Draft

Mainstem / Systemwide Conservation Enforcement Program Summary

NPPC Provincial Review and Project Selection Process FY 2002

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Steven Vigg, Lead Writer
Conservation Enforcement Program Summary
Steven Vigg & Company
Corbett, Oregon 97019

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Mainstem / Systemwide Conservation Enforcement Program Summary

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I. Program Description

System-wide Conservation Enforcement Overview

Purpose of Program – *technical and/or scientific background*

The Conservation Enforcement (CE) Program Summary will be the framework for determining:

- the efficacy of ongoing projects,
- the need for currently proposed projects, and
- the guidelines for future conservation enforcement projects.

This document will describe, in generic terms, the conceptual needs and performance standards for all conservation enforcement projects throughout the Columbia Basin. In addition, this summary documents the accomplishments and results of currently funded Conservation Enforcement projects, presents a synopsis of new projects proposed during FY2001-02, and develops ideas for future projects and program enhancements.

Monitoring and evaluation (M&E) is an integral part of the ongoing Conservation Enforcement Program. The CE program will be adaptively managed via M&E -- according to performance criteria/standards. The evaluation of desired/actual achievements are in terms of:

- Inputs (e.g., budget, personnel, equipment),
- Outputs (e.g., fishery statistics, contacts, arrests, seizure, etc.), and
- Outcomes (e.g., fish & wildlife saved, critical habitats protected).

The following three enforcement effectiveness objectives and three biological objectives have been identified for evaluation of the Conservation Enforcement Program.

<u>Law Enforcement Effectiveness Objectives:</u>

- Increased enforcement effectiveness throughout the watersheds of the Columbia Basin -- via increased public awareness, voluntary compliance with laws and rules, and deterrence of illegal activities.
- Increased LE effectiveness in anadromous and resident fish protection via annual planning to ensure effective use of personnel and equipment, and close coordination with fisheries management and regulatory agencies.
- Increased LE effectiveness in anadromous and resident fish protection via long-term strategic planning, tribal coordination at LE command levels, and support of state & federal enforcement agencies.

Biological Objectives:

- Improvement in adult salmon survival during in-river migration as measured by temporal trends in inter-dam and reach conversion rates.
- Increased survival of juvenile salmon and protection of critical habitat as measured by case studies, and compliance with various regulations.
- Increased survival of resident fish populations via enforcement, habitat protection, and public outreach.

These objectives can be measured against biologically-based performance criteria and metrics. In order to evaluate the benefits of each new conservation enforcement project, specific performance criteria, null hypotheses, and metrics need to be developed. Examples of performance criteria are:

- Adult salmon passage survival through the migration corridor and fisheries;
- Protection of critical spawning and rearing habitat of anadromous salmonids;
- Juvenile salmonid out-migration survival through the migration corridor;
- Inter-agency coordination, cooperation and resource sharing;
- Public education, awareness and participation;
- Resident fish protection,
- Resident wildlife protection, and
- Watershed protection.

Scope of Program

Management Application

The overall purpose of the conservation enforcement (CE) program is to increase protection of fish, wildlife and watersheds throughout the Columbia Basin. Currently, laws[1] are "on the books" to protect fish & wildlife populations, the waters, and the lands of the Columbia Basin from overexploitation and degradation. However, the limited number of conservation law enforcement officers distributed over the vast area of the Columbia Basin is not sufficient to enforce all the laws and rules, in all places, at all times. Thus, illegal takes and habitat degradation continues to be a problem.

A major goal of the Conservation Enforcement Program is to reduce illegal take of Columbia River Basin salmonids and native resident fish, and thereby help to rebuild all endemic fish populations within the basin. Illegal take includes illegal harvest of adults and juveniles, harassment of spawners attending redds, destruction of eggs or fry within redds, direct mortality of juveniles caused by various human activities (e.g., water diversion), and degradation of essential critical habitat. Specific goals and objectives of individual projects should be consistent with protection and enhancement goals of the region's fish and wildlife managers (e.g., CBFWA members), ESA recovery and Fish & Wildlife mitigation planning entities (e.g., NMFS and NPPC) and funding entities (e.g., BPA).

The first NMFS Recovery Team in the Columbia Basin conducted a comprehensive evaluation of enhancement measures needed to rebuild and de-list Snake River salmon populations. The recovery Team recommended continuation of a vigorous fishery law enforcement program (Bevan et al. 1994):

[1] In this context "laws" includes local, state, federal and tribal Acts, laws, regulations, resolutions and rules.

> "Some aspects of the Recovery Plan will require law enforcement. It would not be prudent to expend large sums of money on downstream passage, or to require major changes in how fishing is operated, and then lose a considerable fraction of increased survival because of failure to control such aspects as illegal fishing, unscreened diversions or habitat degradation. ... The BPA, the fishery agencies, and the tribes should continue the Enhanced Fishery Enforcement Program."

The conceptual scope of the program is the entire life cycle of the target fish and wildlife species. For example, *"gravel to gravel"* in the case of anadromous salmonids. The targeted fish stocks are depleted anadromous salmonids and resident fish & wildlife species -- especially species petitioned or listed under the ESA. It is expected that enhanced protection will also extend to all other endemic fish & wildlife populations and their habitats in the Columbia Basin. This enhancement "spin-off" is beneficial to all renewable natural resources and watersheds of the region.

Geographic Scope

The geographic scope for enhanced conservation law enforcement is the entire Columbia Basin. The system-wide scope includes both mainstem and tributary areas; it also encompasses areas accessible to anadromous fish and "blocked areas". The geographic system implemented by the Northwest Power Planning Council -- Ecological Provinces, subbasins, and watersheds – is a convenient method to describe specific areas where proposed conservation enforcement projects are planned. The details of the Columbia Basin Province-subbasin organization are available on the CBFWA web site -- www.cbfwf.org .

Future conservation enforcement projects may be planned for implementation in a limited region encompassing the jurisdiction of a specific enforcement entity. Nonetheless, all conservation enforcement projects should be coordinated under the umbrella of the System-wide review and defined geographically according to the regional subbasin planning scheme.

Species Populations Affected / Benefited

Conceptually, all fish & wildlife species and the habitats they depend on for sustainability in the Columbia Basin are benefited by enhanced conservation law enforcement. Depleted fish & wildlife species and their critical habitats are the focus of the system-wide Conservation Enforcement Program.

Columbia Basin anadromous fish stocks currently protected under the ESA are listed at the NMFS N.W. Region web site www.nwr.noaa.gov/1salmon/salmesa/index.htm. Likewise, resident fish & wildlife species protected under the ESA are listed at the U.S Fish & Wildlife Service web site www.endangered.fws.gov/index.html.

Nez Perce Tribal Conservation Enforcement Project 2000-055-00

Purpose of Program - *technical and/or scientific background*

The overall purpose of the Nez Perce Tribe's fisheries/conservation law enforcement (CE) program is to increase protection of fish, wildlife and watersheds under our jurisdiction within the Columbia Basin. The main focus of the CE program is to implement an enhanced enforcement effort to provide additional protection against illegal takes of Columbia River salmon species throughout their life cycle with an emphasis on weak stocks passing through the hydro-power corridor into tributary streams within the reservation and Treaty lands of the Nez Perce Ttribe.

Goal, Scope, and Approach Nez Perce Tribal Conservation Law Enforcement

The Nez Perce Tribe's Conservation Enforcement Goal:
Enhanced law enforcement for fish, wildlife and habitat resource protection on the reservation and on Treaty lands -- with an emphasis on protection of ESA listed threatened or endangered anadromous salmonids. Nez Perce tribal fish & wildlife enforcement will coordinate with various co-managers, including appropriate state, federal, and tribal enforcement entities. The NPT Conservation Enforcement Department will maintain the integrity of treaty reserved rights and in carrying out tribal co-management responsibilities and regulatory authority by providing law enforcement services as an integral and highly visible component of the tribes' treaty rights to self-regulation.

Specific goals and objectives of the Nez Perce Tribal fisheries enforcement projects are consistent with that of regional fish & wildlife conservation and enhancement efforts, i.e.:

- the basin-wide inter-agency enforcement coordination;
- the goals and objectives of the Nez Perce Tribe's Fisheries Resource Management Program;
- the comprehensive Fish and Wildlife enhancement actions as planned in the CBFWA multi-year implementation Plan (MYIP), and the Northwest Power Planning Council's Fish & Wildlife Program; and
- the salmon, steelhead and sturgeon recovery efforts described in proposed recovery plans of the four Treaty Tribes (Nez Perce, Umatilla, Warm Springs and Yakama Tribes 1995), the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

The Project Description details the structure of the law enforcement program, the cooperation among enforcement and fisheries management entities, and the specific work to be performed under BPA funding. This is a technical document to describe the comprehensive, integrated nature of the program and in no way affects the sovereign rights, jurisdictions, or policy positions of the Nez Perce Tribe.

Scope. The conceptual scope of the overall program is the entire life cycle of the target fish species, i.e., "gravel to gravel". The geographical scope of the Nez Perce enforcement program is primarily the Nez Perce reservation and Treaty lands in the tributary subbasins of the Columbia River system. Furthermore, the Nez Perce Tribe has jurisdiction over its tribal

members exercising Treaty rights in all all usual and accustomed fishing, hunting, and gathering areas. In cooperation with the Columbia River Inter-Tribal Fish Commission, the NPT conservation officers assist with mainstem fisheries enforcement in Zone 6 of the Columbia River. The enhanced Nez Perce Tribal Conservation Enforcement protection will also extend to all other fish & wildlife populations within Nez Perce territory, including white sturgeon, resident fish and wildlife. This synergistic "spin-off" benefit is considered by all regional enforcement entities to be beneficial to fish & wildlife resources of the Columbia Basin.

Approach. The approach we are taking is threefold. First, to substantially increase and maintain the levels of harvest and habitat law enforcement throughout the Nez Perce Reservation and Treaty lands. Second, to enhance the efficiency of this increased harvest and habitat enforcement effort by promoting cooperation and assistance from appropriate federal, state, tribal, regional and local entities. Third, to educate the public on the plight of specific fish stocks that are in danger of extinction and the need to protect their critical habitats; and make the public aware of the importance to society of conserving the tribal cultural values and the diversity of anadromous salmon and steelhead, sturgeon, and resident fish & wildlife for future generations.

Monitoring and Evaluation – Achievement of Law Enforcement Effectiveness Objectives and Biological Objectives

Monitoring and evaluation (M&E) is an integral part of the ongoing CE program. We will adaptively manage the CE program via M&E -- according to biologically-based performance criteria. The evaluation of desired/actual achievements are in terms of: Inputs (e.g., budget, personnel, equipment), Outputs (e.g., fishery statistics, contacts, arrests, seizure, etc.), and Outcomes (e.g., fish & wildlife saved, critical habitats protected).

The following three LE effectiveness objectives and three biological objectives have been identified for evaluation of the Nez Perce Tribe's LE program.

Law Enforcement Effectiveness Objectives:

- Increased LE effectiveness throughout the watersheds of the Columbia Basin under the co-management of the NPT -- via increased public awareness, voluntary compliance with laws and rules, and deterrence of illegal activities.
- Increased LE effectiveness in anadromous and resident fish protection via annual planning to ensure effective use of personnel and equipment, and close coordination with fisheries management and regulatory agencies.
- Increased LE effectiveness in anadromous and resident fish protection via long-term strategic planning, tribal coordination at LE command levels, and support of state & federal enforcement agencies.

Biological Objectives:

- Improvement in adult salmon survival during in-river migration as measured by temporal trends in inter-dam and reach conversion rates.

- Increased survival of juvenile salmon and protection of critical habitat as measured by case studies, and compliance with various regulations.
- Increased survival of resident fish populations via enforcement, habitat protection, and public outreach.

These objectives can be measured against specific biologically-based performance criteria and metrics (Table 1).

Table 1. Performance criteria, null hypotheses, and metrics for evaluation of biological benefits of enhanced law enforcement.

Performance Criteria	Null Hypotheses	Metrics
Adult salmon passage survival through the migration corridor and fisheries	An increase in the level of enforcement in the mainstem Columbia River does not reduce illegal take and improve adult salmon survival.	Inter-dam conversion rates, Bonneville to Lower Granite dams. Radio telemetry studies in tributary areas.
Protection of critical spawning and rearing habitat of anadromous salmonids	Enforcement of habitat regulations[2] in tributary areas does not increase natural production success or improve the integrity of critical habitat.	Compliance rates with laws and rules for the protection of stream habitat, riparian zones, watersheds and ecosystems.
Juvenile salmonid out-migration survival through the migration corridor	Enforcement of "trout" fishing regulations and water diversion & screening regulations does not increase juvenile salmonid survival in tributaries and mainstem.	Compliance rates with "trout" fisheries and screening regulations on mainstem pump and tributary diversions.
Inter-agency coordination	Enhanced inter-agency coordination and resource sharing does not improve efficiency and cost-effectiveness of LE efforts.	Contacts, enforcement statistics, habitat protected, and fish saved via inter-agency task forces per cost level.
Public participation	Improved public education and awareness does not enhance LE efforts via public support and involvement.	Public opinion polls, public volunteer work, voluntary compliance with laws and rules, "poacher hotline" information on violations.
Resident Fish	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.	Enforcement statistics; compliance rates with laws and rules; fisheries statistics; public awareness.

[2] State and Federal water quality standards, Forest Practices Acts, BLM grazing regulations, etc.

The Columbia Basin Fish & Wildlife Authority (CBFWA) and the Northwest Power Planning Council (Council) have directed that comprehensive Monitoring & Evaluation (M&E) be an integral part of fisheries & conservation law enforcement projects funded via the regional process. At the conclusion of FY2001 performance period, the NPT Conservation Enforcement Department and the M&E Consultant will provide a progress report to the Council that includes an update on the evaluation of the project including responses to questions listed in Attachment 1 and quantitative information addressing performance measures listed in Attachment 2.

Scope of Program - *management application, geographic scope, and species populations affected/benefited*

Management Application

The fundamental need for integration of fish & wildlife conservation enforcement (resource user management) with biologically based fish & wildlife population and ecosystem management is a pragmatic historical fact. Fish & Wildlife management entities in the Columbia Basin began with the establishment of laws and rules designed to protect renewable natural resources from overexploitation and their essential habitats from destruction -- empowered by Fish & Wildlife Commissions and law enforcement. Protection of fish, wildlife and habitats – via enhanced conservation enforcement – has consistently been a strategy integrated with other fish & wildlife enhancement measures in regional fish & wildlife plans, e.g., the Northwest Power Planning Council's "Columbia River Basin Fish and Wildlife Program" (NPPC 1994), the original Anadromous Salmonid Snake River Recovery Team Plan (Bevan et al. 1994), the Proposed Recovery Plan for Snake River salmon (NMFS 1995), the Tribes' "Spirit of the Salmon" (Nez Perce et al. 1995), and the Draft Multi-Year Implementation Plan for Resident Fish Protection (RFM-CBFWA 1997).

