



**PRINCE
WILLIAM
SOUND**



Exxon Valdez settlement
funds benefit the sound's
residents and visitors

Civil Settlement

Science, Subsistence, Archaeology

The following projects have been funded by the Trustee Council through the \$900 million 1991 civil settlement with Exxon.

Most research, monitoring and general restoration projects take place in Prince William Sound. Much of the \$74 million in projects represented below ends up in the Prince William Sound economy, paying for boat charters, plane charters, facilities, technical support, researcher salaries, supplies, motels, gas, food, and other needs.

In addition, the focus on pink salmon and herring is resulting in a new understanding of the ecosystem dynamics in Prince William Sound and providing vital new tools for fisheries managers.

Sound Ecosystem Assessment (SEA) \$21.9 million

This six-year research effort seeks to understand the ecological influences on herring and pink salmon productivity in Prince William Sound.

Nearshore Vertebrate Predator (NVP) Project \$6.4 million

Five-year effort is studying the recovery of sea otters, river otters, harlequin ducks and pigeon guillemots, all predators in the nearshore environment.

Alaska Predator Ecosystem Experiment (APEX) \$10.4 million

Seven-year project studies seabirds and the schooling fish they prey on, revealing long-term changes taking place in the Gulf of Alaska.

Sound Waste Management Plan \$1.4 million

A waste management plan, including facilities, helps reduce marine pollution through proper disposal of common pollutants, such as waste oil and hazardous household waste. Facilities were constructed in Whittier, Chenega, Tatitlek, Valdez and Cordova.

Shoreline Cleanup \$2.0 million

Returned to Chenega-area beaches in 1997 to remove entrenched oil.

Pink Salmon

Coded Wire Tagging \$2.7 million

Funded tagging and recovery of hatchery pink salmon, providing information to allow fisheries managers to vary timing and location of commercial harvests in order to protect wild stocks. (see photos, back page)

Otolith Mass Marking \$1.2 million

Equipment and testing provided to develop a more accurate, less expensive means of identifying hatchery-raised salmon for better fisheries management. (see photos, back page)

Egg Mortalities \$3.7 million

Studied the survival of pink salmon embryos in oiled and unoled streams to determine immediate and long-term impacts from the spill.

Genetic Structure \$955,600

Described genetic differences in wild pink salmon. Knowing if there are multiple stocks enables fisheries managers to refine practices to better protect wild stocks.

Pacific Herring

Herring Disease \$3.0 million

Determined that a virus and fungus were involved in the 1993 herring crash. Work continues to determine which natural and human-induced factors aid in the spread of disease among herring.

Genetic Discrimination \$294,800

Examined genetic composition of Alaska herring to determine if PWS herring population is a separate stock or part of a regional population.

Herring Natal Habitats \$1.6 million

For years after the herring crash, this project monitored biomass of spawning herring throughout PWS.

Marine Mammals

Harbor Seals \$2.7 million

Multi-year effort to study the overall health, trends, and habitat use of harbor seals to determine why they are in decline.

Killer Whales \$9

Monitor pods, document distribution, analyze blubber and genetics in PWS and Gulf of Alaska.

Birds

Black Oystercatchers \$80,400

Monitoring population and productivity to determine if recovery from spill has occurred.

Harlequin Ducks \$1.6 million

Monitoring population and productivity to determine why this species is not recovering in the spill region.

Bald Eagles \$49,300

Assessed recovery status in Prince William Sound until declared recovered in 1996.

Marbled Murrelets \$1.2 million

Studied reproductive success, productivity, prey, and foraging habitat of this mysterious seabird in decline.

Kittitz Murrelets \$605,400

Evaluate abundance, distribution, habitat use, and productivity of this little-known species.

Subsistence

Community Involvement/Traditional Knowledge \$1.6 million

Residents of Valdez, Chenega, Tatitlek, Cordova and six other communities in spill region serve as liaisons among the Trustee Council, researchers, and communities.

Youth Area Watch \$877,300

Students take part in ongoing restoration projects, giving them the skills and knowledge to participate in restoration activities now and in the future.

Community Based Harbor Seal Management \$712,000

Village technicians in each PWS community are trained by the Alaska Native Harbor Seal Commission to collect biological samples from subsistence harvests for analysis.

Clam Restoration \$1.1 million

Pilot project to stock clam populations on subsistence beaches near Chenega Bay and Tatitlek.

