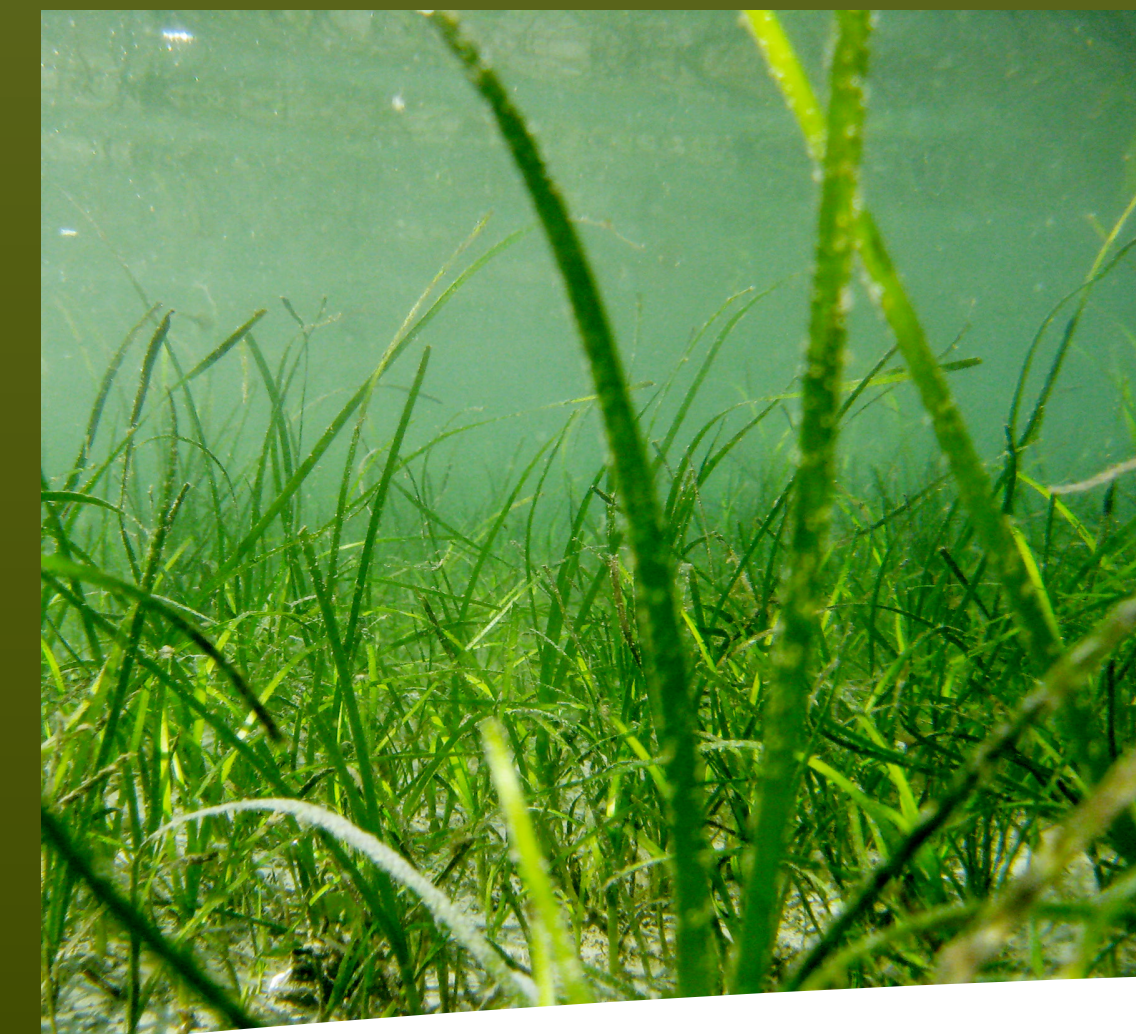
expansive native eelgrass beds—essential habitats for the reproductive, foraging, and rearing success of many fish and bird species. A wide variety of fish, water birds, mammals, and invertebrates inhabit the reserve or use it as an important stopover on their migratory routes. The critical habitats and biodiversity of Fidalgo Bay are key reasons it was designated as an aquatic reserve.



Karen Huber



Betty Carteret



### Management goals of the Fidalgo Bay Aquatic Reserve

**Conserve and enhance native habitats** and associated plants and wildlife species. Special emphasis: eelgrass, forage fish, salmonids, and migratory birds.

**Protect and restore** the functions and natural processes of the shoreline and intertidal areas to further support the natural resources of the reserve.

