COLUMBIA BASIN LAW ENFORCEMENT PROGRAM 9202400

SHORT DESCRIPTION:
Reduce illegal take of anadromous salmonids and resident fish, and protect their critical habitats throughout the Columbia Basin through an Inter-agency fisheries and habitat law enforcement program

SPONSOR/CONTRACTOR: USFWS
U.S. Fish and Wildlife Service
Pete Nylander, Senior Resident Agent
9025 S.W. Hillman Court, Suite 3134, Wilsonville, OR 97070
503/682-6131

SUB-CONTRACTORS:
Columbia River Inter-Tribal Fisheries Enforcement; Oregon State Police; Washington Department of Fish and Wildlife; Idaho Department of Fish and Game; Montana Department of Fish, Wildlife, and Parks; Shoshone-Bannock Tribes; Confederated Tribes of the Umatilla Indian Reservation; Nez Perce Tribe

GOALS

GENERAL:
Supports a healthy Columbia basin, Maintains biological diversity, Maintains genetic integrity, Increases run sizes or populations, Provides needed habitat protection, Adaptive management (research or M&E), Program coordination or planning, Basinwide, Education

ANADROMOUS FISH:
Hydro ops, mainstem passage, construction, Habitat or tributary passage

RESIDENT FISH:
Habitat

NPPC PROGRAM MEASURE:
8.5C

TARGET STOCK	LIFE STAGE	MGMT CODE (see below)
Bull Trout	All freshwater life stages	P
Steelhead (Lower and Upper Columbia River, Snake River Basin)	All freshwater life stages	P
Kootenai Sturgeon	All freshwater life stages	L
Chinook Salmon (Snake River-Spring/Summer, Fall runs)	All freshwater life stages	L
Sockeye Salmon (Snake River)	All freshwater life stages	L

AFFECTED STOCK	BENEFIT OR DETRIMENT
Sturgeon (Columbia/Snake Rivers)	Beneficial
All other Columbia River Basin anadromous salmonids	Beneficial

BACKGROUND

Habitat types:
All viable habitat types relative to freshwater life-cycle stages of listed and candidate anadromous salmonids within the Columbia River Basin

HISTORY:
The Columbia Basin Law Enforcement Council (CBLEC) was formed in 1979 to coordinate fisheries enforcement on the Columbia River. In general, law enforcement (LE) is an integral part of fisheries management, and specifically LE is fundamental to the Columbia River Fish Management Plan (1987) derived from US v. Oregon. The enhanced law enforcement program was conceived by regional consensus during the 1990-91 Salmon Summit initiated by Senator Mark Hatfield. The

proposed measure received regional review during the NPPC amendment process in 1991, and was adopted as a measure in the Council's F&W Program. During the summer of 1991, Bonneville Power Administration (BPA) worked with the directors and enforcement chiefs of the Oregon State Police-Fish and Wildlife Division (OSP), Washington Department of Fish and Wildlife (WDFW), Idaho Department of Fish and Game (IDFG), and the Columbia River Inter-Tribal Fisheries Enforcement (CRITFE)-- to develop a plan for a multi-agency, basin-wide, enhanced law enforcement (LE) program. In the fall of 1991, BPA initiated funding of four grants for the enhanced fisheries and habitat LE Project 92-024 -- targeted on depleted fish stocks proposed for listing under the Endangered Species Act. In 1993, the National Marine Fisheries Service (NMFS) received BPA funding to facilitate inter-agency coordination and task force operations. Montana Department of Fish Wildlife & Parks (MDFWP) received limited BPA enforcement funding via an ongoing habitat project. In the following year, MDFWP received a BPA grant that was integrated with the multi-agency LE program -- to provide enhanced protection of resident fish populations and their critical habitats. Beginning in 1996, the U.S. Fish and Wildlife Service (USFWS) consolidated all the individual agency contracts under an inter-agency agreement between USFWS and BPA -- at no cost to the participants. In 1997, USFWS-Federal Aid continued fiscal administration of the Project, including new grant agreements with the Shoshone-Bannock Tribes (SBT), Confederated Tribes of the Umatilla Indian Reservation (CTUIR), and Nez Perce Tribe (NPT) for the tribal tributary component of the Project. All member agencies of the Columbia Basin Law Enforcement Council (CBLEC) -- NMFS, USFWS, OSP, WDFW, IDFG, CRITFE, MDFWP, BT, CTUIR, NPT, and the U.S. Coast Guard -- are now providing active participation and coordination for the BPA-funded enhanced Columbia Basin law enforcement program. During its development, the enhanced law enforcement program has been endorsed by: the directors of fisheries agencies and tribes, the Scientific Review Group (SRG 1993); utility groups representing ratepayers, the NMFS Recovery Team (Bevan et al. 1994); the proposed NMFS Recovery Plan (1995); and the Columbia River Anadromous Fish Plan of the Nez Perce, Umatilla, Warm Springs and Yakama Tribes (1995). The LE Program has also been credited for increasing salmon survival in the NMFS FCRPS Biological Opinions.