Rationale for Conservation Enforcement Conducted by the Nez Perce Tribe

Within the 761,000 acre Nez Perce reservation, the Tribe has exclusive jurisdiction to regulate its own tribal members and any other Indian authorized to fish by tribal authority. As a general rule, state jurisdiction within Indian Country is preempted both by federal protection of tribal self-government and by federal treaties and statutes on other subjects relating to Indians, tribes, their property and federal programs. Cohen, Handbook of Federal Indian Law, 349 (1982 Ed.)

The Nez Perce Tribe has what might be deemed near exclusive jurisdiction to regulate tribal members exercising treaty reserved fishing rights at all off reservation, usual and accustomed locations. The geographic scope of such rights includes, at a bare minimum, that portion of the original 13,204,000 acres that were exclusively used and occupied by the tribe including the 761,000 acres contained within the present reservation where the Tribe has exclusive rights. That area includes major portions of the Snake, Salmon and Clearwater Rivers and their drainages situated in three states - Washington, Oregon and Idaho. In addition, there are many Nez Perce usual and accustomed fishing sites located beyond that aboriginal territory. Undoubtedly the best example of that is represented by the rights of the Nez Perce Tribe to fish pursuant to treaty rights in the lower Columbia River as determined by the U.S. v. Oregon litigation.

The Nez Perce Tribe continues to play a key role in anadromous fish management. However, instead of being the sole manager as it was over a century ago, the Tribe works amidst the multitude of state, federal, and tribal agencies having management authority and the groups and organizations that have an interest in the fish themselves.

In aboriginal times as well as in the early historical period, the Nez Perce Tribe was free to resort to fishing sites in the lower Columbia River and frequently did so to participate in the earliest part of anadromous fish runs. At that time, fishing could occur on nearly a year around basis because of the numbers and sizes of the runs. Commercialization of the anadromous fish by non-Indians, the fish wheels, dams and a number of other events have severely decreased the numbers of fish that ascend and descend the Columbia River.

Within the Columbia River Fish Management Plan the Nez Perce Tribe has agreed, among many other things, to limit fishing by its tribal members on the Columbia River runs until escapement goals established for those runs are met. The effect of this agreement has been felt yearly as the opportunities to fish for ceremonial, subsistence and commercial purposes have been limited in an effort to allow fish runs of low numbers to rebuild. Rebuilding of runs is among the specific targets established by the Plan. The difference between once having the opportunity to fish nearly every day of the year and the number of days allowed under the plan is considerable.

Self-imposed limitations of the Nez Perce Tribe extend beyond the Columbia River. In the upper tributaries of the Snake and Clearwater Rivers where fishing is outside the scope of the Columbia River Fish Management Plan and within the realm of tribal-state issues, there have been additional measures taken. In 1991, The Nez Perce Tribal Executive Committee adopted Resolution NP 91-190 -- which closed all tributary fishing for spring, summer and fall chinook specifically because of endangered species concerns. This closure left only returns to Rapid River hatchery as a source of subsistence fishing in the upper river system. Low returns precluded even that possibility in previous years.

In undertaking these efforts, the Nez Perce Tribe necessarily interacts with other governmental agencies and user groups. The quality of the working relationship between the Tribe and State of Idaho has varied widely in years past. However, in recent years the Tribe has made efforts to stabilize that relationship and to formalize a sound basis for cooperative efforts. A Memorandum of Agreement was developed between the Tribe and State to strive for cooperative efforts, exchange information and improve communications with regard to fish and wildlife issues. It is intended that this basic MOU serve as the foundation for additional, more detailed agreements in the future.

NPT has been coordinating fish and wildlife enforcement with the State of Idaho. A Memorandum of Agreement between the Nez Perce Tribe and IDFG exists (January 24, 1992): “The state and the tribe share mutual concerns for protection, perpetuation, and restoration of existing and historic runs of salmon and steelhead of the Snake River Basin, as well as other indigenous fish and wildlife species.” In 1997 an MOU was drafted and approved between NPT Conservation Enforcement and the U.S. Forest Service, Law Enforcement Division, Nez Perce and Clearwater Forests. This MOU is regarding natural/cultural resource protection and mutual aide, benefiting both the tribe and the service.

The Nez Perce Tribe and the State of Idaho have also entered into agreements with regard to wildlife mitigation for Dworshak Dam. These included an initial agreement signed in January of 1991 defining the responsibilities of the State and Tribe for wildlife mitigation

for Dworshak and the final agreement to which BPA was a party that was executed in a formal ceremony March 10, 1992.

Presently, a draft agreement with regard to the management of, and tribal harvest of fish from, Rapid River Hatchery has been developed by the Tribe and is under consideration by the State. Discussions have begun about using written agreements to resolve other fish and wildlife issues that could lead to litigation unless resolved by negotiated agreement.

The nature and extent of Nez Perce treaty fishing rights and the ESA issues indicate that the Nez Perce Tribe should focus enforcement efforts on that portion of the Columbia River above McNary Dam to the mouth of the Snake River, from the mouth of the Snake River upstream to Hells Canyon Dam, the Clearwater River and the Salmon River as well as the tributaries to those rivers where endangered or threatened species might migrate. The Nez Perce Tribe has jurisdiction to regulate and to enforce its laws on tribal members fishing throughout those locations.

Power Act – in lieu Funding Issue

BPA funding does indeed supplement funding available from the BIA for NPT's enforcement effort, but this does not create a problem with the express language of the "in lieu" provisions of section 4(h)(10(A) of the Power Act. The section of the Act requires that "[expenditures of [BPA] pursuant to this paragraph shall be in addition to, not in lieu of, other expenditures authorized or required from other entities under other agreements or provisions of law." 16 U.S.C. 839b (h)(10)(A)(emphasis added). In fact, the Act expressly contemplates (4(h)(8)(C)) and encourages coordination (4(h)(2)(A) and (11)(B)) with other measures dealing with non-hydro programs. Supplemental funding is not prohibited by the Act as long as the funding is not in lieu of other expenditures authorized or required by law.

NPT Fishery Conservation Law Enforcement Interface -- Endangered Species Act

Beginning in 1989, numerous species and stocks of anadromous salmonids – originating throughout the Pacific Northwest -- have been listed as "*threatened*" or "*endangered*" under the Endangered Species Act, ESA. The first ESA-listings of Columbia River salmon were Snake River (Redfish Lake) sockeye salmon in 1991 and Snake River fall and spring/summer chinook stocks in 1992.

The Snake River Basin steelhead ESU was listed as "threatened" in August 1997. The steelhead ESU includes all naturally spawned populations of steelhead (and their progeny) in streams in the Snake River Basin of southeast Washington, northeast Oregon, and Idaho. Major river basins containing spawning and rearing habitat for this ESU comprise approximately 29,282 square miles in Idaho, Oregon, and Washington. The following counties lie partially or wholly within these basins: Idaho - Adams, Blaine, Camas, Clearwater, Custer, Idaho, Latah, Lemhi, Lewis, Nez Perce, and Valley; Oregon - Umatilla, Union, and Wallowa; Washington - Asotin, Columbia, Franklin, Garfield, Walla Walla, and Whitman.

System-wide Fish & Wildlife Enforcement Coordination

The cornerstone of effective law enforcement has been coordination and cooperation among the various tribal, state and federal entities with fisheries, wildlife and habitat law enforcement jurisdictions within the Columbia River Basin -- in conjunction with BPA. Other related conservation enforcement projects and/or cooperating entities include:

- Idaho Department of Fish and Game

- Washington Department of Fish and Wildlife
- Oregon State Police, Oregon Department of Fish and Wildlife
- Columbia River Inter-Tribal Fisheries Enforcement, and individual tribes.
- National Marine Fisheries Service - Law Enforcement
- U.S. Fish and Wildlife- Law Enforcement
- U.S. Forest Service - Law Enforcement

Currently the NPT conservation enforcement project coordinates with the BPA-funded Columbia River Inter-Tribal Fisheries Enforcement Project #2000-56-00. If and when additional Columbia Basin fish, wildlife and habitat enforcement programs are developed – e.g., the Umatilla Tribes Project #195505500 proposed for FY2002 – it will be important to enhance inter-project coordination and have consistent performance standards and methodologies to evaluate results and effectiveness of all BPA-funded conservation enforcement projects.

Geographic Scope

The enhanced fish, wildlife and habitat law enforcement provided by this project serves to protect and enhance all targeted salmonid stocks, resident fish stocks, wildlife species, essential habitats, and other commercially, ecologically and culturally important natural resources within the project area. The region of focused enforcement effort includes Zone 6 of the mainstem Columbia River (in conjunction with the CRITFC enforcement project) and Snake River Basin tributary river systems under the co-management jurisdiction of the Nez Perce Tribe. The Zone 6 fishery management area of the Columbia River extends about 150 miles -- from Bonneville Dam to McNary Dam.

Geographic regions under the co-management and law enforcement jurisdiction of the Nez Perce Tribe, including the mainstem Snake River Basin and its tributary river systems are summarized -- within the NPPC Province Designations -- in Table 2 and further specified in the following "*Fish & Wildlife Species & their Habitats*" section. The Columbia Plateau, Blue Mountain and Mountain Snake Ecological Provinces, as defined by the NPPC, have river systems, subbasins, and watersheds that fall under the co-management jurisdiction of the Nez Perce Tribe.

Table 2. Geographic regions defined by NPPC Ecological Provinces, which include some subbasins under the co-management or law enforcement jurisdiction of the Nez Perce Tribe.

Ecological Province	Subbasin
Columbia Plateau South Columbia River and all tributaries on the south bank upstream of The Dalles Dam up to the confluence with the Snake River; Snake River and all tributaries from Lewiston, Idaho, to the confluence with the Columbia River	Deschutes Walla Walla John Day Tucannon Umatilla Palouse Mainstem Snake
Blue Mountain Snake River and all tributaries from Lewiston to Hells Canyon Dam	Grande Ronde Asotin Imnaha Mainstem Snake
Mountain Snake The Mountain Snake Province includes rivers and tributaries in the Clearwater and Salmon subbasins	Clearwater Salmon

Fish & Wildlife Species & their Habitats – Protected and Conserved

Nez Perce Tribal Conservation Enforcement has identified areas, seasons and natural resources that are targeted for focused enforcement actions. The following anadromous salmonid species and tributaries are a high priority in both Zone 6 and specified tributaries:

- Spring chinook: Clearwater River, Rapid River, and Lookingglass Creek;
- Summer chinook: South Fork Salmon River and Imnaha River
- Coho salmon: Clearwater River
- Steelhead: All Lower Snake River tributaries

White sturgeon is an important species for fishery and conservation focus in the Snake River mainstem. Enforcement for other resident fish will be focused on the Clearwater River and trout-rearing and catching ponds. Hunting and gathering areas are also the focus for conservation enforcement patrols: Blue Mountains, Craig Mountains, Bitterroot Mountains, Tribal Reserves, and National Forest Lands. Big game species targeted by tribal hunting activities include elk, deer, moose, and mountain sheep. Gathering activities are focused on roots, berries, woodcutting, herbs, and other medicinal plants.

Anadromous Salmonid Species

Within the Snake River Basin, six river systems fall under the management jurisdiction of the Nez Perce Tribe (Table 3).

Table 3. River systems and fish species within the Snake River Basin.

Subbasin / River System	Anadromous Salmonid Species	Co-management Entity
Tucannon River	• Spring Chinook • Fall Chinook • Steelhead	• NPT • ODFW • WDFW
Snake River Mainstem	• Fall Chinook • Steelhead	• NPT • IDFG • ODFW • WDFW
Grande Ronde River	• Spring Chinook • Fall Chinook • Coho • Steelhead	• NPT • ODFW
Imnaha River	• Spring Chinook • Fall Chinook • Steelhead	• NPT • ODFW
Salmon River	• Spring Chinook • Summer Chinook • Sockeye • Steelhead	• NPT • IDFG
Clearwater River	• Spring Chinook • Fall Chinook • Coho • Steelhead	• NPT • IDFG

Resident Fish Stocks

Resident fish are freshwater fish that live and migrate within the rivers, streams and lakes of the Columbia River Basin, but are not anadromous. Resident fish species exist throughout the Nez Perce Territory and are particularly important for tribal fisheries in areas where anadromous fish runs are blocked by natural barriers and manmade dams.

Columbia Basin resident fish managers have identified species of management concern currently inhabiting or planned for re-introduction into specific habitats within specific subregions and subbasins (MYIP 1998). Resident fish species -- both native and introduced exotic populations -- that are currently targeted for management actions in the Columbia Basin are listed by common and scientific names in Table 4. In future years, it is likely that management objectives and projects will be developed for additional native resident fish species that are not currently targeted for restoration activities.

Columbia River Inter-Tribal Fisheries Enforcement Project 2000-05600

Purpose of Program - *technical and/or scientific background*

The overall purpose of the Columbia River Inter-Tribal Fisheries Enforcement (CRITFE) program is to increase protection of fish, wildlife and watersheds within the Columbia Basin – that are under the jurisdiction of the Columbia River Inter-Tribal Fish Commission member

Tribes. The main focus of the CRITFE program is to implement an enhanced enforcement effort to provide additional protection against illegal takes of Columbia River salmon species throughout their life cycle with an emphasis on weak stocks passing through the hydro-power corridor into tributary streams.

Goal, Scope, and Approach of Columbia River Inter-Tribal Fisheries Enforcement

The goal of this program is to reduce illegal take of Columbia River Basin salmonids and native resident fish, and thereby help to rebuild all endemic fish populations within the basin. Illegal take includes illegal harvest of adults and juveniles, harassment of spawners attending redds, destruction of eggs or fry within redds, direct mortality of juveniles caused by various human activities (e.g., water diversion), and degradation of critical habitat. Specific goals and objectives of the CRITFE Enforcement Program are consistent with protection and enhancement goals of the region's fish and wildlife managers (CBFWA).

The conceptual scope of the program is the entire life cycle of the target fish species, (i.e., *"gravel to gravel"*). The targeted fish stocks are depleted anadromous salmonids and resident fish species -- especially species petitioned or listed under the ESA. It is expected that enhanced protection will also extend to all other endemic fish populations in the Columbia Basin (e.g., steelhead, and white sturgeon); this enhancement "spin-off" is beneficial to the fishery resources of the entire region.

The approach we are taking is threefold:

First, to initiate an enhanced (three patrol officers and one dispatcher) level of harvest and habitat law enforcement in the Columbia Basin (specifically in the Zone 6 area). This enhanced level of enforcement personnel staffing will allow CRITFE to maintain the present high levels of voluntary compliance by tribal fishers. The program as funded and initiated thus far has clearly shown a high degree of success in creating pro-active, high visibility enforcement actions that create a significant deterrence against unlawful fishing activities.