**Promote the stewardship** of riparian and aquatic habitats and species by providing education and outreach opportunities and promoting coordination with other resource managers.

A Washington Conservation Corps member collects sediment samples in Fidalgo Bay, looking for forage fish eggs.



### Did you know?

Funding for these tideland acquisitions was provided by the Washington State Coastal Protection Fund and by the Texaco Oil Spills Natural Resource Trustees to compensate the public for impacts to natural resources that resulted from oil spills that occurred in the area in the 1990s.



To learn more, visit the Aquatic Reserves website: <http://bit.ly/aqreserve> or call 360-901-1100



# Fidalgo Bay Aquatic Reserve

## RESTORING SHORELINE HABITATS

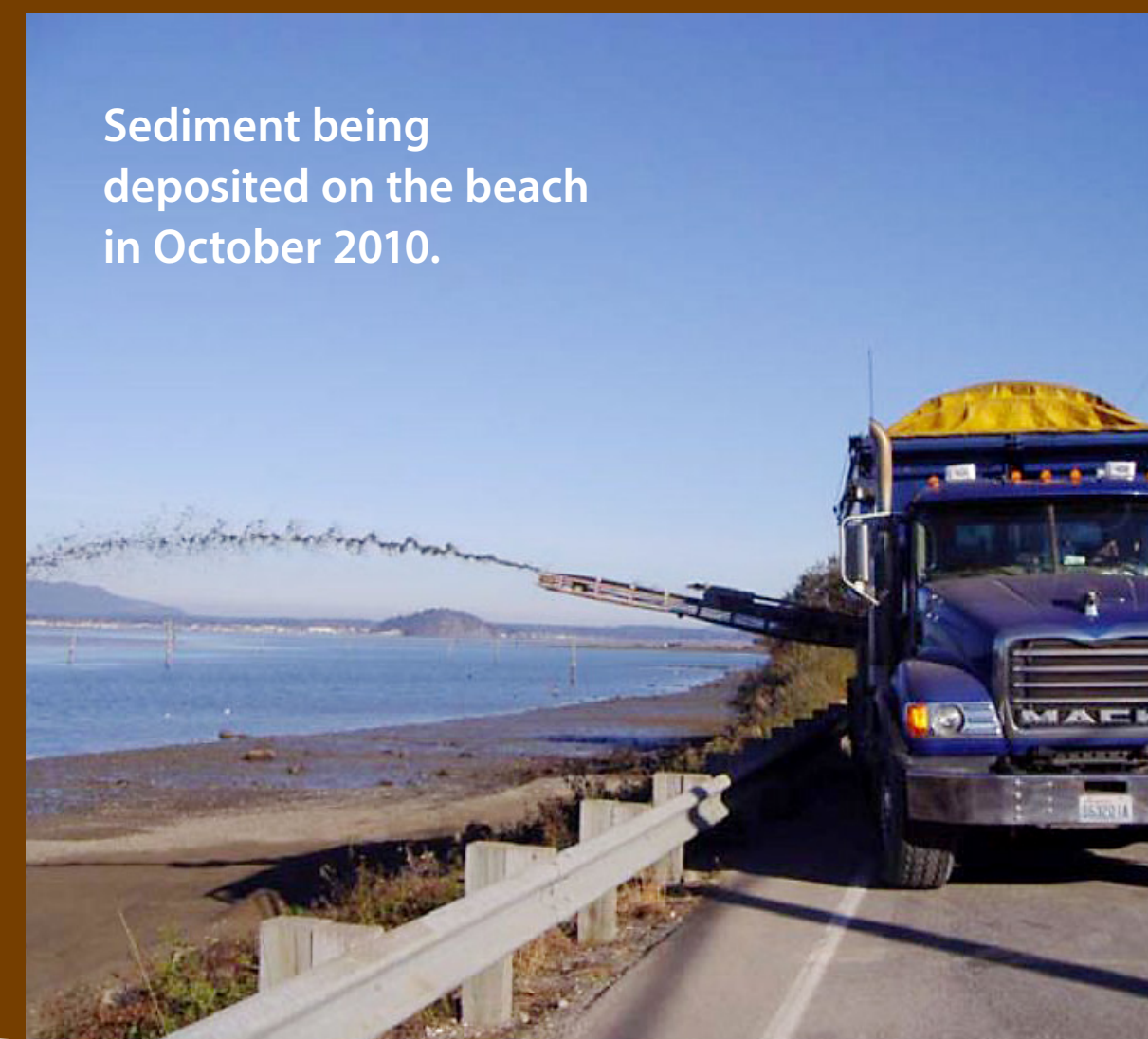
You are looking north along March Point, the site of an important restoration project that took place in 2010. The goal of the project: restore the beach to support habitat for spawning forage fish.