BIOLOGICAL RESULTS ACHIEVED:

Several case studies have shown that law enforcement actions, during the past decade have had a large impact on reducing illegal take of Columbia Basin anadromous salmonids, sturgeon, and resident fish. Poorly regulated high seas gill net drift fisheries have illegally taken millions of salmon annually during the past decade. For example, the illegal 1988 harvest was estimated to be 5.5 million salmon weighing 10,000 metric tons (Pella et al. 1993). Thus this illegal ocean take was over twice the total salmonid run into the Columbia River. In 1994, inaccurate run size forecasts caused by massive poaching nearly wiped out a major component of the Eraser River sockeye run (Carl Walters, Kennewick Tri- City Heraid, 11/8/94, source: The Associated Press). It was estimated that about 1 million sockeye salmon were illegally taken in Johnstone Strait during the closures and added to the legitimate catch when the season was open. This resulted in an over-estimate of the run size by the fishery managers, an increase in the allowable catch, and ultimately in severe overfishing of the Adams River run.

Monitoring changes in previously unaccounted losses and analyzing inter-dam conversion rates provides a basis for quantitative evaluation of adult salmonid passage survival. Prior to LE Program implementation in 1992, unaccounted losses in upstream migrating adult salmonids between Bonneville and Lower Granite Dams averaged 44% for spring chinook salmon and 68% for fall chinook salmon. Preliminary results during 1992-94 show 53% and 29% improvements in conversion rates for spring chinook and fall chinook, respectively, from Bonneville to Lower Granite dams -- compared to the previous baseline. Although a longer-term and more rigorous analysis is needed -- these results are a basis for a hypothesis that 100% increases in LE efforts have improved adult salmonid passage survival. Illegal diversions and non-compliance with screening regulations causes direct mortality to out-migrating juvenile salmonids -- in one incident in 1993, OSP documented the mortality of 45,000 chinook. A high non-compliance rate (60% to 85%) of screening requirements to protect fish existed during 1981 to 1993. As a direct result of the LE Program, screening activities have increased in Oregon and Washington, and nearly 100% compliance was achieved in 1994. All violators identified in the 1993 LE survey have either complied or are actively participating in programs to bring screens into compliance. In 1993, two Washington fishermen and a New Jersey distributor were indicted on state and federal charges for illegally harvesting and conspiring to market 3,200 pounds of sturgeon caviar, worth at least $2.5 million, from the Columbia River -- the legal take is only 650 pounds per year (New York Times April 4, 1993). Any loss of Kootenai River white sturgeon is significant since the adult population is currently estimated to be less than 900 individuals. In 1990, a poacher was arrested for killing a 48-inch sturgeon while it was staging in an area of the Yaak River about 100 yards from the mouth of the Kootenai River. Montana law enforcement is now increasing efforts to educate anglers, after a 1995 survey conducted by game wardens showed most anglers could not distinguish between bull trout and other salmonids -- thus making that protected species vulnerable to illegal take.

PROJECT REPORTS AND PAPERS:

Individual Agency Annual Reports 1992, 1993 are on file. The 1996 Annual Report will be completed by April 1, 1997.Vigg, S. (

editor), 1995. Increased levels of harvest & habitat law enforcement and public awareness for anadromous salmonids and resident fish in the Columbia River Basin -- Project 92-024 Final Report for the demonstration period, 1992-94. June 31, 1995. Bonneville Power Administration, Portland, Oregon.