Table 4. Native and introduced resident fish species in the Snake River Sub-regions that are targeted for management actions by the Resident Fish Managers Workgroup (source: RFM-CBFWA 1997).

Common Name	Scientific Name	ESA	Sub-Region[3]	
Family / Species	Genus Species	Status[4]	LSR	USR
Sturgeon	**Acipenseridae**			
White sturgeon[5]	Acipenser transmontanus		PM	PM
Salmon & Trout	**Salmonidae**			
Bull trout[7]	Salvelinus confluentus	T/E	PM	PM
Red Band / rainbow trout[6]	Oncorhynchus mykiss spp.	R	PM	PM
Westslope cutthroat trout[8]	Oncorhynchus clarki lewisi		PM	P
Yellowstone cutthroat trout[8]	Oncorhynchus clarki bouvieri			PM
Lahontan cutthroat trout[7]	Oncorhynchus clarki henshawi	T[8]		P
Brown trout[9]	Salmo trutta		P	P
Brook trout[9]	Salvelinus fontinalus		P	P
Lake trout[9]	Salvelinus namaycush		P	P
Kokanee[8]	Oncorhynchus nerka spp.		PM	P
Mountain whitefish[7]	Prosopium williamsoni		P	P
Pigmy whitefish[7]	Prosopium coulteri		P	P
Lake whitefish[9]	Coregonus clupeaformis		P	P
Arctic grayling[8]	Thymallus arcticus		P	P
Perch Family	**Percidae**			
Yellow perch[9]	Perca flavescens		P	P
Sunfish Family	**Centrarchidae**			
Largemouth bass[9]	Micropterus salmoides		P	P
Smallmouth bass[9]	Micropterus dolomieui		PMS	P
Catfish Family	**Ictaluridae**			
Channel catfish[9]	Ictalurus punctatus		P	P

Species present & targeted for management are denoted with a 'P'; mitigation targets with an 'M'; and substitution targets with an 'S'.

- Second, to enhance the efficiency of this increased harvest and habitat enforcement effort by promoting cooperation and assistance from appropriate federal, state, tribal, regional and local entities.
    - Third, to educate the public on the plight of specific fish stocks in danger of extinction and the need to protect their critical habitats and make the public aware of the

[3] LSR = Lower Snake River and tributaries downstream from Hells Canyon Dam; USR = Upper Snake River and tributaries upstream from Hells Canyon Dam.
[4] E = endangered, W = warranted but precluded, R = status review, T = threatened.
[5] Native species throughout basin.
[6] Native species in some areas of the basin and introduced in other portions.
[7] Introduced species throughout basin.
[8] Lahontan cutthroat trout is "threatened" in its native range, i.e., the Great Basin.

importance to society of conserving the cultural values and diversity of anadromous salmonid and resident fish for future generations.

Monitoring and Evaluation – Achievement of Law Enforcement Effectiveness Objectives and Biological Objectives

Monitoring and evaluation (M&E) is an integral part of the ongoing CRITFE program. We will adaptively manage the enforcement program via M&E -- according to biologically-based performance criteria. The evaluation of desired/actual achievements are in terms of: Inputs (e.g., budget, personnel, equipment), Outputs (e.g., fishery statistics, contacts, arrests, seizure, etc.), and Outcomes (e.g., fish & wildlife saved, critical habitats protected).

The following three LE effectiveness objectives and three biological objectives have been identified for evaluation of the Columbia River Inter-Tribal Fisheries Enforcement program.

Law Enforcement Effectiveness Objectives:

- Increased LE effectiveness throughout the watersheds of the Columbia Basin under the co-management of the NPT -- via increased public awareness, voluntary compliance with laws and rules, and deterrence of illegal activities.
- Increased LE effectiveness in anadromous and resident fish protection via annual planning to ensure effective use of personnel and equipment, and close coordination with fisheries management and regulatory agencies.
- Increased LE effectiveness in anadromous and resident fish protection via long-term strategic planning, tribal coordination at LE command levels, and support of state & federal enforcement agencies.

Biological Objectives:

- Improvement in adult salmon survival during in-river migration as measured by temporal trends in inter-dam and reach conversion rates.
- Increased survival of juvenile salmon and protection of critical habitat as measured by case studies, and compliance with various regulations.
- Increased survival of resident fish populations via enforcement, habitat protection, and public outreach.

These objectives can be measured against specific biologically-based performance criteria and metrics (Table 5).

Table 5. Performance criteria, null hypotheses, and metrics for evaluation of biological benefits of enhanced law enforcement.

Performance Criteria	Null Hypotheses	Metrics
Adult salmon passage survival through the migration corridor and fisheries	An increase in the level of enforcement in the mainstem Columbia River does not reduce illegal take and improve adult salmon survival.	Inter-dam conversion rates, Bonneville to Lower Granite dams. Radio telemetry studies in tributary areas.
Protection of critical spawning and rearing habitat of anadromous salmonids	Enforcement of habitat regulations[9] in tributary areas does not increase natural production success or improve the integrity of critical habitat.	Compliance rates with laws and rules for the protection of stream habitat, riparian zones, watersheds and ecosystems.
Juvenile salmonid out-migration survival through the migration corridor	Enforcement of "trout" fishing regulations and water diversion & screening regulations does not increase juvenile salmonid survival in tributaries and mainstem.	Compliance rates with "trout" fisheries and screening regulations on mainstem pump and tributary diversions.
Inter-agency coordination	Enhanced inter-agency coordination and resource sharing does not improve efficiency and cost-effectiveness of LE efforts.	Contacts, enforcement statistics, habitat protected, and fish saved via inter-agency task forces per cost level.
Public participation	Improved public education and awareness does not enhance LE efforts via public support and involvement.	Public opinion polls, public volunteer work, voluntary compliance with laws and rules, "poacher hotline" information on violations.
Resident Fish	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.	Enforcement statistics; compliance rates with laws and rules; fisheries statistics; public awareness.

The Columbia Basin Fish & Wildlife Authority (CBFWA) and the Northwest Power Planning Council (Council) have directed that comprehensive Monitoring & Evaluation (M&E) be an integral part of fisheries & conservation law enforcement projects funded via the regional process. At the conclusion of FY2001 performance period, the CRITFE Enforcement

[9] State and Federal water quality standards, Forest Practices Acts, BLM grazing regulations, etc.

Department and the M&E Consultant will provide a progress report to the Council that includes an update on the evaluation the project results with respect to performance standards.

Scope of Program - *management application, geographic scope, and species populations affected/benefited*

Management Application

The fundamental need for integration of fish & wildlife conservation enforcement (resource user management) with biologically based fish & wildlife population and ecosystem management is a pragmatic historical fact. Fish & Wildlife management entities in the Columbia Basin began with the establishment of laws and rules designed to protect renewable natural resources from overexploitation and their essential habitats from destruction -- empowered by Fish & Wildlife Commissions and law enforcement. Protection of fish, wildlife and habitats – via enhanced conservation enforcement – has consistently been a strategy integrated with other fish & wildlife enhancement measures in regional fish & wildlife plans, e.g., the Northwest Power Planning Council's "Columbia River Basin Fish and Wildlife Program" (NPPC 1994), the original Anadromous Salmonid Snake River Recovery Team Plan (Bevan et al. 1994), the Proposed Recovery Plan for Snake River salmon (NMFS 1995), the Tribes' "Spirit of the Salmon" (Nez Perce et al. 1995), and the Draft Multi-Year Implementation Plan for Resident Fish Protection (RFM-CBFWA 1997).

Rationale for Conservation Enforcement Conducted by CRITFE

Authority for Tribal fisheries law enforcement is derived from Treaties with the U.S. Government. It has consistently been held that treaties were grants of rights from tribes to the United States and that anything not expressly granted was reserved. It is fundamental that a federal treaty guaranteeing certain rights to the subjects of a signatory nation is self-executing and supersedes state law, *U.S. v. Washington*, and that a state may enact no statute or regulation in conflict with a treaty between the United States and an Indian Tribe.

The *U.S. v. Oregon* litigation was initiated by the United States in 1968. It established the Tribes' co-management responsibilities for the Columbia Basin. The *U.S. v. Oregon* case began as a means of establishing the nature and extent of treaty reserved rights of four Indian Tribes to fish in the mainstem of the Columbia River for anadromous fish.

The Columbia River Inter-Tribal Fish Commission (CRITFC) is comprised of four member Tribes -- Umatilla, Nez Perce, Warm Springs and Yakama. Columbia River Inter-Tribal Fisheries Enforcement (CRITFE), as a department of CRITFC, is delegated tribal enforcement responsibilities the four Treaty Tribes

Power Act – in lieu Funding Issue

BPA funding does indeed supplement funding available from the BIA for CRITFE's enforcement effort, but this does not create a problem with the express language of the "in lieu" provisions of section 4(h)(10(A). The section of the Act requires that "[expenditures of [BPA] pursuant to this paragraph shall be in addition to, not in lieu of, other expenditures authorized or required from other entities under other agreements or provisions of law." 16 U.S.C. 839b (h)(10)(A)(emphasis added). In fact, the Act expressly contemplates

(4(h)(8)(C)) and encourages coordination (4(h)(2)(A) and (11)(B)) with other measures dealing with non-hydro programs. Supplemental funding is not prohibited by the Act as long as the funding is not in lieu of other expenditures authorized or required by law.

The primary area to which the enhanced CRITFE effort has been directed is the mainstem of the Columbia River -- in particular Zone 6 - which is the area between the Bonneville and McNary dams (147 linear miles). Zone 6 fisheries are very complex with several different species, e.g., various salmon stocks, steelhead, sturgeon, walleye, and shad, different seasons for each species/stock, and different types of fisheries, e.g., tribal treaty commercial and ceremonial/subsistence fisheries, and sport fisheries. All of the fish in these fisheries are affected by the operation of the hydropower system. Most of these fish species benefit from specific mitigation measures targeted at them for which the Bonneville Power Administration is financially liable. For example, BPA's investments in flows, the Corps of Engineer's investment in fish ladders, and U.S. Fish and Wildlife Service's investment in artificial propagation of spring Chinook in the Snake River Basin result in financial obligations to the Bonneville Power Administration. CRITFE's enhanced efforts protect the fruits of these investments, Snake River spring Chinook in this example, and other stocks benefited by mitigation measures under the Act.

CRITFC Enforcement Interface with Endangered Species Act

Beginning in 1989, numerous species and stocks of anadromous salmonids – originating throughout the Pacific Northwest -- have been listed as "*threatened*" or "*endangered*" under the Endangered Species Act, ESA. The first ESA-listings of Columbia River salmon were Snake River (Redfish Lake) sockeye salmon in 1991 and Snake River fall and spring/summer chinook stocks in 1992. The Snake River Basin steelhead ESU was listed as "threatened" in August 1997. Subsequent ESA salmonid listings are documented in the record (see NMFS NW Region web site) and the overlapping ranges of these stocks cover the Columbia Basin. The recovery plans developed by independent scientists on the Recovery Team (Bevan et al.) and the plan subsequently endorsed by NMFS (Schmitten et al. 1996) – included enhanced law enforcement as a key strategy to protect and conserve depleted salmonid stocks.

System-wide Fish & Wildlife Enforcement Coordination

The cornerstone of effective law enforcement has been coordination among the various tribal, state and federal entities with fisheries law enforcement jurisdictions within the Columbia River Basin -- in conjunction with BPA funding. In Zone 6, CRITFE routinely coordinates with other fisheries enforcement agencies but as per the *US vs. Oregon* court mandated *"Fisheries Management Plan"* . CRITFE maintains primary jurisdiction for tribal enforcement responsibilities by virtue of a delegation of that governmental enforcement responsibility by the four Treaty Tribes (Umatilla, Nez Perce, Warm Springs and Yakama).

CRITFE has primary enforcement authority regarding all treaty tribal fisheries and shares concurrent jurisdiction on the mainstem Columbia River regarding enforcement of state law. CRITFE officers are also commissioned with Special Law Enforcement Commissions by the Bureau of Indian Affairs - Law Enforcement Division. Additionally, CRITFE officers have federal commissions issued by the U.S. Department of Interior, Dept. of Fish and Wildlife, for the purpose of enforcing applicable federal laws. In summary, other related

conservation enforcement projects and/or cooperating entities in Zone 6 of the Mainstem Columbia River include:

- Washington Department of Fish and Wildlife
- Oregon State Police, Oregon Department of Fish and Wildlife
- Nez Perce Tribe
- Yakama Tribe
- Umatilla Tribe
- Warm Springs Tribe
- National Marine Fisheries Service - Law Enforcement
- U.S. Fish and Wildlife- Law Enforcement

As a department within the Columbia River Inter-Tribal Fish Commission, CRITFE coordinates fisheries enforcement efforts with all four Commission member tribes for the purpose of implementing an enforcement program focused towards achieving the fisheries management priorities of the four Treaty Tribes. This includes assisting the tribes relative to enforcement issues on the reservations and in the tribal ceded areas as requested or required by the tribes.

Currently Columbia River Inter-Tribal Fisheries Enforcement Project coordinates and, if possible, shares resources with the BPA-funded Nez Perce Tribal Conservation Enforcement Project #2000-55-00. If and when additional Columbia Basin fish, wildlife and habitat enforcement programs are implemented – e.g., the Umatilla Tribes Project proposed for FY2002 – it will be important to enhance inter-project coordination and have consistent performance standards and methodologies to evaluate results and effectiveness of all BPA-funded conservation enforcement projects.

Geographic Scope

The enhanced fish, wildlife and habitat law enforcement provided by this project serves to protect and enhance all targeted salmonid stocks, resident fish stocks, wildlife species, essential habitats, and other commercially, ecologically and culturally important natural resources within the project area. The primary area of focused CRITFE effort is Zone 6 of the mainstem Columbia River – which encompasses about 150 linear miles of river between Bonneville and McNary Dams. The mainstem dams, reservoir pools, and natural resources targeted for protection within the Treaty fishery area (Zone 6) is summarized in Table 6. CRITFE coordinates and shares available resources with the Nez Perce Tribe's conservation enforcement project with primary jurisdiction in the mainstem Snake River and its tributary river systems.

Table 6. Gross characterization of mainstem Zone 6 area and targeted natural resources.

