

Past, Present and Future Activities Being
Conducted in the Klamath River Basin Related
to the Protection and Recovery of Fish and Their
Habitat

National Marine Fisheries Service
March 2003

The Department of Commerce's National Marine Fisheries Service (NOAA Fisheries) is involved in a broad range of activities in the Klamath Basin under the authorities of the Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Act), and other federal statutes. Through these statutes, NOAA Fisheries must protect and recover fish populations under their jurisdiction. NOAA Fisheries also administers grants to state, tribal and local entities in the Klamath River basin for salmon restoration activities. NOAA Fisheries activities in the basin principally occur in the lower Klamath Basin, where anadromous species occur. However, NOAA Fisheries does administer grants to the State of Oregon for watershed improvements in the upper Klamath River basin. These grants improve watershed health, water quality and water quantity, which in turn benefits anadromous species in the lower Klamath Basin. The following report is a summary of NOAA Fisheries' primary activities in the Klamath Basin that have occurred over the past 5 years as well as those activities that will occur into the future.

Species under NOAA Fisheries' management: Chinook and coho salmon and steelhead trout are currently found in the lower Klamath River downstream of Iron Gate Dam, in the Trinity River (the largest tributary to the Klamath River) downstream of Lewiston Dam, and in tributaries to these rivers. The Southern Oregon/Northern California Coasts (SONCC) coho salmon is the only ESA-listed species under the jurisdiction of NOAA Fisheries that is found in the Klamath basin.

ESA Section 7 Consultations: NOAA Fisheries has conducted over 250 section 7 consultations over the last five years with federal action agencies that fund or carry-out projects in the Klamath basin. Federal agencies with which NOAA consults include the Bureau of Reclamation, Army Corps of Engineers, Federal Highway Administration, Fish and Wildlife Service, Forest Service, Bureau of Land Management, and Bureau of Indian Affairs. These consultations evaluate impacts to threatened coho salmon from a wide variety of federal projects which include: irrigation and water diversion, timber harvest, watershed restoration, fish passage, gravel mining, grazing, and transportation projects. The consultation workload is expected to remain similar over the next five years.

EFH Consultation: NOAA Fisheries has designated Essential Fish Habitat (EFH) for salmon species included in the Pacific Coast Salmon Fishery Management Plan (i.e., chinook and coho) and consults on the effects of federally funded, permitted, or conducted projects that affect EFH. For purposes of efficiency, NOAA Fisheries includes EFH consultations with ESA consultation to the extent feasible. In the Klamath Basin there is a possibility of EFH recommendations in addition to ESA recommendations because EFH consultations address salmonid species (e.g. chinook) that are not listed under the ESA and differ in their habitat requirements for species (e.g. coho) that are listed under the ESA. Since NOAA Fisheries designated EFH for chinook and coho in the Klamath basin in 2000, NOAA has completed about 20 EFH consultations with federal agencies in the Klamath basin.

The Bureau of Reclamation's Klamath Project 10-year Biological Opinion: Over the past five years, NOAA Fisheries provided assistance to the Bureau of Reclamation (Reclamation) to ensure that its Klamath Project operations were not likely to jeopardize the continued existence of threatened coho salmon or destroy or adversely modify designated critical habitat. In July 1999, NOAA Fisheries issued its first biological opinion on the effects of Reclamation's Klamath Project operations on coho through March 2000. On January 22, 2001, Reclamation requested initiation of formal ESA section 7 consultation regarding the ongoing operation (i.e., multi-year operation) of the Project. NOAA Fisheries issued an April 6, 2001, biological opinion in response to Reclamation's request. Because the 2001 Opinion found that the proposed operation of the Project was likely to jeopardize the continued existence of coho salmon, NOAA Fisheries included a reasonable and prudent alternative to the proposed Project operation which included a minimum flow release regime for Iron Gate Dam (IGD), based on the best information available at the time. However, because of the expectation that additional information and analyses relevant to the relationship between Iron Gate Dam flows and suitable salmonid habitat would become available in the next few months, the alternative only included minimum IGD flows for the April through September 2001 period. In the 2001 Opinion, NOAA stated the intention to prepare a supplemental biological opinion, addressing all water year types. NOAA Fisheries issued several amendments, with recommended minimum flows, to the April 2001 Opinion to ensure there was no lapse in Reclamation's incidental take coverage.