Forage fish—such as surf smelt and Pacific sand lance—are a critical food source for marine birds, salmon, and other large marine predators. These small fish require just the appropriate kind of conditions to spawn and survive, particularly the right kind of sand and gravel at specific tidal elevations on the beach.

### Bringing back sediments

Large portions of the shoreline along the bay are modified by riprap, concrete bulkheads, and creosote pilings—what shoreline restoration experts call “armoring.” Armoring protects March’s Point Road from erosion; but erosion can also be a good thing. The natural process of erosion enables sediments to deposit along a beach and provide the right kind of habitat for forage fish. Armoring interferes with erosion and eventually causes finer sand and gravel to be

transported away by tides and currents. To replace lost sediments, rebuild the beach slope, and improve habitat for forage fish spawning, a multi-partner restoration effort began work in October 2010. Crews hauled in 11,000 cubic yards of sand and gravel that were spread over 3,000 feet of shoreline on the west side of March Point. We will continue to monitor the shoreline to make sure the restoration work is accomplishing our goals of creating suitable habitat for forage fish.

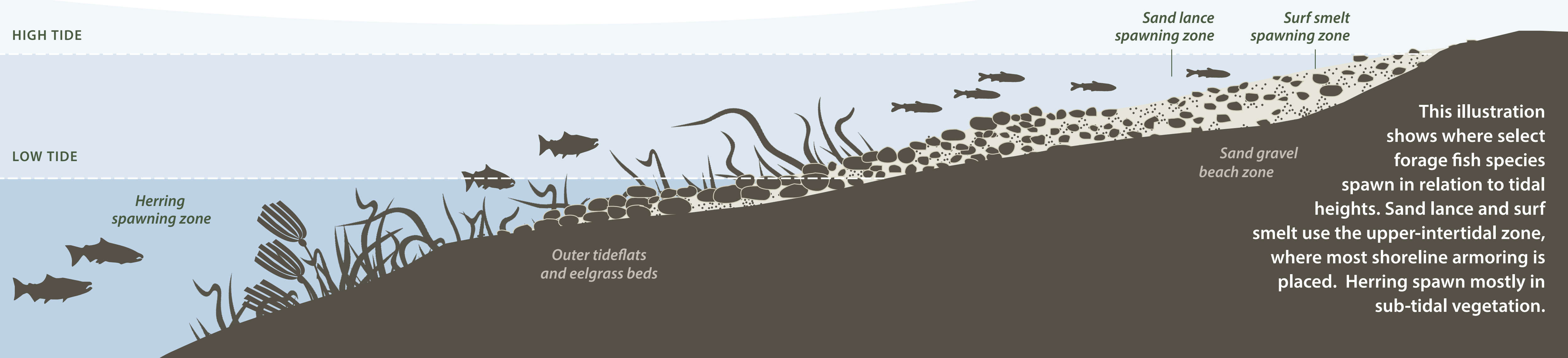


### Did you know?

In Puget Sound, more than one-third of its 2,500 miles of shoreline are armored, largely to protect public and private property, ports, marinas, roads and railways.

HIGH TIDE

LOW TIDE



This illustration shows where select forage fish species spawn in relation to tidal heights. Sand lance and surf smelt use the upper-intertidal zone, where most shoreline armoring is placed. Herring spawn mostly in sub-tidal vegetation.

### Who are the project sponsors?

Skagit River System Cooperative coordinated the project with help from the Washington State Department of Natural Resources and the Swinomish Indian Tribal Community. Shell Puget Sound Refinery, Tesoro Refining & Marketing, and the Munks Family provided logistical support.

The project cost \$358,000 and was funded by the Texaco Oil Spills Natural Resource Trustees. Funds came from a settlement with Texaco for oil spills that occurred in Fidalgo Bay in the 1990s.

- Texaco Oil Spills Natural Resource Trustees
- Lummi Nation
- Nooksack Tribe
- Suquamish Tribe
- Swinomish Indian Tribal Community
- U.S. Department of the Interior
- U.S. Fish and Wildlife Service
- WA Department of Ecology
- WA Department of Fish and Wildlife
- WA Department of Natural Resources