Pool	Lower Dam	Upper Dam	River Miles	Target Resources
Bonneville	Bonneville	The Dalles	45	All anadromous salmonid species/stocks; sturgeon; lamprey; walleye; northern pikeminnow; shad; other depleted or protected resident fish; wildlife species utilized for hunting; ecologically, culturally & commercially important plant species.
The Dalles	The Dalles	John Day	31	
John Day	John Day	McNary	76	

The vast watersheds that are tributary to the mainstem Columbia River and are under the co-management jurisdiction of the CRITFC member tribes can be subdivided into geographic regions defined by Northwest Power Planning Council as "Ecological Provinces". The following Provinces include subbasins under the co-management or law enforcement jurisdiction of the CRITFC member Tribes in the mainstem Columbia River:

- Columbia Gorge Province;
- Columbia Plateau Ecological Province – north; and
- Columbia Plateau Ecological Province – south.

The Columbia Gorge Province includes the mainstem Columbia River between Bonneville and The Dalles Dams, and subbasins that are tributary to the mainstem. Subbasins within the Columbia Gorge Province are:

- Bonneville Reservoir;
- Fifteenmile;
- Hood;
- Klickitat
- Little White Salmon;
- White Salmon; and
- Wind.

The Columbia Plateau Ecological Provinces include the region from The Dalles Dam to, up the Mid-Columbia River, to Wanapum Dam on the North; and from The Dalles Dam, up the Snake River, to Lewiston on the South. The Columbia Plateau North includes the Columbia River and all tributaries upstream of The Dalles Dam up to and including Wanapum Dam. Subbasins within the Columbia Plateau – North are:

- Crab;
- Mainstem Columbia;
- Rock Creek; and
- Yakima.

The Columbia Plateau South includes the Columbia River and all tributaries on the south bank upstream of The Dalles Dam up to the confluence with the Snake River; and the Snake River and all tributaries from Lewiston, Idaho to the confluence with the Columbia River. Subbasins within the Columbia Plateau – South are:

- Deschutes
- John Day
- Mainstem Snake
- Palouse
- Tucannon
- Umatilla
- Walla Walla

Fish & Wildlife Species & their Habitats – Protected and Conserved

Primary Zone 6 Fisheries - Anadromous Salmonids

Diverse and complex fisheries occur within the Zone 6 of the mainstem Columbia River River. Fishing seasons and closures covered by CRITFE Conservation Enforcement for CY 2000 are summarized in Table 7. Regulations and fisheries proposed for 2001 are summarized in Table 8.

Table 7. Priority fish species / seasons for CRITFE Conservation Enforcement patrols – with preliminary catch for CY 2000 (Source Stuart Ellis, CRITFC Harvest Manager).

Fish Species	Season	Zone 6 Fishery (total 2000 preliminary catch by season)
Steelhead	Winter:	N/A
	Spring:	C&S + incidental catch in chinook commercial (n= 686)
	Summer:	C&S (n= 1,670)
	Fall:	C&S + commercial gillnet (n= 18,403)
Chinook salmon	Winter:	Gillnet commercial (n= 6)
	Spring:	C&S + platform + commercial (n= 11,250)
	Summer:	N/A
	Fall:	C&S + commercial gillnet (n> 53,322)
Coho salmon	Winter:	(n= 0)
	Spring:	(n= 0)
	Summer:	(n= 0)
	Fall:	Gillnet commercial (n> 4,373)
Sockeye Salmon	Winter:	(n= 0)
	Spring:	(n= 0)
	Summer:	C&S + commercial gillnet (n= 3,020)
	Fall:	(n= 0)
Sturgeon	Winter:	Setline + gillnet (n= 2,448)
	Spring:	Setline + gillnet (n= 670
	Summer:	Setline + gillnet (n= 49)
	Fall:	N/A
Walleye	Winter:	Commercial gillnet (n= 247)
	Spring:	Commercial gillnet (n= 30)
	Summer:	N/A (n= 0)
	Fall:	C&S + commercial gillnet (n= 47)
American Shad	Open	Spring-Summer
Northern pikeminnow	Open	BPA bounty fishery: April-September

Table 8. A preliminary summary of year 2001 Zone 6 Fisheries and regulations (Source Stuart Ellis, CRITFC Harvest Manager).

Fishery	Dates (Start-Stop)	*Special Regulations*
Winter Fisheries:		
C&S and Platform	1/1-3/14	
Sturgeon	1/1-1/31	
Gillnet	2/1-3/14	
Spring Fisheries:		
Ceremonial Permits	3/15-4/15, 5/28-5/31	1
Platform	3/15-5/31	2
Sturgeon	Closed	
Chinook gillnet Fisheries	4/17-4/19, 4/26-4/28, 5/4-5/5, 5/10-5/12, 5/24-5/26, 5/28-5/31	
Summer Fisheries:		
C&S and platform	6/1-7/31	3
Sockeye gillnet	6/25-6/26, 6/30-7/1	
Sturgeon setline	6/1-8/18	4
Fall Fisheries:		
C&S and Platform	8/1	5
Gillnet	8/28-9/1	
Gillnet	9/4-9/8	
Gillnet	9/11-9/15	
Sturgeon *		

Special Regulations:

1. Ceremonial Permit fishery was managed individually by each tribe. Process and dates varied slightly by tribe.
2. Sales of platform caught fish allowed from 4/21-5/28.
3. Sales of platform caught fish allowed from 6/30-7/15.
4. Bonneville and John Day pools open only.
5. Sales of platform caught fish allowed from 8/20 to present.

* Data not yet available

Resident Fish Stocks

Resident fish are freshwater fish that live and migrate within the rivers, streams and lakes of the Columbia River Basin, but are not anadromous. Resident fish species exist throughout the mainstem Columbia River; and a beneficial "spin-off" of the CRITFE anadromous salmonid protection in Zone 6 is protection of resident fish. Resident species include sturgeon, walleye, lamprey, shad, smelt, smallmouth bass, and northern pikeminnow.

II Accomplishments/Results

The results and efficacy of the previous Columbia Basin fish, wildlife and habitat law enforcement project (BPA Project 92-024) – implemented during 1992-1997 – were documented in four separate evaluation reports:

1) the BPA Final Report, 1992-94 (Vigg, editor 1995);
2) a system-wide evaluation of the need for tributary enforcement (Vigg and Stevens 1996);
3) a performance evaluation of the CRITFE mainstem component of the Columbia Basin Program, 1992-1996 (Vigg 1997); and
4) a comprehensive Monitoring & Evaluation (M&E) of the entire Columbia Basin fish, wildlife and habitat law enforcement project, 1992-1997 by *Research Into Action* and *Harza* (Peters et al. 1997).

The following excerpt from a section written by one of the Principal Investigators of the 1992-1997 M&E – economist Dr. Darryll Olson – determined that the system-wide enforcement program was cost-effective compared to other BPA-funded measures he has evaluated:

> *"A cost-effectiveness analysis of the Enhanced Law Enforcement Program effort, as compared to other non-law enforcement efforts to save salmon, indicate a comparable and in some cases, better, return on expenditure. This comparison shows that law enforcement dollars are as legitimately well spent as many other more costly measures and, while the outcomes are difficult to measure, they are more measurable for law enforcement than for many other efforts"* (from Peters et al. 1997).

This section of the 2002 Conservation Enforcement Program Summary, however, is primarily relevant to ongoing or new projects with an implementation history. The accomplishments and results to date of two conservation enforcement projects funded in FY2000 – Nez Perce Conservation Enforcement Project 2000-05500 and CRITFE Mainstem Fishery Enforcement Project 2000-05600 – are summarized below.

Nez Perce Tribal Conservation Enforcement Project 2000-055-00

Adaptive Management Implications - *historic and current changes in management, future applications*

The following Table 9 summarizes the evolution and chronological development of the current NPT conservation enforcement project (BPA# 2000-55-00).

Table 9. Chronology of NPT conservation enforcement, 1991-2001.

1991-1997	A law enforcement demonstration project (BPA #91-024) was funded in 1991 -- for 1992-1997 that resulted in increased protection of depleted anadromous salmonid stocks throughout the Columbia Basin (Vigg 1991, 1995).
1992	Silas Whitman, NPT Fisheries Director, submitted a fish & wildlife enforcement proposal to BPA – focused on the protection of depleted salmonid stocks proposed for listing under the ESA.
1996	Tribal Needs Assessment (Vigg and Stevens 1996) documented the need for conservation enforcement in NPT jurisdiction. Successful formation of fisheries enforcement program, fielded uniformed tribal officers for the first time in tribal history.
1997	BPA provided initial funding to the NPT fish & wildlife enforcement, under project 91-024. Tribal enforcement of conservation laws regarding harvest of resident fish, wildlife, and their habitats carried out for the first time by this programs officers throughout NPT jurisdiction.
1997	In 1997, patrol effort (patrol hrs) increased 70% compared to 1991 baseline levels. In the mainstem Columbia River increased effort resulted in deterrence of illegal take. From 1992 thru 1997 tribal arrests decreased by 59%; and tribal gillnet, setline and hoop-net seizures decreased by 63%.
1997	Independent evaluation of the basin-wide enforcement project demonstrated effectiveness (refer to Vigg 1997; Peters et al 1997).
1997	NPPC decided to eliminate FY 1998 funding for BPA project BPA #91-024 – system-wide multi-agency fish & wildlife enforcement.
1998	Training was provided to NPT conservation officers on basic conservation enforcement procedures, timber theft investigations, environmental law enforcement, and Endangered Species Act.
1998-1999	The Nez Perce Tribe maintained interim conservation law enforcement protection when enhanced enforcement funding was cut by the Northwest Power Planning Council.
2000	A new conservation enforcement project (BPA #2000-055-00) focused on tributaries and watersheds under jurisdiction of the NPT was implemented in March 2000.
2000-2001	Progress and results of NPT Conservation Enforcement actions are documented in Quarterly reports, annual reports, and a Monitoring & Evaluation web site: www.Eco-Law.net .

The NPT Conservation Enforcement (CE) program is based on Adaptive Management principles, and we anticipate that ongoing Monitoring & Evaluation coupled with responsive CE management will result in continual improvements in the efficiency and effectiveness of our program. Enhancements will occur both in terms of refining performance measures that best fit our specific CE application and changing our enforcement implementation approach & evaluation methodology to address opportunities for project improvement. This adaptive

management process will not occur all in the first year, but incrementally over the life of the project.

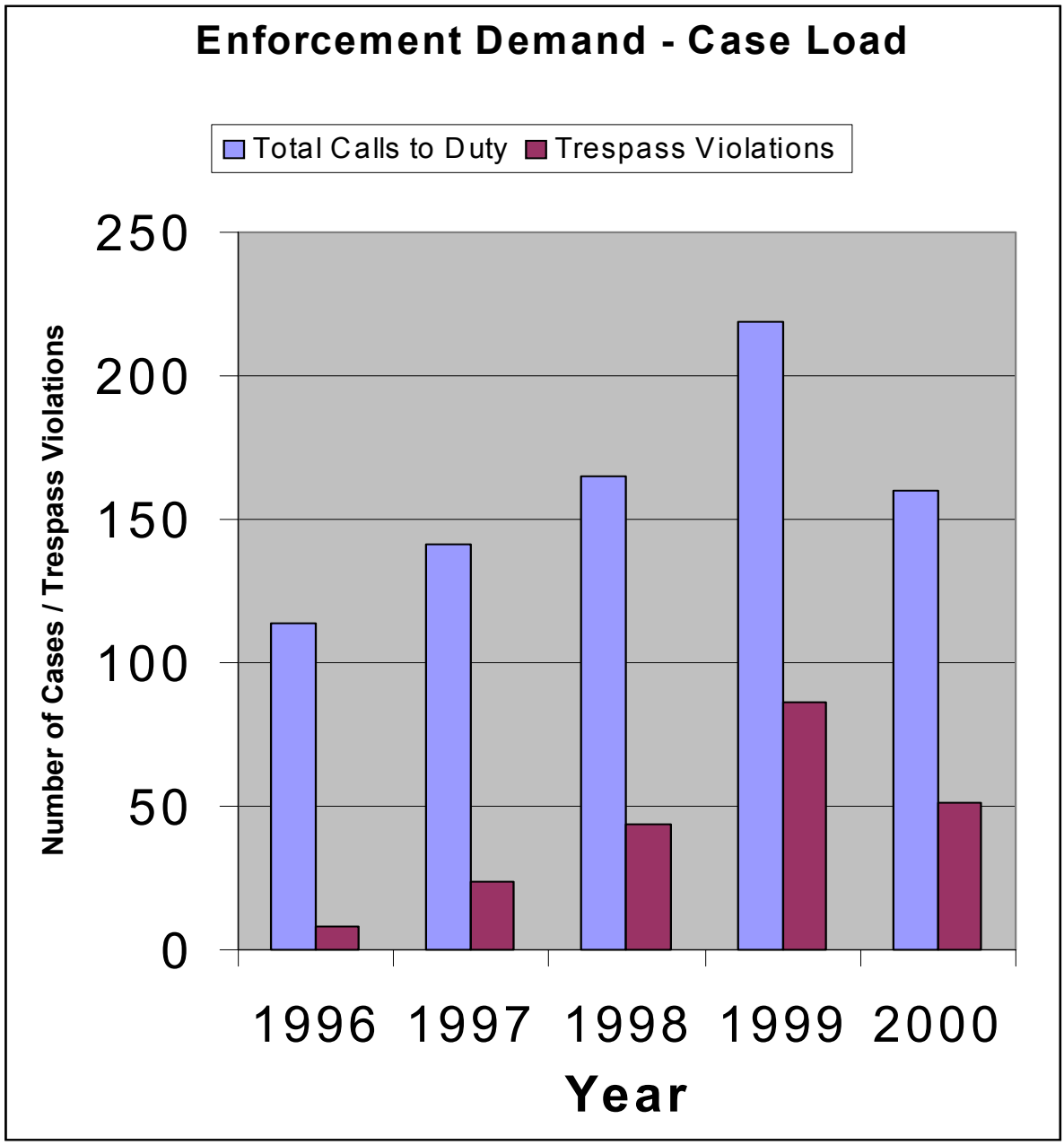

Figure 1. Increasing demand for NPT Conservation Enforcement, 1996-2000.

Annual Trends in Output Enforcement Statistics – Baseline Period 1996-2000

Since 1996 an increased demand for NPT conservation enforcement has occurred; calls to duty (case load) steadily increased – peaking in 1999 (Figure 1). During that same year of maximum demand, the ability of NPT enforcement to respond to fish, wildlife and habitat violations was diminished by BPA funding cuts.

Although, NPT conservation enforcement funding and field effort declined from 1997 to 1999, the need for law enforcement concurrently doubled:

- Total calls to duty increasing (100% increase in case load from 1996 to 1999), and
- Increasing numbers of trespass violations on tribal lands – associated with natural resource use.

Since resumption of BPA funding in March 2000, NPT resource enforcement effort has been greatly enhanced. Conservation law enforcement contacts ranged from 111 to 246 per year during 1996-98, and increased dramatically to over one thousand during year 2000 (Figure 2). Although baseline levels of enforcement continued during 1999 when BPA funds were cut, data collection was incomplete due to limited resources. During times of restricted budgets, enforcement generally takes on a reactive mode – responding only to urgent cases – and thus record keeping (needed for M&E) is given lower priority. Tribal contacts (Figure 1) and detection of fishery related violations (Figure 2) both increased during calendar year 2000.