On February 27, 2002, Reclamation requested formal consultation pursuant to section 7 of the ESA on the effects on Southern Oregon/Northern California Coasts (SONCC) coho salmon from proposed Klamath Project Operations between April 1, 2002 and March 31, 2012. NOAA Fisheries issued a biological opinion on May 31, 2002, which concluded that Reclamation's proposed 10-year operation would jeopardize the continued existence of SONCC coho. NOAA Fisheries developed, with Reclamation, a reasonable and prudent alternative consisting of the following elements: (1) water management measures over the next 10 years; (2) a water bank program to provide flows to the Klamath River to improve coho salmon habitat; (3) an agreed upon long-term flow target to be achieved by 2012; (4) an inter-governmental task force to develop, procure, and manage water resources in the Klamath River Basin (Conservation Implementation Program); and (5) an inter-governmental science panel to develop and implement a research program to identify and fill gaps in existing knowledge regarding coho salmon and their habitat requirements during various life history stages and water-year types. NOAA Fisheries thinks that this alternative provides a reasonable balance between the findings of the National Research Council and the recommendations contained in the 2001 Hardy Phase II report, and establishes a risk averse approach that provides incremental improvements in habitat conditions while the science is developed to allow refinement of our understanding of the role of main-stem habitat in coho survival and recovery. The reasonable and prudent alternative also provides a mechanism to increase flows to the extent the need is supported by the science that is developed. In 2003, Reclamation must provide an additional 50,000 acre-feet of water to supplement river flows below Iron Gate Dam. NOAA Fisheries is working with Reclamation to ensure that its Klamath Project operations and programs are consistent with the reasonable and prudent alternative, including development of a distribution schedule for the 2003 water bank, assisting in

development of its study plans and methodologies, and to develop the structure of the Conservation Implementation Program. Implementation of the Biological Opinion will occur through March, 2012.

Klamath Hydroelectric Project: The FERC license for PacifiCorp's Klamath Hydroelectric Project will expire in March 2006. Pursuant to FERC's traditional licensing process, PacifiCorp provided its First Stage Consultant Document on December 15, 2000. In early 2001, NOAA Fisheries informed PacifiCorp that this document was deficient and provided its resource management goals and objectives as well as detailed and specific study recommendations. PacifiCorp has yet to fully address these recommendations. Therefore, NOAA Fisheries is concerned that all the studies necessary for a full and adequate consideration of relevant resource issues (e.g., potential impacts to chinook, coho and steelhead) will not be conducted in time, or at all, to meet the deadline for filing a draft License Application. NOAA Fisheries has actively coordinated with PacifiCorp, state and federal resource agencies, and other stakeholder groups to share information and enhance the quality of technical comments by ensuring greater consistency. These efforts at improving coordination are intended to reduce delay, increase efficiency and provide greater regulatory certainty. To ensure consistency, NOAA Fisheries will continue to coordinate on study plan development as well as interim measures to be implemented immediately or to be incorporated into any annual licenses to minimize ongoing impacts that may significantly compromise sensitive species or other sensitive public and private resources. These activities are intended to be consistent with FERC's guidance to attempt to resolve disputes informally prior to pursuing dispute resolution through FERC.

Trinity River Restoration Program: Under the authority of the 1984 Trinity River Fish and Wildlife Management Act, the Trinity River Task Force was convened to oversee the development of a program to restore fish populations on the Trinity River. Between 1997, when SONCC coho were listed as threatened under the ESA, and 2000, NOAA Fisheries participated as a member of the Trinity River Task Force. NOAA also provided technical input during the preparation of the Trinity River flow study. In December 2000, the Secretary of the Interior signed the Record of Decision (ROD) which outlines a plan to implement the recovery of the Trinity River and its fish and wildlife populations. The plan includes flow allocations, direct in-channel actions, as well as continued watershed restoration activities, replacement of bridges and structures in the floodplain, and monitoring and adaptive management. The Trinity River Restoration Program includes the Trinity Management Council which is responsible for oversight and direction. NOAA serves as one of the eight members of the Trinity Management Council which includes other federal agencies, the State of California, tribes and Trinity County. Implementation of the ROD has been stayed pending further NEPA analysis of effects of the alternatives on California's energy supply and Central Valley water users.