Tatitlek Coho Salmon Release \$61,400

Smolt have been released in Boulder Bay annually since 1994 to create a subsistence fishery.

Elders/Youth Conferences \$181,100

1995 and 1998 conferences bring subsistence users, youth, and researchers together to learn from each other and exchange ideas.

Subsistence Documentaries \$170,400

Two videos document subsistence uses and traditions involving harbor seals and herring.

Self Lakes Sockeye Stocking \$250,500

Enhancement project to provide more subsistence resources in the Chenega area.

Chenega Chinook \$200,600

King salmon fry released in Crab Bay to provide additional subsistence resources.

Habitat Improvements

Habitat Restoration \$122,800

Targeted restoration of salmon streams in PWS.

Valdez Duck Flats Restoration \$65,400

Developed plan for possible enhancement of popular duck flats.

Recreation

Prince William Sound Recreation \$115,800

Developed list of proposed recreational improvements.

Human Use Model \$206,400

Predicts the patterns of increasing human use in PWS and the impacts on wildlife.

NOTE: See I



Other

Archaeological Site Monitoring & Stewardship \$1.2 million
Archaeological sites injured by vandalism and oiling are being monitored and volunteers are trained to provide long-term protection.

Oiled Bed Restoration \$2.3 million
Experimental effort cleaned and restored oiled mussel beds with evaluation ongoing to determine the long-term health of restored beds.

Eelgrass Monitoring \$428,200
Quantified recovery in eelgrass habitat and examined hydrocarbon concentrations in sediments.

Oceanography of PWS \$94,200
Studies the water properties and circulation in 4 bays important to herring.

Pristane Monitoring \$425,900
Measures plankton productivity by analyzing pristane levels in mussels. This helps assess the feeding success and productivity of salmon fry.

Restoration of Coghill Lake \$697,000
Fertilized lake to restore it as a major contributor to the commercial sockeye fishery.

Cutthroat Trout/Dolly Varden \$909,700
Provided an inventory of streams with cutthroat trout, analyzed habitat needs, made habitat improvements.

Legend

Uses of Exxon Civil Settlement

NUMERALS designate Trustee Council projects

For more information on these projects call the Restoration Office at 907-278-8012 or 800-478-7745.