Enforcement of fish & wildlife violations peaked in 1997 when enhanced BPA funding first took effect. However, during 1998-99 the number of resource violations handled by NPT enforcement officers declined – especially for fishery violations. This was probably due to less effort in the field from 1998 to the first quarter of year 2000 – corresponding to cuts in BPA funding. However, starting in March of 2000 BPA funding of NPT conservation enforcement was resumed, along with an enhanced focus on sensitive fish stocks. Apparently as a result of increased effort, the number of resource violations detected substantially rebounded during calendar year 2000 (Figure 3). Additional years of monitoring & evaluation will be needed to clarify the probable cause-effect relationships underlying these trends.

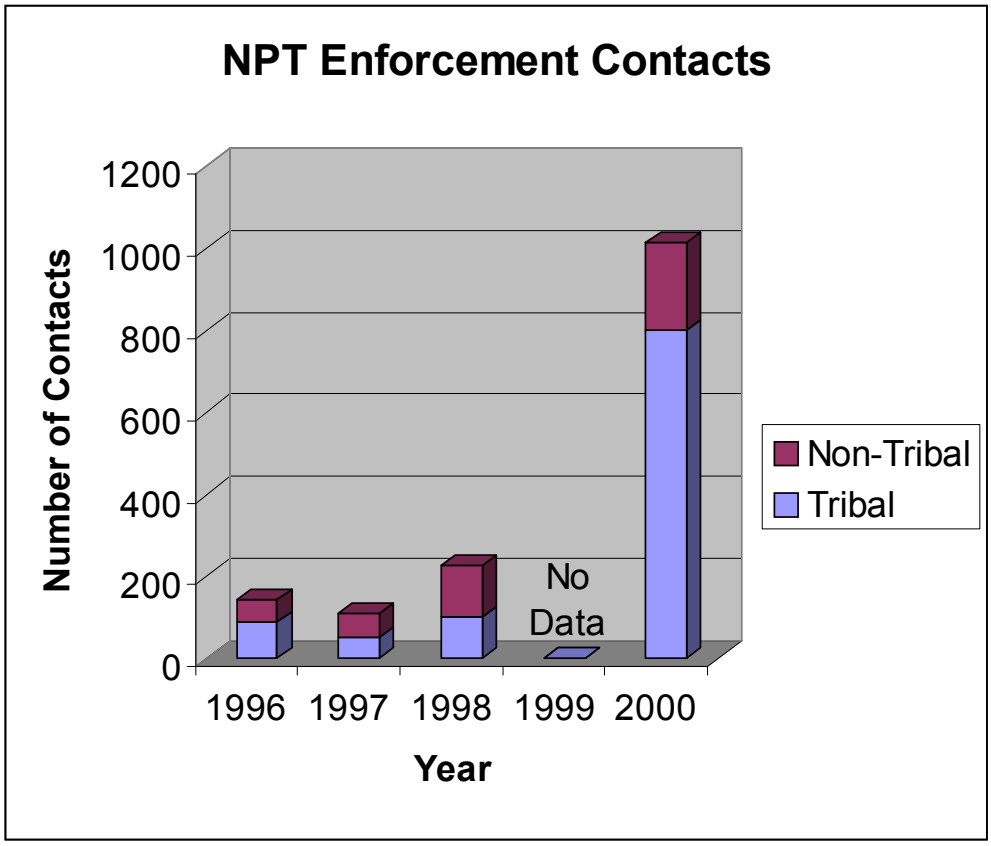

Figure 2. Conservation law enforcement contacts with Tribal and non-tribal resource users, CY 1996 to 2000.

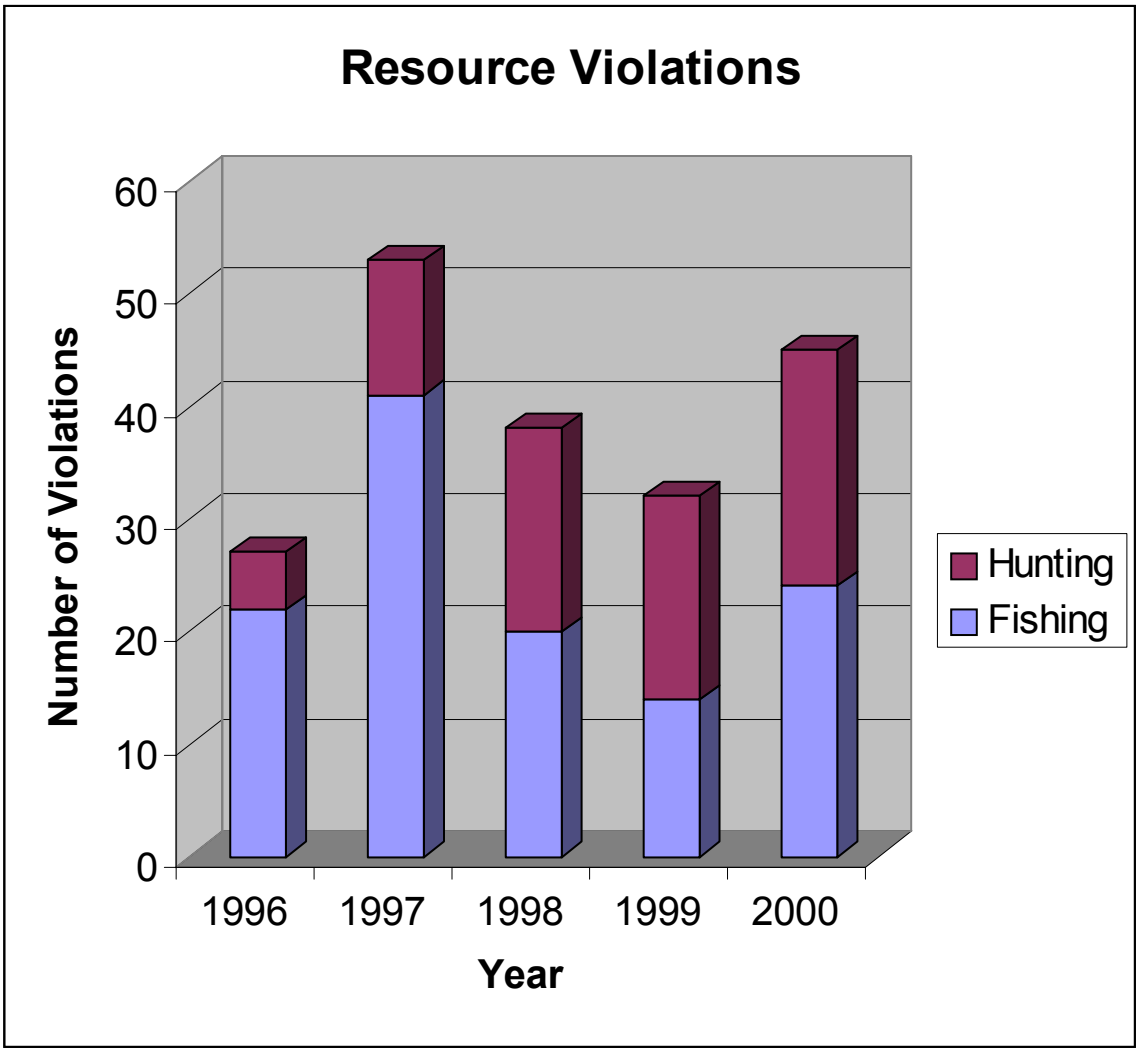

Figure 3. Hunting and fishing violations handled by NPT Conservation Officers, CY 1996 to 2000.

FY2000 Performance Period – April 2000 through March 2001

Fishing seasons and closures covered by NPT Conservation Enforcement for the period April 2000 through March 2001 are summarized in Table 10. NPT enforcement contact statistics for the FY 2000 performance period are summarized by quarter in Table 11.

Table 10. Fishing seasons enforced by the Nez Perce Tribal Conservation Enforcement Department – by Quarter -- April 2000 - March 2001.

Location	Species	Date (Open/Close)
Quarter 2: April 1 through June 31, 2000		
Clear Creek	Chinook	Closure: June 17, 2000; 12:00 AM
All Fisheries within the Nez Perce 1855 Treaty/ICC Area	Bull Trout	Closure: June 8, 2000
Selway River	Spring Chinook	Closure: June 17, 2000; 12:00 AM
Rapid River	Chinook	Closure: May 24, 2000; 12:00 PM
John Day Pool	Sturgeon	Remains open until 6:00 PM July 31, or when the catch guideline of 1,160 in the John Day Pool is reached.
Quarter 3: July-September 2000		
ZONE 6	Shad, Sturgeon, Steelhead, Coho, Walleye	September 28, 2000
ZONE 6	Steelhead, Walleye, Shad, Salmon (Chinook, Coho), Sturgeon	6:00 AM September 19 to September 23 6:00 PM (2000)
ZONE 6	Steelhead, Walleye, Shad, Salmon (Chinook, Coho), Sturgeon	6:00 AM September 12 to September 16 6:00 PM (2000)
ZONE 6	Steelhead, Walleye, Shad, Salmon (Chinook, Coho), Sturgeon	6:00 AM August 30 to September 2 6:00 PM (2000)
ZONE 6	Steelhead, Walleye, Shad, Salmon (Chinook, Coho), Sturgeon	6:00 AM September 5 to September 9 6:00 PM (2000)
John Day Pool	Sturgeon	6:00 AM August 8 to August 20 6:00 PM (2000)
South Fork Salmon River	Chinook	Closure: August 2, 2000
Imnaha River	Chinook	Closure: August 2, 2000

Location	Species	Date (Open/Close)
Rapid River	Chinook	Closure: July 10, 2000; 12:00 AM
ZONE 6 Bonneville, The Dalles, John Day	Sockeye	6:00 AM July 1 to July 10 6:00 PM (2000)
John Day Pool	Sturgeon	Remains open until 6:00 PM July 31, or when the catch guideline of 1,160 in the John Day Pool is reached.
Quarter 4: October-December 2000		
John Day Pool Only	Sturgeon	10/02/00- 10/31/00
Clearwater River	Steelhead (fall)	10/01/00 - 12/30/01
Quarter 1: January-March 2001		
Zone6	Sturgeon	01/01/01-03/14/01
Clearwater River	Steelhead	01/01/01-04/30/01
Clearwater River	Salmon	03/21/01-07/10/01
Snake River	Salmon	03/21/01-07/10/01
Imnaha River	Salmon	03/21/01-07/10/01
Tucannon River	Salmon	03/21/01-07/10/01
Zone6	Salmon	03/21/01-04/15/01

From April 2000 to March 2001, NPT officers made a total of 1,198 contacts with resource users (Table 11). The majority of these enforcement contacts – 890 or 74% – were made with Nez Perce Tribal Members. The time period of maximum conservation enforcement contacts during FY 2000 was April-June – corresponding to major fishing seasons in tributary regions.

Table 11. NPT conservation enforcement contact statistics (tribal versus non-tribal) for Quarter 1, 2000 compared to the BPA-funded FY2000 performance period, i.e., April 2000 through March 2001.

Contact Category (number)	**Quarter 1 January-March 2000**	**Quarter 2 April-June 2000**	**Quarter 3 July-September 2000**	**Quarter 4 October-December 2000**	**Quarter 1 January-March 2001**	**FY 2000 TOTAL (Q2-2000 to Q1-2001)**
Tribal Contacts	71	567	107	64	152	**890**
Non-Tribal Contacts	31	81	49	55	123	**308**
Total Contacts	**102**	**648**	**156**	**119**	**275**	**1,198**

The overall level of NPT enforcement actions during the period enhanced by FY2000 BPA funding (April 2000 to March 2001) was substantially higher than that of the preceding quarter (Figure 4). The temporal pattern of violations and warnings issued by NPT officers was similar to the contact statistics described in the previous section, i.e., the time period of maximum enforcement actions was during the April-June 2000 corresponding to fishing seasons in the Mountain Snake Province. From April 2000 to March 2001, NPT officers made 361 enforcement actions during the FY2000 performance period – including a total of 89 citations and 95 warnings. Officers also ran 62 vehicle checks and 123 identification checks during the FY2000 performance period.

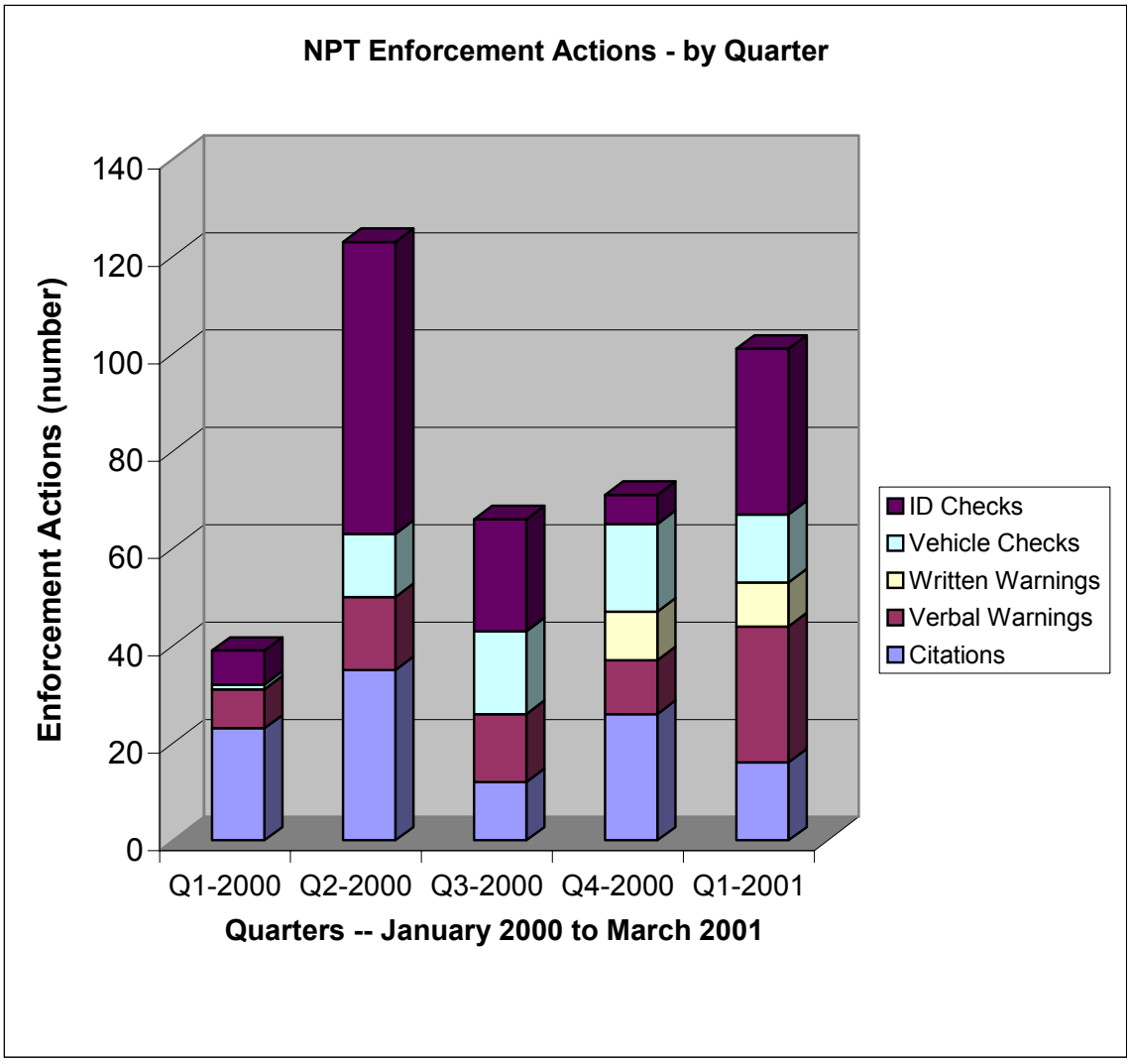

Figure 4. NPT Conservation Enforcement actions by quarter, January 2000 to March 2001.