Klamath River Basin Conservation Area Restoration Program: The Klamath River Basin Conservation Area Restoration Program is administered by the Department of the Interior. Congress has authorized \$1 million annually to implement this program. The Klamath River Basin Fisheries Task Force was established by the Klamath River Basin Fishery Resources Restoration Act of 1986 to provide recommendations to the Secretary of the Interior on the formulation, establishment, and implementation of a 20-year program to restore anadromous fish populations in the Klamath Basin to optimal levels. NOAA Fisheries is one of the 16 members of the Task Force which includes representatives the fishing community, county, state and federal agencies, and tribes. NOAA Fisheries also participates as a member of the Technical Work Group of the Klamath River Basin Fisheries Task Force which provides technical and scientific input to the Task Force. NOAA Fisheries has been a member of the Task Force since 1998.

Federal Coho Salmon Recovery Planning: NOAA Fisheries initiated development of a recovery plan for SONCC coho in 2001 by convening the SONCC Technical Recovery Team (TRT). The TRT is comprised of scientists from federal, state, tribal, academic, and local agencies/groups. During Phase I of recovery planning, the TRT will focus on developing delisting goals for the SONCC coho, identify factors for the decline and factors limiting recovery of the species, identify early actions that can be taken by co-managers to reduce impacts to the species and habitat, and identify monitoring and evaluation needs for the species and habitat conditions. The Southwest Fisheries Science Center (NOAA Fisheries) is on the TRT, facilitates each meeting, and conducts technical analyses for TRT review. After the TRT has completed its tasks, NOAA Fisheries will form a second team (Phase II of recovery planning), comprised of stakeholders, to develop potential recovery measures to achieve the goals developed by the TRT. Updates on the recovery planning process can be obtained at <http://nwr.nmfs.noaa.gov/>.

State Coho Recovery Planning: The State of California listed California coho salmon (from San Francisco Bay to the Oregon border) as a candidate species under the California Endangered Species Act (CESA) in 2002. In response to potential listings under CESA, the State of California has developed two recovery teams to identify and address recovery needs of the species and habitat (similar to Phase II of the Federal coho recovery process). The state-wide recovery team is addressing impacts throughout all California streams and rivers where coho are found. In addition, a special recovery team was formed within the Scott and Shasta Rivers (SSRT), tributaries to the Klamath River, made up of mostly local land owners and state and federal representatives to address impacts associated with agricultural issues in these two sub-basins. NOAA Fisheries has representatives on both recovery teams. Both state recovery teams were convened in January 2003. Each of the recovery teams is expected to develop voluntary conservation measures and identify necessary state regulatory changes for integration into a single state-wide coho recovery plan which is due to California Department of Fish and Game (CDFG) by July 2003. CDFG will then present final recommendations to the California Fish and Game Commission for final adoption in August 2003.

Five County Roads Program: NOAA Fisheries has developed a Memorandum of Understanding with five northern California counties (Siskiyou, Trinity, Del Norte, Humboldt, and Mendocino)

to develop a standardized county routine road maintenance manual to help protect ESA listed species and their habitat. NOAA has also provided nearly \$750,000 in grants to support this program over the past 3 years and has worked with the counties in developing a prioritization process for inventorying and ranking all fish barriers in anadromous waters associated with county roads. This manual includes best management practices for reducing impacts to listed species and the aquatic environment, a five county inventory and prioritization of all fish passage barriers associated with county roads, annual training of road crews and county planners, and a monitoring framework for adaptive management. This plan was recently submitted by the Counties to the Southwest Region (NOAA Fisheries) for ESA coverage under the 4(d) rule process.