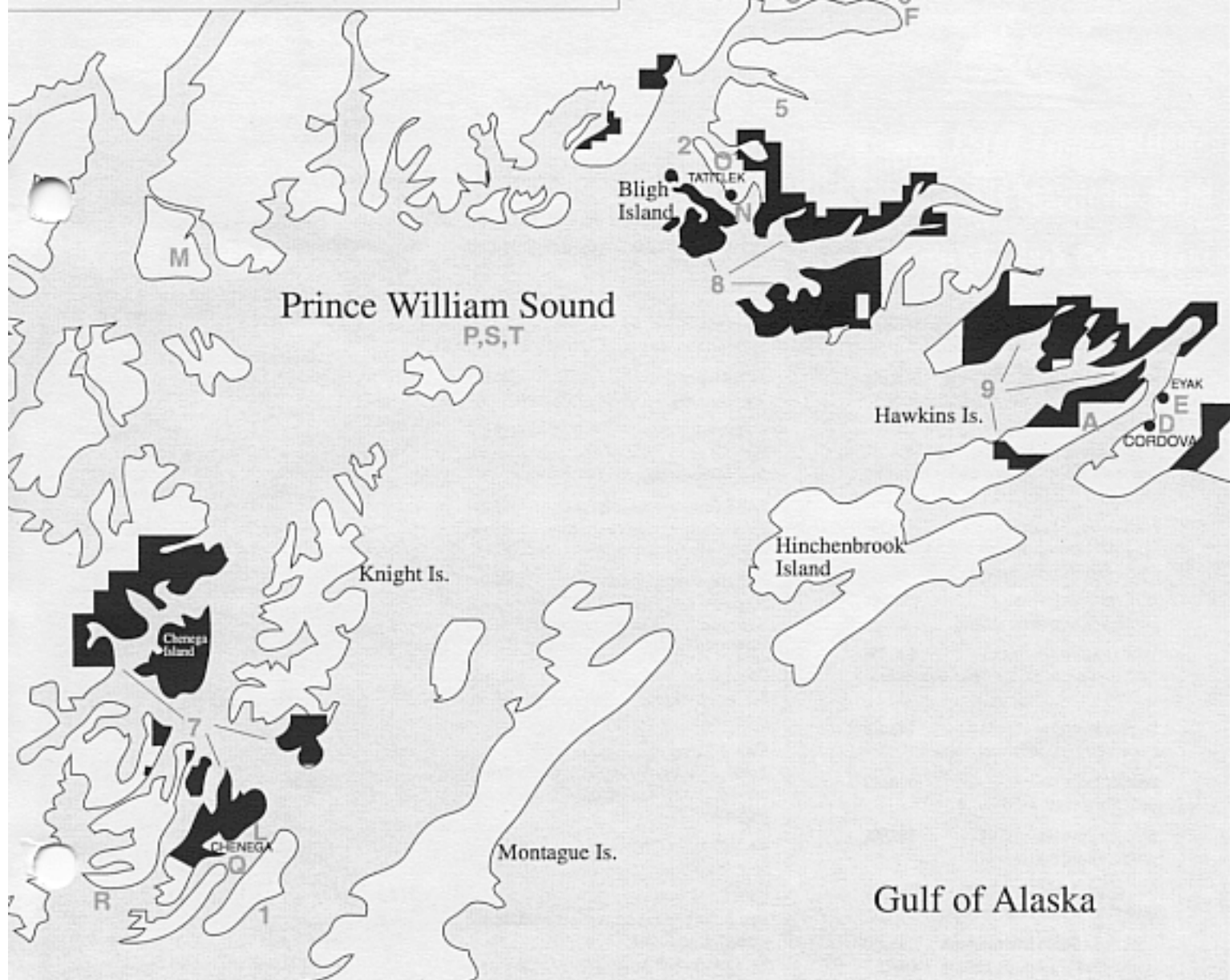
Uses of Exxon Criminal Settlement

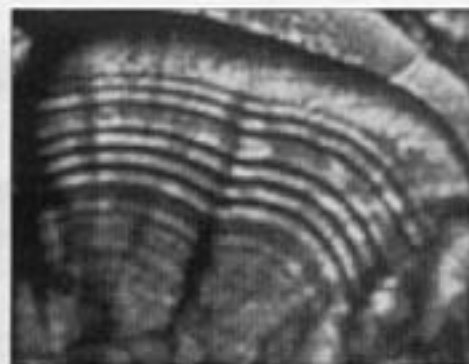
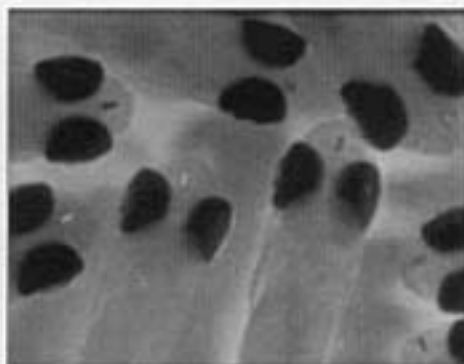
LETTERS designate state and federal projects

For more information on these projects contact the agency identified at the end of each project description:

Dept. of Natural Resources (Division of Parks)	269-8700
Dept. of Fish & Game (Habitat Division)	267-2277
Dept. of Community & Regional Affairs	269-4588
U.S. Forest Service	271-2619

Back Page for habitat protection and other projects





Coded Wire Tags

During the last several years, research supported by the Trustee Council was able to test the effectiveness of a new hatchery salmon identification process known as otolith mass marking. By slightly changing the water temperature while young salmon are in the incubator, distinctive patterns form on the earbone (or otolith) of salmon fry, much like climate affects the rings of a tree. Most pink salmon released from Prince William Sound hatcheries are now marked this way. Technicians have had a 97 percent success rate in rapidly identifying fish in the field. This new method was used in 1997 to justify harvesting pink salmon that were concentrated in Hidden Bay, an area that otherwise would not have been fished because of unknown stock composition. Otolith mass marking is proving to be easier, more effective and less expensive than the labor-intensive process of tagging one of every 600 fry with tiny coded wire nose tags. The Trustee Council provided \$3.8 million to maintain the coded-wire tagging process, while at the same time research the effectiveness of the new otolith mass marking process. This included the purchase and installation of boilers at hatcheries so the water could be warmed.

-versus-

Otolith Mass Marking

Criminal Settlement

The following projects (in various stages of completion) are being funded through the \$100 million criminal settlement paid by Exxon. This settlement was split evenly between the state and federal governments and is used for restoration purposes.