Project funding to date - *total amount of BPA funding since program inception*

The NPT Conservation Enforcement Project (BPA Project 2000-055-00) was initiated with FY 2000 BPA funding. The BPA-NPT conservation enforcement contract (00BI 26422) was signed by Patricia O'Donnell, BPA COR on 6-21-00 and by Samuel N. Penny, Chairman, Nez Perce Tribe Executive Committee (NPTEC) on 6-29-00. Beginning in March 2000, however, pre-contract expenditure of funds – exclusively for conservation officer salaries – was approved by Brad Miller, BPA COTR. The performance period of the contract starts March 1 of each funding year and extends through February of the following calendar year. Initial work on the Monitoring and Evaluation component of the Conservation Enforcement Project was delayed until after the contract was officially in place on June 29, 2000.

The total BPA funding amount for this project to date (i.e., FY2000 and FY2001) is $890,745 (Table 12). The proposed budget amount for FY2002 is $481,340.

Table 12. Annual budget amount for NPT Conservation Enforcement – BPA Project 2000-055-00 – FY2000-2002.

Fiscal Year - Funding	Performance Period	Budget Amount	Note
2000	March 1, 2000 through February 28, 2001	$425,235	First year funding for the project
2001	March 1, 2001 through February 28, 2002	$465,510	Actual BPA-approved budget amount
2002	March 1, 2002 through February 28, 2003	$481,340	In Review; ~3.4% increase over FY2001

Expected Project Results

In the previous sections, we present enforcement input/output data derived from the pre-project baseline period and first year of project implementation. In subsequent years of implementation with M&E, we will compile relevant fisheries and run size data and examine linkages between enforcement efforts and biological outcomes.

Expected direct biological outcomes include: (1) Increased passage survival of adult salmonids during their upstream migration through the Columbia River to the spawning areas of the Upper Snake River tributaries -- with an emphasis in the tributary areas under NPT jurisdiction & comanagement; (2) Increased protection of tributary habitats of anadromous salmonids that are essential for passage, reproduction, and rearing -- including the adult/juvenile migration corridor; and (3) Increased life cycle survival of depleted species of endemic resident fish (e.g., bull trout, redband trout, cutthroat trout and white sturgeon) and protection of their essential habitats.

Based on police science principles, we believe that the following public awareness outcomes will also translate into enhanced fish survival: (a) Increased public awareness of problems associated with illegal take and habitat degradation, (b) increased public participation in reporting and deterring violations; (c) Increased deterrence for criminals and the general public in violating laws and rules and (d) improved voluntary compliance with state, tribal and federal fish and wildlife protection laws.

Reports and Technical Papers - *reports or scientific papers produced as a result of this program and how they have been disseminated*

Technical reports derived from this project and media for their dissemination to interested parties are listed in Table 13. In addition, both most recent and historical baseline data are presented on the Columbia River Conservation Law Enforcement M&E web site – www.Eco-Law.net . This internet site is a direct product of the M&E components of the two Conservation Enforcement projects started in FY 2000 – sponsored by the Nez Perce Tribe and the Columbia River Inter-Tribal Fish Commission. The M&E web site facilitates access – by technical, policy and public interest groups – to Conservation Enforcement plans, implementation progress and results in a dynamic and interactive mode.

Table 13. Summary of technical reports produced by the NPT Conservation Enforcement Project 2000-055, from April 2000 to November 2001.

Report	Time Period	Disseminated
Quarter 2 --2000 M&E	April-June, 2000	Submitted to BPA / Posted on Eco-Law.net
Quarter 3 --2000 M&E	July-September, 2000	Submitted to BPA / Posted on Eco-Law.net
Quarter 4 --2000 M&E	October-December 2000	Submitted to BPA / Posted on Eco-Law.net
NPT-CE Draft Multi-Year Strategic Plan	FY 2000-2004	Posted on Eco-Law.net
Quarter 1 --2001 M&E	January-March 2001	Submitted to BPA / Posted on Eco-Law.net
Annual M&E Report -- FY2000	January 2000-March 2001	In Review / Posted on Eco-Law.net
WWW M&E Report -- 2000-2001	January 2000-June 2001	In Preparation
Quarter 2 --2001 M&E	April-June, 2001	Submitted to BPA / Posted on Eco-Law.net
Quarter 3 --2001 M&E	July-September, 2001	In Preparation

Columbia River Inter-Tribal Fisheries Enforcement Project 2000-05600

Adaptive Management Implications - *historic and current changes in management, future applications*

Over the past decade, Columbia Basin Tribes' fisheries law enforcement efforts have benefited from BPA funding and the 1996 M&E reviews demonstrate this fact. BPA funding does not replace BIA enforcement funding, which has remained stable during the period in which BPA enhanced funding has been available

The BPA addendum funding during 1991-98 (Project 91-024) allowed CRITFE to increase enforcement personnel by eight positions. These additional enforcement positions allowed us to nearly double our enforcement effort in Zone 6. This allowed CRITFE to initiate a *"pro active"* law enforcement effort, whereas, prior to BPA funding our efforts were primarily *"reactive"* and in fact CRITFE could not even keep up with the "calls for service" (complaints from the public, primarily CRITFE's tribal constituency). The funding provided for a very visible law enforcement effort in Zone 6 and substantial public education efforts. Further, with the purchase of new equipment, field personnel became much more efficient in preventing and detecting violations, creating a significant "deterrent" effect, resulting in the much-improved voluntary compliance rates. Significantly increased compliance rates in the treaty fishery have occurred since the inception of addendum funding in 1992. The Northwest Power Planning Council's decision to cut the BPA-funded law enforcement program in 1998 necessitated that CRITFE incur a 40% reduction in force.

The following Table 14summarizes the evolution from previous multi-agency fish, wildlife and habitat enforcement project – into the development of the current conservation enforcement projects (BPA# 2000-55 and -56).

Table 14. Chronology of the development of system-wide enhanced conservation law enforcement in the Columbia Basin.

A Brief Chronology of the Columbia Basin Conservation Enforcement Program	
1991	• A multi-agency fisheries law enforcement demonstration project was funded in 1991 -- to provide immediate protection of Columbia Basin anadromous salmonid stocks proposed for listing under the ESA (Vigg 1991). • Cooperating agencies were Inter-Tribe (CRITFE), Oregon (OSP), Washington (WDFW), and Idaho (IDFG).
1992-1994	• National Marine Fisheries Service (NMFS) and Montana Fish, Wildlife & Parks (MFWP) joined the BPA-funded enforcement project. • Evaluation of the first three years of implementation demonstrated that the project achieved increased fisheries and habitat protection of depleted anadromous salmonid stocks throughout the Columbia Basin (Vigg [editor] 1995).
1996	• The Tribal Needs Assessment (Vigg and Stevens 1996) documented the need for conservation enforcement in tributary areas under tribal jurisdiction.
1997	• In the mainstem Zone 6 patrol effort increased 70% during 1992-1997 compared to the pre-project baseline. • Increased enforcement effort resulted in deterrence -- from 1992 thru 1997 tribal arrests decreased by 59% and tribal gillnet, setline and hoop-net seizures decreased by 63%. • Independent evaluation of the basin-wide enforcement project demonstrated cost-effectiveness (refer to Vigg 1997; Peters et al 1997).
1998-1999	• NPPC shifted support from all-agency system-wide enforcement to more focused conservation projects; and BPA funding for all existing fisheries and habitat enforcement was cut.
2000-Present	• Two new Conservation Enforcement projects implemented in March 2000 -- CRITFC in the mainstem corridor and NPT in mainstem Snake and tributary areas. • The Council specified that Monitoring and Evaluation would be an integral component of the new projects.

The CRITFE mainstem enforcement project is based on Adaptive Management principles, and we anticipate that ongoing Monitoring & Evaluation coupled with responsive CE management will result in continual improvements in the efficiency and effectiveness of

our program. Enhancements will occur both in terms of refining performance measures that best fit our specific Zone 6 application and changing our enforcement implementation approach & evaluation methodology to address opportunities for project improvement. This adaptive management process will not occur all in the first year, but incrementally over the life of the project.

B. Benefits to fish and wildlife
- role of program efforts in the Council's Program

Temporal Trends in CRITFE Output Enforcement Statistics

From 1992 through 1997, CRITFC Conservation Enforcement was part of a system-wide BPA project (#92-024) that greatly increased fish, wildlife and habitat enforcement throughout the Columbia Basin. The performance of the system-wide enforcement project during the 1992-94 demonstration period was documented by Vigg (1995). Performance of the CRITFE project for the five-year period 1992-1996 was evaluated by Vigg (1997). Funding for enhanced law enforcement provided to eight fish & wildlife agencies and tribes, including CRITFC, was eliminated in FY 1998 when BPA Project 92-024 was terminated. As a direct result of elimination of BPA funding, several CRITFE enforcement positions were cut in 1998. From January 1998 to May 2000, the ability of CRITFE to respond to fish, wildlife and habitat violations was diminished due to fewer officers in the field, fewer dispatchers, and reduction of the temporal enforcement coverage in Zone 6 (previously 24-7-365).

Reductions in all CRITFE output statistics occurred during calendar years 1998-2000 relative to the enhanced 1992-1997 period. Temporal trends in three of the primary enforcement outputs – officer patrol effort, contacts with resource users, and total arrests for fishery violations – show decreases in CRITFE performance during 1998-2000 compared to 1997 (Figure 5).

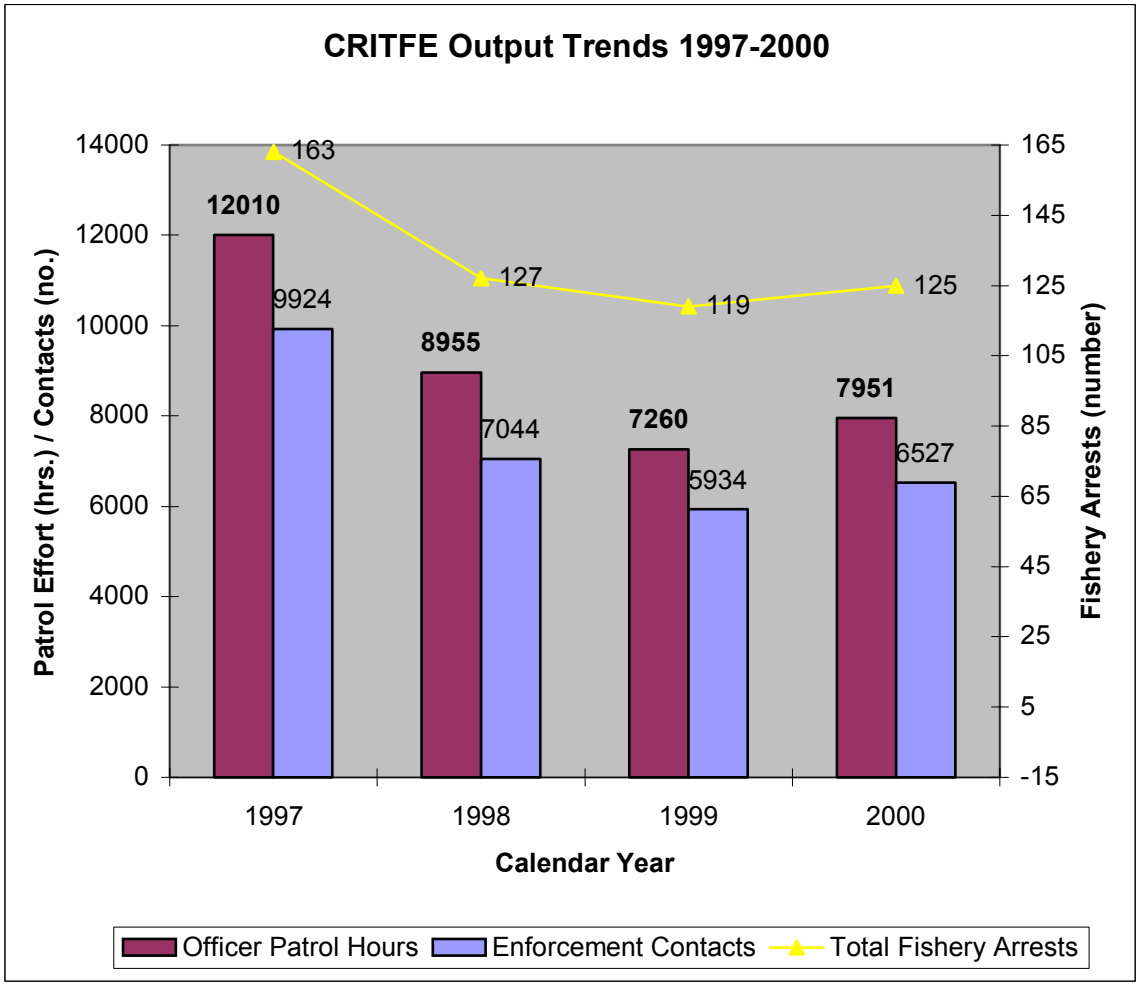

Figure 5. Trends in enforcement output statistics (patrol effort, contacts and arrests) by CRITFE Conservation Officers in Zone 6, CY 1997 to 2000.