ADAPTIVE MANAGEMENT IMPLICATIONS:

The experience derived during the program's Demonstration Period (i.e., 1992-94), and subsequent years, has improved the overall effectiveness of the program and resulted in knowledge requisite to facilitating adaptive management. The Columbia Basin Law Enforcement Council (CBLEC) has actively solicited input from fisheries managers to effectively interface with other fisheries programs. Improved screening compliance derived from an ongoing law enforcement project is an example of this synergistic interaction. As further evidence of an ongoing paradigm shift in law enforcement, CBLEC agencies have begun utilizing the StreamNet database and geographic information system (GIS) technology to help define its mission and resulting operations. In 1996, the Bonneville Power Administration (BPA) volunteered to assist CBLEC in contracting with an independent third party to conduct a monitoring and evaluation study (M&E) of the program, for the period of 1992 through 1995. Research into Action, headed by Jane Peters and John Pizzamente, was selected through a solicitation for proposal and bid process. It is anticipated that the ongoing M&E, which is a three-year master agreement, not limited to the initial task items, will provide CBLEC with comprehensive information on the effectiveness of the program in achieving its specific objectives and the overall goal of enhancement of depleted fish stocks. The evaluation will also provide accountability for achieving desired results from expenditures, ensure program cost-effectiveness, and provide direction in adaptively managing the program.

PURPOSE AND METHODS

CRITICAL UNCERTAINTIES:

Willingness of fisheries management agencies and regional planning entities to fund long-term fish, wildlife, and habitat law enforcement. Commitment to a systematic collection and analysis of an adequate time series of monitoring data to adequately assess the efficacy of the ongoing LE program.

BIOLOGICAL NEED:

To increase survival of anadromous salmonids and resident fish throughout the Columbia Basin -- by reducing illegal take and protecting critical habitats from degradation caused by violation of water and land use regulations.

HYPOTHESIS TO BE TESTED:

s via public support and involvement. Metric: Public opinion polls, public volunteer work, voluntary compliance with laws and rules, 'Poacher Hotline' information on violations.H(6): Increased levels of law enforcement for Columbia Basin resident fish species and their critical habitats does not improve the species' life cycle survival and population levels. Metric: Enforcement statistics compliance rates with laws and rules; fisheries statistics; public awareness.

METHODS:

(1) experimental design
Double law enforcement effort throughout the Columbia Basin
Enhance effectiveness with sophisticated equipment and communications
Improve cost-effectiveness with inter-agency coordination and special emphasis task forces
Improve public participation and voluntary compliance through information and education
Take directed actions to protect anadromous fish, resident fish, and critical habitats
Take directed actions to enforce both fisheries and habitat regulations
Adaptively manage the program via monitoring and evaluation (M&E)
Develop biologically based performance criteria for each operational objective
Improve data management systems to collect valid enforcement statistics, fisheries statistics, and habitat data
Organize the evaluation of desired/actual achievements in terms of:
Input (e.g., -increased budget, personnel, equipment, coordination)
Output (e.g., enforcement contacts, warnings, arrests, seizures, and other statistics) and
Outcome (e.g., salmon saved, critical habitat protected)- Focus on Outcomes, i.e., biological results
(2) Evaluate outcomes using statistical trend analyses, opinion surveys, and qualitative analyses -- M&E, initiated during 1996, is currently ongoing. The contract is being performed by 'Research Into Action', a third-party independent consultant.

(3) No test fish will be required in 1996 or 1997.

PLANNED ACTIVITIES

SCHEDULE:

PROJECT COMPLETION DATE:
2001

OUTCOMES, MONITORING AND EVALUATION

SUMMARY OF EXPECTED OUTCOMES

Expected performance of target population or quality change in land area affected:
1. Increased passage survival of adult salmonids during their upstream migration through the mainstem Columbia and Snake rivers.
2. Increased passage survival of juvenile salmonids during their downstream migration through the mainstem Columbia and Snake rivers, and their tributaries.
3. Increased protection of critical habitats of anadromous salmonids throughout the Columbia Basin.
4. Increased life cycle survival of depleted species of endemic resident fish, and protection of their critical habitats throughout the Columbia Basin.
5. Increased public awareness, public participation, voluntary compliance, and deterrence of illegal take of depleted anadromous and resident fish throughout the Columbia Basin.
6. Increased effectiveness and biological benefits of the LE program through inter-agency cooperation, M&E, and adaptive management.
7. Contribution to the regional fish and wildlife conservation and enhancement programs - leading to expedited rebuilding and recovery of depleted Columbia Basin fish stocks.