A	Passage Canal Campsites	\$270,000
	Campsites, trail, shelters. (ADNR)	
B	Allison Point Fishing Area	\$450,000
	Valdez - expand parking, trails, restrooms, fishing dock. (ADNR)	
C	Mineral Creek to Shoup Bay Trail	\$300,000
	Trail between Valdez and Shoup Bay park. (ADNR)	
D	Fleming Spit Recreation Area	\$450,000
	Cordova - parking, restrooms, fish tables, access. (ADNR)	
E	Mt. Eyak Trail System	\$93,000
	Cordova - trail system. (ADNR)	
F	Valdez Interpretive Display	\$20,000
	Build displays at Valdez Small Boat Harbor. (ADNR)	
G	W. PWS Interpretive Display	\$40,000
	Displays for Portage/Whittier. (ADNR)	
H	Whittier Trails	\$110,000
	Build hiking trails. (ADNR)	
I	Shotgun Cove Hiking Trail	\$60,000
	Whittier - build trail. (ADNR)	
J	Shoup Bay Public Use Cabins	\$185,000
	Build three cabins, trails, campsites. (ADNR)	
K	Dock Point Beach Improvements	\$185,000
	Valdez - trails, restrooms, parking. (ADNR)	

L	Chenega Bay Trail System	\$200,000
	Shelter, boardwalks, signs. (ADNR)	
M	Esther Island Trail	\$40,000
	Boardwalk trail and viewing platform. (ADNR)	
N	Tatitlek Mariculture	\$993,000
	Facilities and support for production of oysters for subsistence use. (DCRA)	
O	Fish & Game Processing Facility	\$187,000
	Provide facilities in Tatitlek for better processing and storing of subsistence resources. (DCRA)	
P	PWS Regional Spirit Camp	\$228,000
	Supported spirit camp in 1995 & 1996 to teach youth about subsistence resources & related activities. (DCRA)	
Q	Chenega Bay Mariculture	\$337,000
	Supports production of oysters for subsistence uses. (DCRA)	
R	Kiniklik Parcel	
	Acquired the historic Russian Orthodox Church site in the abandoned village of Kiniklik for protection. (USFS)	
S	Marbled Murrelet Nesting	\$165,000
	Map nesting habitat of marbled murrelets. (USFS)	
T	New Growth Forest Management	\$200,000
	Assess techniques for managing new growth forests at recently logged sites. (USFS)	

Civil Settlement

Habitat Protection

The following habitat in Prince William Sound has been protected (or is being considered for protection) by the Exxon Valdez Oil Spill Trustee Council through use of the \$900 million civil settlement with Exxon.

- 1 **Horseshoe Bay** **\$475,000**
315 acres with 1600 ft. frontage next to Horseshoe Bay State Marine Park on La Touche Island. Acquisition complete.
- 2 **Ellamar Subdivision** **\$655,500**
Five parcels totaling 33.4 acres at Ellamar northwest of Tatitlek. Acquisitions complete.
- 3 **Hayward Parcel** **\$150,000**
9.5 acres adjacent to Valdez Duck Flats east of Valdez. Acquisition complete.
- 4 **Valdez Duck Flats**
Three parcels totaling 66.7 acres in the estuarine area east of the City of Valdez. Appraisals under review.
- 5 **Jack Bay**
942 acres includes three salmon streams and good shoreline habitat. Appraisal under review.
- 6 **Blondeau Parcel**
100 acres at the mouth of Mineral Creek in the City of Valdez. Popular for salmon fishing. Appraisal is under review.
- 7 **Chenega Corporation** **\$24,000,000**
Protected 59,520 acres, including Jackpot and Eshamy Bays, 190 miles of shoreline and 45 salmon streams. About 40% of the package is through conservation easements. Federal criminal fund provided another \$10 million.
- 8 **Tatitlek Corporation** **\$24,550,000**
Protected 68,814 acres, about half through conservation easements. Includes about 212 miles of shoreline and 50 salmon streams. Federal criminal fund provided another \$10 million.
- 9 **Eyak Corporation** **\$45,000,000**
Agreement in place to protect 75,425 acres, including Port Gravina, Sheep Bay and Windy Bay, about 190 miles of shoreline and 80 salmon streams. Agreement must be approved by shareholders.



Exxon Valdez Oil Spill Trustee Council

Restoration Office: 645 G Street
Anchorage, AK 99501
907-278-8012 or 800-478-7745 (within Alaska)