CRITFE patrol effort declined from a high of 12,010 officer hours in 1997 to a low of 7,260 in 1999. Likewise, enforcement contacts decreased from 9,924 in 1997 to 5,934 in 1999. CRITFE officers arrested 163 violators in 1997, but only 119 in 1999. Thus, the primary output measures – patrol effort, contacts, and arrests – showed declines of 39.6, 40.2, and 27.0 percent , respectively from 1997 to 1999 (Table 15). Conversely, renewed BPA funding during the second half of CY2000 has resulted in reversal of the downward trends and 5-10 percent increases in these same output statistics.

Table 15. Changes in three primary enforcement output statistics during calendar years (CY) 1997 to 2000.

Enforcement Statistic	*Percent Decrease From CY 1997 to 1999*	*Percent Increase From CY 1999 to 2000*
Officer Patrol Hours	39.6%	9.5%
Enforcement Contacts	40.2%	10.0%
Total Fishery Arrests	27.0%	5.0%

Since initiation of BPA funding to the new Conservation Enforcement Project 2000-056-00 in May 2000, CRITFE resource enforcement effort has been significantly enhanced. Three additional enforcement positions were hired in August and received academy and field training during the remainder of CY 2000. In addition an experienced officer was promoted to supervise BPA-funded field activities. Thus, although BPA funding in May immediately provided focus on Conservation Enforcement objectives and invigoration of the command structure, the achievement of additional fully functional and commissioned officers in the field was not fully realized until January 2001. Thus, much of the enhancement in CRITFE field effort from FY2000 funding occurred during the latter segment of the performance period – specifically, January –May 2001.

Monthly vehicle patrol mileage was relatively stable from January to April 2000 (under 15,000 miles per month), but increased substantially to average of 17,850 miles during May-September. Fall fisheries were closed in October, and as a result patrol mileage subsequently declined to an average of about 7,550 during the November-December off-season (Figure 6). The patrol mileage for 2001 started out at higher levels than the previous year, averaging over 17,000 miles per month during January-April 2001.

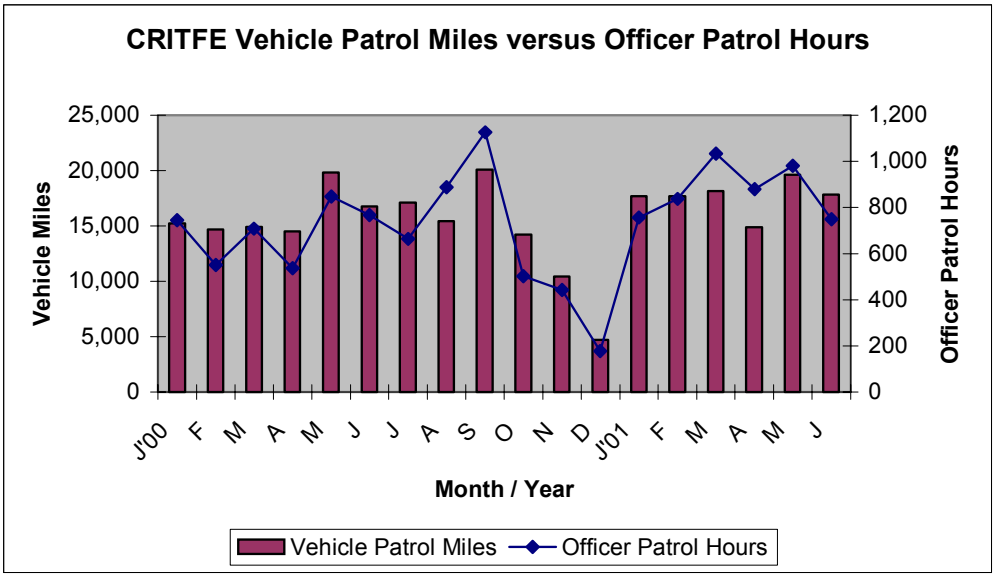

Figure 6. Time series of CRITFE vehicle patrol mileage compared to total officer patrol time (hours) from January 2000 to June 2001.

Monthly officer patrol time averaged 635 hours from January to April 2000, then increased substantially to average of about 760 during May-July, and over 1,000 during August-September. Fall fisheries were closed in October, and as a result patrol time subsequently declined to an average of about 310 hours per month during the November-December off-season (Figure 6). The monthly officer patrol effort for 2001 started out at consistently higher levels than the previous year -- averaging over 873 hours per month during January-June 2001, with a peak of over 1,000 hours in March.

The number of total arrests for fishery violations in Zone 6 increased from a monthly average of about 4.8 during January-April 2000 to about 22.5 per month during May and June (Figure 7). Concurrently, the number of warnings increased from a monthly average of about seven during January-April 2000 to about 14.5 per month during May and June. Fishery arrests declined in July, with an increasing trend through October – corresponding to the execution of the fall salmon fishery. Low arrests were observed during the late-fall to winter off-season. An increasing trend in fishery arrests and warnings was observed for the first half of CY2001 – with an average of about 25.5 arrests and 41 warnings per month during May and June.

The number of salmon hoop nets and gill nets seized for illegal fishing activities in Zone 6 increased from a monthly average of about 1.8 during January-April 2000 to about 9.5 per month during May and June (Figure 8). Five illegal sturgeon set lines were confiscated in January 2000, with none for the remainder of the time period. The total number of illegally caught salmon and steelhead confiscated for commercial fishery violations in Zone 6 increased from a monthly average of about 3.3 during January-

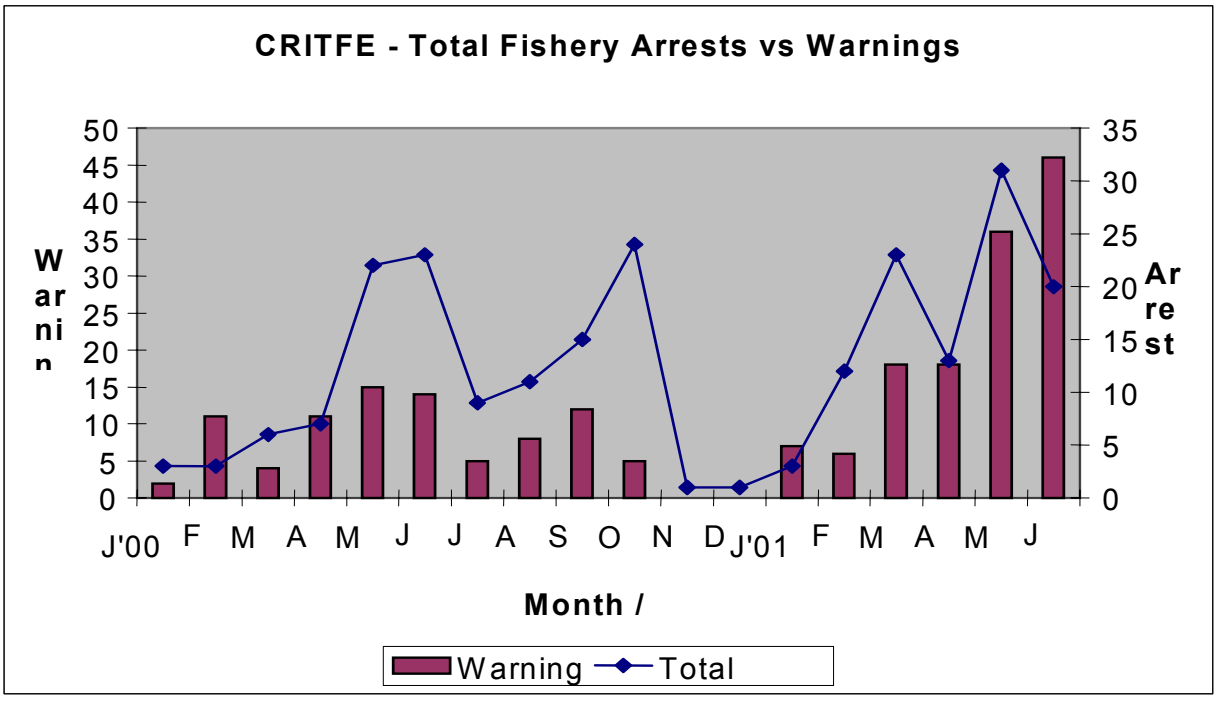

Figure 7. Time series of total fishery-related arrests and warnings in Zone 6 from January 2000 to June 2001. Overall column height indicates total number of fishery-related arrests by month.

April to a peak of 52 during May, with a subsequent declines to low levels during June-July (Figure 9). Elevated levels occurred during the fall salmon season, with a peak of 151 salmonids confiscated during September 2000. During the spring 2001 fishing season seizures of illegally caught salmonids again peaked in May, but the level was over twice that of April-June 2000 (i.e., 66 salmonids). The number of illegally caught salmonids confiscated during the spring 2001 fishing season was 29 in April, 122 in May, and 26 in June.

The three disposition categories for illegally caught fish are (a) spoiled and returned dead to the river, (b) unharmed and released alive to the river, and (c) mortalities in good condition seized and frozen for beneficial uses. Of the 76 illegally caught salmon & steelhead handled by enforcement officers during January-June -- 31 (41%) were spoiled and wasted, 33 (43%) were mortalities in edible condition, and 12 (16%) were released alive to the river. All of the saved fish (released alive) were during May & June fishing seasons.

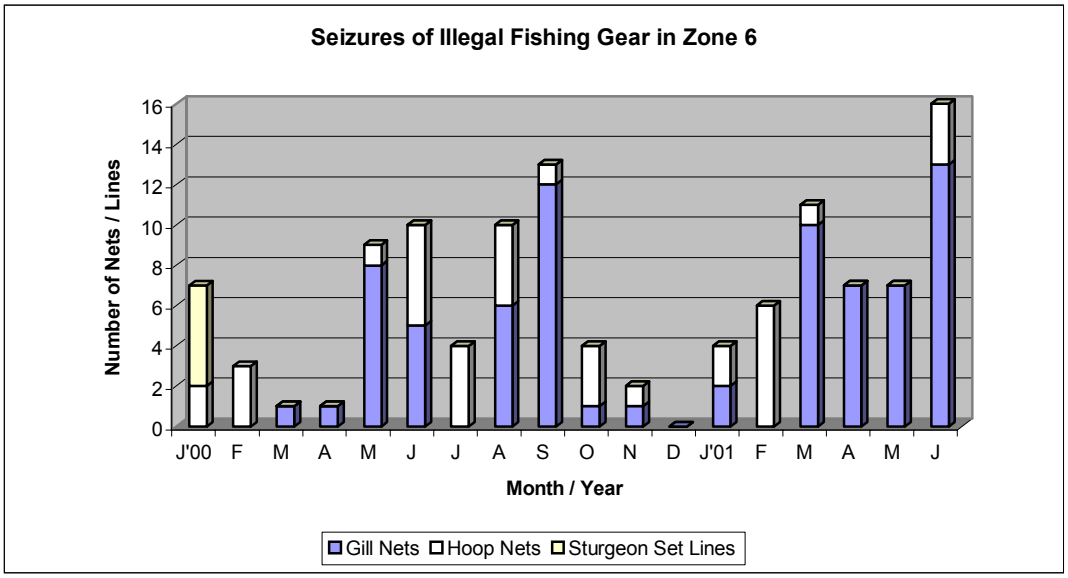

Figure 8. Time series of Zone 6 fishing gear seizures and recoveries (hoop nets, gill nets and set-lines) from January 2000 to June 2001.

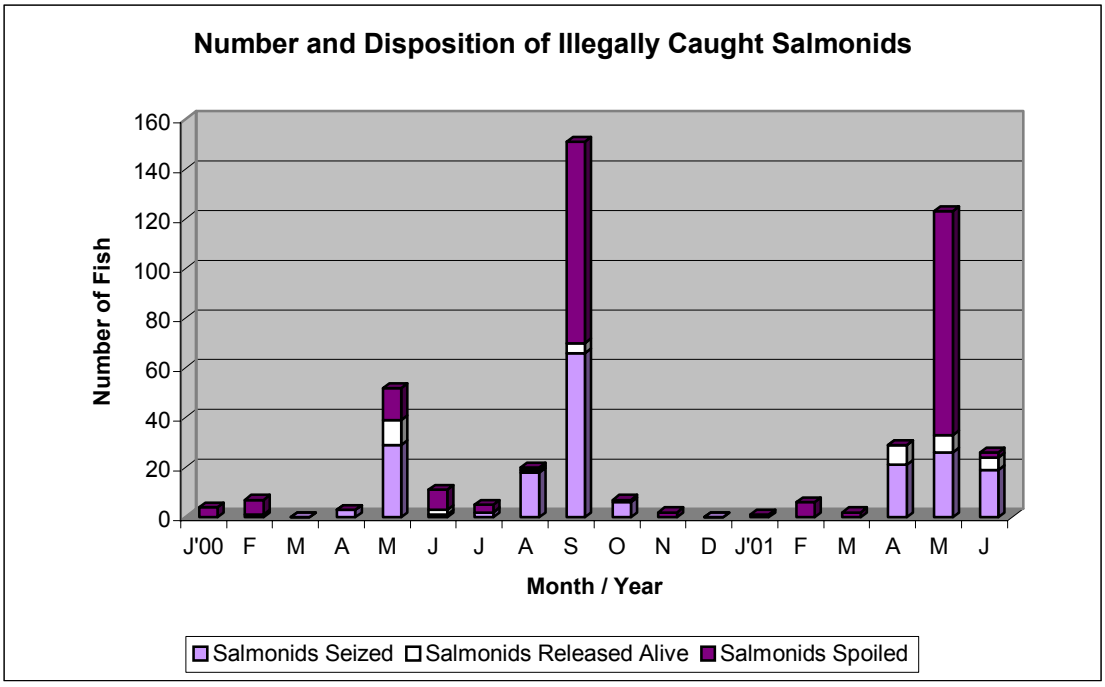

Figure 9. Time series of CRITFE seizures and dispositions[10] of illegally caught salmon and steelhead in Zone 6 from January 2000 to June 2001.

The monthly time-series of fishery compliance rates for January 2000 through June 2001 is illustrated in Figure 10. Compliance rate was greater than 97% during 17 of the 18 the months of record (94% of the time). The lowest recorded compliance rate during the 18-month time-period was 90% compliance during October 2000.

Project funding to date - *total amount of BPA funding since program inception*

The CRITFE mainstem project (BPA Project 2000-056-00) was initiated with FY 2000 BPA funding. The BPA-CRITFC Conservation Enforcement contract (current #000000112-00001; initially 00BI-26426) was signed by Elizabeth C. Ellis, BPA COR on 5-25-00 and by Donald Sampson, Director, Columbia River Inter-Tribal Fisheries Commission (CRITFC) on 6-1-00. Beginning on May 15, 2000, however, pre-contract expenditure of funds was approved by Brad Miller, BPA COTR. The performance period for FY 2000 is May 15, 2000 to May 14, 2001. Work on the Monitoring and Evaluation component of the conservation Enforcement

[10] The three disposition categories for illegally caught fish are (a) **"alive"** - unharmed and released alive to the river, (b) **"seized"** - mortalities in good (edible) condition that are seized and frozen for beneficial uses, and (c) **"spoiled"** mortalities in various stages of decomposition that are returned dead to the river.