Contribution toward long-term goal:
Increased survival of all anadromous stocks in Columbia and Snake rivers with emphasis on ESA stocks, as measured by inter-dam conversion rates. To protect resident fish from illegal take.

Coordination outcomes:
January 1, 1993: Funding of four grants was continued to more than double the fisheries law enforcement efforts over 1991 levels. March 1993: Draft annual report for the first year of the program completed. December 31, 1994: Three-year demonstration phase of program completed. December 1994: Decision for continuation of program is based on regional, scientific, and management support and a preliminary analysis of its effectiveness in reducing illegal take of adults (improved inter-dam conversion rates), protection of juveniles from irrigation diversions, and protection of critical habitat. May 1994: A preliminary analysis of the efficacy of the program is presented in the NMFS Recovery Team, with recommendations for continuation. March 1995: NMFS Recovery Plan endorses continued BPA funding for the enhanced LE program. June 1995: Final report for the 1992-95 demonstration period is completed. In 1996: A 'block grant' from BPA to USFWS was instituted to administer the entire basin-wide program.

MONITORING APPROACH
M&E will be conducted by a "third-party" independent fisheries law enforcement consultant.

RELATIONSHIPS

RELATED BPA PROJECT	RELATIONSHIP
9202400 The M&E Project	Provide evaluation of project relevence and cost effectiveness to direct adaptive management

OPPORTUNITIES FOR COOPERATION:

The law enforcement divisions of the following entities currently comprise the members and cooperators of the Columbia Basin Law Enforcement Council (CBLEC): the Columbia River Inter-Tribal Fisheries Enforcement, Oregon State Police, Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, Montana Department of Fish, Wildlife & Parks, National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Coast Guard, Shoshone-Bannock Tribes, Confederated Tribes of the Umatilla Indian Reservation, and the Nez Perce Tribe. The cooperation of all the above fish and wildlife enforcement entities enhances the systemwide Columbia Basin LE Program. Beginning in 1997, the intergration of the Tribal Tributary component by the Shoshone-Bannock Tribes, Confederated Tribes of the Umatilla Indian Reservation, and the Nez Perce Tribe will further basin-wide cooperation, and will provide enhanced harvest and habitat law enforcement and public awareness on reservations and on the activities of Tribal members on ceded lands.

COSTS AND FTE

1997 Planned: $4,457,000

FUTURE FUNDING NEEDS:

FY	$ NEED	% PLAN	% IMPLEMENT	% O AND M
1998	$4,630,315			
1999	$4,630,315			
2000	$4,630,315			
2001	$4,630,315			

PAST OBLIGATIONS (incl. 1997 if done):

FY	OBLIGATED
1992	$393,764
1996	$3,320,022
1997	$4,206,300
TOTAL:	$7,920,086

Note: Data are past obligations, or amounts committed by year, not amounts billed. Does not include data for related projects.

1997 OVERHEAD PERCENT:

Columbia River Inter-Tribal Fisheries Enforcement - 38%; Oregon State Police - 0%; WDFW - 19%; IDFG - 24.6%; MDFWP - 17.3%; SBT - 29.5%; CTUIR - 34%; Nez Perce Tribe - 29.5%

SUBCONTRACTOR FTE:

Columbia River Inter-Tribal Fisheries Enforcement - 9.5 FTEs; Oregon State Police - 7 FTEs; Washington Department of Fish and Wildlife - 9.5 FTEs; Idaho Department of Fish and Game - 6 FTEs; Montana Department of Fish, Wildlife, & Parks - 2 FTEs; Shoshone-Bannock Tribes - 1 FTE; Confederated Tribes of the Umatilla Indian Reservation - 3 FTEs; Nez Perce Tribe - 4 FTEs; (Total - 42 FTEs); Monitoring & Evaluation (Research Into Action) - variable; pump screen survey subcontractors - variable