Tribal 4(d) Rule: NOAA Fisheries issued a final rule under ESA section 4(d) modifying section 9 take prohibitions for threatened salmon and steelhead. The modifications create a section 4(d) limitation on take prohibitions for Tribal Resource Management Plans (TRMP) where the Secretary of Commerce has determined that implementing the TRMP will not appreciably reduce the likelihood of survival and recovery of the listed species. The rule also reiterated that the United States has a unique legal relationship with Indian tribes as set forth in the Constitution, treaties, statutes, executive orders, and court decisions, and established a process to meet the conservation needs of protected species while respecting tribal rights, values and needs. The Tribal 4(d) rule also requires the use of best available scientific and commercial data, including any tribal data and analysis, to determine the TRMP's impact on the biological requirements of the species and reinforces the commitment to government-to-government relations as expressed in Secretarial Order no. 3206. Over the past year, NOAA Fisheries has worked closely with the Yurok Tribe in its development of a request for Tribal 4(d) coverage of its TRMP for chinook and coho salmon. NOAA is currently preparing an evaluation and determination of the effects of the Yurok Tribe's TRMP on threatened coho salmon.

Simpson Habitat Conservation Plan: NOAA Fisheries and the U.S. Fish and Wildlife Service have held technical and policy discussions with Simpson Resource Company regarding the development of a Habitat Conservation Plan under section 10(a) of the ESA for much of its industrial timber operations in northern California over the past three years. Currently, the Services are considering applications submitted by Simpson Resource company for an Incidental Take Permit and an Enhancement of Survival Permit. Simpson has prepared a draft Aquatic Habitat Conservation Plan/Candidate Conservation Agreement in support of its applications. Simpson's Initial Plan Area includes 416,531 acres in Humboldt and Del Norte counties of which 170,241 acres (40.9%) are in the lower Klamath River basin. In addition, Simpson is proposing an adjustment area of 267,412 acres, of which 48,496 acres are in the lower Klamath River basin. The Services published a Federal Notice announcing their receipt of Simpson's applications and initiated 90-day public comment period in August 2002. NOAA Fisheries is currently evaluating the effect of issuance of the Permit under section 7 of the ESA. Upon satisfaction of ESA requirements, the Services anticipate issuance of the permits by summer 2003.

Pacific Fishery Management Council (PFMC): Klamath River fall chinook salmon are one of the

key stocks that NOAA Fisheries manages under the Pacific Coast Salmon Fishery Management Plan developed under the Magnuson Act. The Salmon Plan provides conservation objectives for Klamath fall chinook which the PFMC and NOAA Fisheries must achieve in developing and implementing annual ocean salmon management measures. Ocean fisheries must be managed to allow sufficient numbers of spawners to return to the Klamath basin in order to both meet the reproductive needs of the population, as well as fulfill the federally-reserved harvest rights of Indian Tribes in the lower Klamath Basin. NOAA Fisheries participates in the PFMC meetings that produce season options for public review and the final season recommendations for NOAA Fisheries. A Southwest Fisheries Science Center (NOAA Fisheries) representative is a member of the PFMC salmon technical team, which evaluates stock abundance projections and forecasts the effects of proposed seasons on various salmon stocks, including Klamath fall chinook and coho.

Klamath Fishery Management Council (KFMC): The Klamath Fishery Management Council (KFMC) is an 11-member federal advisory committee that provides recommendations to the state and federal entities (including the PFMC, see above) responsible for managing harvests of anadromous fish in the Klamath basin. Members include representatives from commercial and recreational ocean fisheries, the in-river sport fishing community, tribal fisheries, and agencies (the California Department of Fish and Game, Oregon Department of Fish and Wildlife, NOAA Fisheries, and Department of the Interior). NOAA Fisheries is represented on the KFMC and NOAA is currently the KFMC chairman. An important aspect of the KFMC is the work done by its Technical Advisory Team (TAT) in developing annual Klamath River fall chinook stock projections, which are used by the PFMC, and maintaining the model used to forecast ocean harvest. The Southwest Fisheries Science Center (NOAA Fisheries) provides a substantial portion of the analytical expertise on the TAT.

Steelhead Restoration and Monitoring Program: NOAA Fisheries entered into an Memorandum of Understanding with the State of California in 1998 to facilitate monitoring the status of steelhead trout populations in northern California, including the Klamath basin. NOAA Fisheries has provided funding and technical assistance to help guide and support this state program and will continue this involvement into the future.

