

**A broad coalition of west coast stakeholders is seeking congressional support to provide \$2 million to fund the National Oceanic and Atmospheric (NOAA) genetic stock identification program for FY 2011. This funding is currently provided in the President's budget under the NOAA Budget Reference for Pacific Salmon (see reverse page for detailed language).**

**WHO IS INVOLVED?**

- ✓ West coast fishermen
- ✓ West coast seafood processors
- ✓ West coast ports and communities
- ✓ Oregon State University & Oregon Sea Grant
- ✓ National Marine Fisheries Service Northwest and Southwest Science Centers
- ✓ Oregon Department of Fish & Wildlife, Washington Department Fish & Wildlife, California Department of Fish & Game
- ✓ Pacific Fishery Management Council
- ✓ Environmental groups

**WHAT IS IT?**

- ➔ Real-time genetic identification of salmon stocks through tissue sample analysis
- ➔ Combines genetic identification, oceanography, and fishermen data to predict salmon migration
- ➔ Allows fishermen to target healthy stocks while avoiding weak or threatened ones
- ➔ Supports coast-wide collaborative research among fishermen, scientists and managers
- ➔ Real-time data is shared with fishermen, managers, and the public to improve fisheries performance
- ➔ Supports ecosystem-based fisheries management

**WHY SHOULD I CARE?**

- ✓ Demonstrated track record of creating and maintaining jobs in coastal communities – in past years the project has kept hundreds of fishermen working who otherwise may not have been able to fish
- ✓ Innovative science which leads to real-time data for fisheries management. Instead of using years-old data to make decisions, real-time data more accurately reflects reality
- ✓ Helps avoid full-scale salmon fishery closures which is bad for our economy

- ✓ Technology used can complement existing technologies improving the science but not negating past efforts like coded-wire tags (CWTs). CWTs are only used on hatchery fish; GSI can be used for wild salmon too
- ✓ This funding continues and expands an existing project – the majority of money goes to fishermen
- ✓ This is a coast-wide approach to salmon management which is supported by a broad base of stakeholders

What WCGSI is **not**:

- Klamath River Disease Control Project
- Pacific Coast Salmon Restoration Fund
- Columbia River Biological Opinion Project

*For More Information Please Go to:*

**[www.pacificfishtrax.org](http://www.pacificfishtrax.org)**

[http://www.corporateservices.noaa.gov/~nbo/FY11\\_BlueBook/FY2011\\_Congressional\\_Budget.pdf](http://www.corporateservices.noaa.gov/~nbo/FY11_BlueBook/FY2011_Congressional_Budget.pdf)

on page 329-330 (of the entire 733 page document) or the listed pages numbers of 168-169 under the headings: **National Marine Fisheries Service: NMFS Operations, Research and Facilities Overview, Protected Species Research and Management.** (see excerpt below)

Complete GSI Budget request

**Pacific Salmon (+0 and +\$2,668,000):** NOAA requests an increase of \$2,668,000 and 0 FTE for a total of 359 FTE and \$70,417,000 to monitor Pacific salmon reintroductions, evaluate the restoration effectiveness of Pacific salmon habitats, and expand NMFS's genetic stock identification capability. Pacific salmon represents a significant biological, cultural, and economic asset to the United States, especially to the Pacific Northwest. There are both direct and indirect economic benefits tied to salmon. Studies and analyses have shown these benefits ranging from hundreds of millions to billions of dollars annually derived from salmon fisheries.

### **Proposed Actions**

Pacific Salmon Science (\$668,000)

*Monitoring and Evaluation of Conservation Actions to Reintroduce Salmon and Restore Habitat* – Funding will support fish tagging and tracking technology to monitor and evaluate watershed level salmon reintroduction and habitat restoration actions. This effort will provide critical information on salmon life history and survival requirements which will lead to more effective restoration of salmon habitats by improving the focus of restoration efforts to those habitat elements that can best increase survival. This improved focus will result in increased likelihood of recovery success.

### **Genetic Stock Identification (GSI) (\$2,000,000)**

*Genetic Tools and Stock Indicators* – Funding will support: (1) at-sea sample collection of Chinook salmon tissue by fishermen; (2) genetic analysis of up to 10,000 additional Chinook salmon samples annually to provide stock origin information for salmon caught in California, Oregon, and Washington coastal fisheries; (3) expanded research on the development of additional genetic tools to reduce costs and increase efficiency of genetic analysis; (4) improved methods of fishery management and stock assessment that fully utilize the spatially explicit genetic information collected; and (5) a regional integrated data system that facilitates movement of data from fishing boats, genetics laboratories, and oceanographic sensors (which provide regional, physical, and chemical oceanographic data in real or near-realtime) into a centralized online database. Obtaining stock specific ocean distribution and catch information is an essential component of managing mixed-stock fisheries. Currently, management of West Coast commercial Chinook and coho salmon fisheries

is based primarily on recoveries of tagged hatchery releases. This methodology provides a coarse-scale picture of the temporal and spatial distribution of stocks along the West Coast. In order to effectively manage weak stocks and protect ESA-listed salmon populations, it is sometimes necessary to restrict fishing over large areas and thereby limit access to strong stocks. Inferences about wild stocks, many of which are protected under the ESA, are typically based upon data from hatchery stock recoveries which may not accurately reflect wild stock distributions. Use of new sampling technologies that provide explicit spatial and temporal catch information, combined with genetic analysis to provide stock identification of both wild and hatchery stocks, is expected to provide much greater information on the stock-specific patterns of salmon ocean distribution than is presently available. The resulting data will allow analysis of stock-specific spatial catch distributions at a scale that may provide new opportunities to manage fisheries, in-season, to target strong stocks while limiting weak-stock impacts.