Salmon River Learning and Understanding Group: For the past few years, NOAA Fisheries has provided technical assistance to the Salmon River Learning and Understanding Group (SLUG). The Salmon River is a significant tributary to the Klamath River in the lower basin. The SLUG identifies watershed restoration and protection issues upon which the diverse group of stakeholders within and related to the Salmon River watershed could find common ground. The mission of the SLUG is to facilitate a coordinated resource management approach to restoring the Salmon River sub-basin. The Salmon River Spring Chinook Recovery Workgroup, a committee of the SLUG, was convened in 2002 and is focused on recovery of the Salmon River spring chinook run. NOAA Fisheries has a representative who provides technical expertise to this group.

Green Sturgeon: In June 2001, NOAA Fisheries received a petition to list the North American

green sturgeon as a threatened or endangered species under the ESA. Although the species is known to range in the nearshore waters of Mexico to the Bering Sea, the largest spawning population of green sturgeon is thought to occur in the Klamath River. After completing a status review for green sturgeon, and reviewing the available scientific and commercial information, in January 2003, NOAA determined that the petitioned species is comprised of two distinct population segments, but that neither segment warrants listing under the ESA at this time. Because of remaining uncertainties about their population structure and status, NOAA Fisheries added both segments to the agency's list of candidate species and will re-evaluate their status in five years provided sufficient new information becomes available.

Grant Programs: NOAA administers several grant programs to further restoration efforts in the Klamath River basin. In FY 2000-2002, NOAA Fisheries issued relatively large grants to the States of California and Oregon, and Klamath basin tribes (Yurok, Karuk, Hoopa and Klamath), through the Pacific Coastal Salmon Recovery Fund (PCSRF) for the purposes of restoring coastal salmonid habitat. Over this period, NOAA Fisheries issued grants of \$41.1 M to California, \$41.1 M to Oregon and nearly \$3 M to Klamath basin tribes. NOAA's FY 2003 appropriation includes \$14 million each for California and Oregon's portion of the PCSRF funds. The States integrate these funds with their state salmon restoration funds and issue grants for habitat restoration, watershed planning, salmon enhancement, research and monitoring, and outreach and education. In 2001 and 2002, over \$8 M in federal funds were issued through this grant process to projects in the Klamath River basin. These projects include a wide range of activities from conservation easements; road inventory and restoration; fish passage improvements; public outreach; watershed planning, sediment source inventory and stabilization; fencing of riparian areas along streams; and species and habitat monitoring.

The Federal funds provided through the PCSRF have been instrumental in furthering conservation efforts in the Klamath River basin. These funds have been successfully used to leverage additional state and local salmon recovery dollars and have led to a substantial increase in overall funding in the basin. Through the use of Federal, state, tribal and local funds over 150 projects have been funded in the Klamath basin, as well as an additional 27 statewide projects that partially influence restoration in the Klamath basin. These projects included the removal of 67 fish barriers, installation of fish screens at 11 projects, the rehabilitation or decommissioning of at least 37 miles of forest roads, the restoration of 10 miles of stream, the fencing and improvement of 4 miles of riparian zones, and prevention of 375,000 cubic yards of sediment from reaching stream channels. The funds also provided for 25 planning projects, 27 research and monitoring projects, and 22 outreach and education projects. Attached to this report are a listing of PCSRF expenditures on projects funded in the Klamath basin through FY 2002, a listing of statewide programs in California and Oregon related to the Klamath basin that were funded through the PCSRF, and a listing of projects approved by the State of California for the 2002/2003 grant funding cycle.

NOAA Fisheries has also executed several interagency agreements (total~ \$340,000) in the late 1990's with the U.S. Fish and Wildlife Service and Bureau of Indian Affairs to facilitate collection of salmon habitat utilization data and physical parameters on the Klamath River. In addition,

NOAA Fisheries provided grants (total<\$200,000) to the Yurok Tribe in the late 1990's to investigate the impact of sea lion predation on salmon and steelhead populations in the lower Klamath Basin. Also, under the authority of the Anadromous Fisheries Act, a grant was provided to California to help fund lower Klamath creel surveys to support fall Chinook harvest projections (see below) and California's steelhead recreational harvest management in the lower Klamath basin.