Project (BPA Project 2000-056-00) was delayed until after the contract was officially in place in June, 2000.

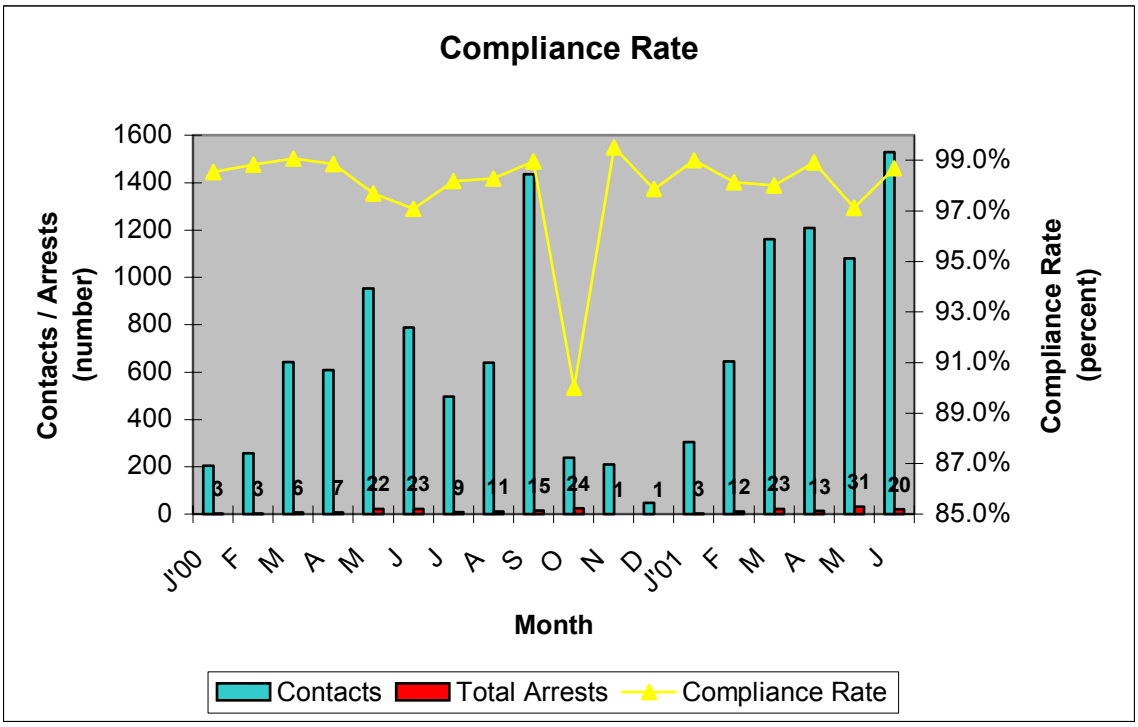

Figure 10. Time series of Zone 6 fishery compliance rates (based on total arrests and contacts) -- from January 2000 to June 2001.

The total BPA funding amount for this project to date (i.e., FY2000 and FY2001) is $808,235 (Table 16). The proposed budget amount for FY2002 is $434,082.

Table 16. Annual budget amount for CRITFE enhanced enforcement – BPA Project 2000-055-00 – FY2000-2002.

Fiscal Year - Funding	Performance Period	Budget Amount	Note
2000	May 15, 2000 through May 14, 2001	$388,427	First year funding for the project
2001	May 15, 2001 through May 14, 2002	$419,808	Actual BPA-approved budget amount
2002	May 15, 2002 through May 14, 2003	$434,082	In Review; 3.4% increase over FY2001

Expected Project Results

In the previous sections, we present enforcement input/output data derived from the pre-project baseline period and first year of project implementation. In subsequent years of

implementation with M&E, we will compile relevant fisheries and run size data and examine linkages between enforcement efforts and biological outcomes.

Expected direct biological outcomes include: (1) Increased passage survival of adult salmonids during their upstream migration through the Columbia River to the spawning areas of the Upper Snake River tributaries -- with an emphasis in the tributary areas under tribal jurisdiction & comanagement; (2) Increased protection of tributary habitats of anadromous salmonids that are essential for passage, reproduction, and rearing -- including the adult/juvenile migration corridor; and (3) Increased life cycle survival of depleted species of endemic resident fish (e.g., bull trout, redband trout, cutthroat trout and white sturgeon) and protection of their essential habitats.

Based on police science principles, we believe that the following public awareness outcomes will also translate into enhanced fish survival: (a) Increased public awareness of problems associated with illegal take and habitat degradation, (b) increased public participation in reporting and deterring violations; (c) Increased deterrence for criminals and the general public in violating laws and rules and (d) improved voluntary compliance with state, tribal and federal fish and wildlife protection laws.

Reports and Technical Papers - *reports or scientific papers produced as a result of this program and how they have been disseminated*

Technical reports derived from this project and media for their dissemination to interested parties are listed in Table 17. Recent and historical baseline data are also presented on the Columbia River Conservation Law Enforcement M&E web site – www.Eco-Law.net . This internet site is a direct product of the M&E components of the two Conservation Enforcement projects started in FY 2000 – sponsored by the Nez Perce Tribe and the Columbia River Inter-Tribal Fish Commission. The M&E web site facilitates access – by technical, policy and public interest groups – to Conservation Enforcement plans, implementation progress and results in a dynamic and interactive mode.

Table 17. Summary of technical reports produced by the CRITFE mainstem enforcement Project 2000-056, from April 2000 to November 2001.

Report	Time Period	Disseminated
Quarter 2 --2000 M&E	April-June, 2000	Submitted to BPA / Posted on Eco-Law.net
Quarter 3 --2000 M&E	July-September, 2000	Submitted to BPA / Posted on Eco-Law.net
Quarter 4 --2000 M&E	October-December 2000	Submitted to BPA / Posted on Eco-Law.net
CRITFE-CE Draft Multi-Year Strategic Plan	FY 2000-2004	Posted on Eco-Law.net
Quarter 1 --2001 M&E	January-March 2001	Submitted to BPA / Posted on Eco-Law.net
Annual M&E Report -- FY2000	January 2000-March 2001	In Review
WWW M&E Report --2000-2001	January 2000-June 2001	In Preparation
Quarter 2 --2001 M&E	April-June, 2001	Submitted to BPA / Posted on Eco-Law.net
Quarter 3 --2001 M&E	July-September, 2001	In Preparation

III Relationship of program to USFWS/NMFS Biological Opinion - RPA's

System-wide Conservation Enforcement Overview

Reasonable and prudent actions (RPA's) from the NMFS 2001 Biological Opinion that are directly relevant to the conservation enforcement projects are listed in Table 18. One of the performance standards for the system-wide enforcement program is adult survival relative to reduction of illegal take; quantification of this standard will include an assessment of adult salmonid survival migrating upstream through the mainstem corridor, and evaluation of illegal take as a factor contributing to previously unaccounted losses (reference Action 107). Another standard is increased pre-spawning survival rate of adult spawners in tributary areas by reducing illegal take (reference Action 118). Another conservation enforcement standard is increased survival rate of juvenile salmonids migrating out of tributary areas and through

the mainstem corridor by reducing illegal take on smolts (reference Actions 189 and 190). In the past, enforcement operations have documented substantial mortality of smolts via "trout" fisheries, illegal water diversions (e.g, temporary in-stream push-up dams), and out of compliance screened diversions.

Table 18. Hydropower Biological Opinion reasonable and prudent actions (RPA's) relevant to the CRITFE enhanced enforcement project (source CBFWA web site).

RPA	Description
Action 107	The Action Agencies shall conduct a comprehensive evaluation to assess survival of adult salmonids migrating upstream and factors contributing to unaccounted losses.
Action 118	The Corps shall develop and implement a program to better assess and enumerate indirect prespawning mortality of adult upstream-migrating fish. Such mortality may be due to, or exacerbated by, passage through the FCRPS hydro projects. If measures are identified which will reduce the unaccountable adult loss rate and/or the prespawning mortality rate, the Corps shall implement these measures as warranted. The program should also enhance efforts to enumerate unaccountable losses associated with tributary turnoff, harvest, or other factors in FCRPS mainstem reservoirs and upstream of FCRPS projects.
Action 189	The Action Agencies and NMFS shall work within the annual planning and congressional appropriation processes to establish and provide the appropriate level of FCRPS funding for studies to investigate the causes of discrepancies in adult return rates for juvenile salmonids that have different passage histories through the hydrosystem.
Action 190	The Action Agencies shall continue to fund studies that monitor survival, growth, and other early life history attributes of Snake River wild juvenile fall chinook.

In addition to the RPA's listed above, any major fish & wildlife management action implemented by the region that requires an additional law enforcement component – will be automatically linked to the enhanced conservation enforcement program. For example, selective harvest and the northern pikeminnow management program both require a level of enforcement effort above pre-enhancement project baselines. RPA's related to harvest reform and selective harvest are listed in Table 19.

Table 19. Hydropower Biological Opinion reasonable and prudent actions (RPA's) relevant to Harvest reform and selective harvest that would require enhanced levels of conservation enforcement (source CBFWA web site).

RPA	Description
Action 165	The Action Agencies shall work with NMFS, USFWS, Tribal and state fishery managers, and the relevant Pacific Salmon Commission and Pacific Fishery Management Council (PFMC) technical committees to develop and implement methods and analytical procedures (including revising and/or replacing current fishery management and stock assessment models based on these methods and procedures) to estimate fishery and stock-specific management parameters (e.g., harvest rates). The Action Agencies shall place particular emphasis on current methods and procedures affected by the transition to mass marking of Columbia River basin hatchery produced fish and/or deployment of selective fishery regimes in the Columbia River basin, addressing these concerns within a time frame necessary to make the new selective fishing regimes feasible. Specifically, the Action Agencies shall facilitate the development of models, methods, and analytical procedures by the 3-year check-in.
Action 168	The Action Agencies shall work with NMFS, USFWS, and Tribal and state fishery management agencies to develop methods for crediting harvest reforms, and the survival benefits they produce, toward FCRPS offsite mitigation responsibilities. A crediting approach shall be agreed upon by the 3-year check-in.

RPA's related to adult salmon passage, Monitoring & Evaluation (M&E), Adaptive Management, and "safety-net" actions are listed in Table 20.

Table 20. Hydropower Biological Opinion reasonable and prudent actions (RPA's) relevant to: adult passage; Monitoring & Evaluation; planning/Adaptive Management; and "safety-net" actions – that may require linkage with conservation enforcement projects (source CBFWA web site).

RPA	Description
Action 1	The Action Agencies, coordinating with NMFS and USFWS, shall annually develop 1- and 5-year plans to implement specific measures in hydro, habitat, hatcheries, harvest, research, monitoring, and evaluation needed to meet and evaluate the performance standards contained in this biological opinion.
Action 107	The Action Agencies shall conduct a comprehensive evaluation to assess survival of adult salmonids migrating upstream and factors contributing to unaccounted losses.
Action 109	The Corps shall initiate an adult steelhead downstream migrant (kelt) assessment program to determine the magnitude of passage, the contribution to population diversity and growth, and potential actions to provide safe passage.

RPA	Description
Action 115	The Corps and BPA shall conduct a comprehensive depth and temperature investigation to characterize direct mortality sources at an FCRPS project considered to have high unaccountable adult losses (either from counts and/or previous adult evaluations).
Action 144	The Corps, in coordination with the Regional Forum, shall maintain juvenile and adult fish facilities within identified criteria and operate FCRPS projects within operational guidelines contained in the Corps' Fish Passage Plan. The Corps shall coordinate with NMFS on the development of these criteria and operational guidelines before the start of each fish passage season (generally February 1).
Action 175	BPA shall, in coordination with NMFS, USFWS, and the relevant state and Tribal comanagers, fund the four-step planning process described above as quickly as possible and, if so determined by that process, implement safety-net projects as quickly as possible at least for the following salmon and steelhead populations: 1) A-run steelhead populations in the Lemhi River, main Salmon River tributaries, East Fork Salmon River, and Lower Salmon River; 2) B-run steelhead populations in the Upper Lochsa River and South Fork Salmon River; and 3) spring/summer chinook populations in the Lemhi, East Fork, and Yankee Fork Salmon rivers, and Valley Creek.
Action 176	BPA shall, in coordination with NMFS, USFWS, and the relevant state and Tribal comanagers, fund the development of HGMPs for the Grande Ronde and Tucannon spring/summer chinook safety-net programs.
Action 177	In 2002, BPA shall begin to implement and sustain NMFS-approved, safety-net projects.
Action 178	BPA shall commit to a process whereby funds can be made quickly available for funding the planning and implementation of additional safety-net projects for high-risk salmon and steelhead populations NMFS identified during the term of this biological opinion.
Action 179	The Action Agencies and NMFS shall work with affected parties to establish regional priorities within the congressional appropriations processes to set and provide the appropriate level of FCRPS funding to develop recovery goals for listed salmon ESUs in the Columbia River basin. Tasks shall include defining populations based on biological criteria and evaluating population viability in accordance with NMFS' viable salmonid population approach. These tasks shall be completed by 2003.

RPA	Description
Action 180	The Action Agencies and NMFS shall work within regional prioritization and congressional appropriation processes to establish and provide the level of FCRPS funding to develop and implement a basinwide hierarchical monitoring program. This program shall be developed collaboratively with appropriate regional agencies and shall determine population and environmental status (including assessment of performance measures and standards) and allow ground-truthing of regional databases. A draft program including protocols for specific data to be collected, frequency of samples, and sampling sites shall be developed by September 2001. Implementation should begin no later than the spring of 2002 and will be fully implemented no later than 2003.
Action 189	The Action Agencies and NMFS shall work within the annual planning and congressional appropriation processes to establish and provide the appropriate level of FCRPS funding for studies to investigate the causes of discrepancies in adult return rates for juvenile salmonids that have different passage histories through the hydrosystem.
Action 190	The Action Agencies shall continue to fund studies that monitor survival, growth, and other early life history attributes of Snake River wild juvenile fall chinook.
Action 192	As set out in Action 50 (Section 9.6.1.3.4), BPA and the Corps shall install necessary adult PIT-tag detectors at appropriate FCRPS projects before the expected return of adult salmon from the 2001 juvenile outmigration. These adult PIT-tag detectors shall be used as needed for calculating transport benefits, conversion rates, and SARs for listed salmon and steelhead.
Action 195	The Action Agencies shall investigate and partition the causes of mortality below Bonneville Dam after juvenile salmonid passage through the FCRPS.
Action 196	The Action Agencies and NMFS shall work within the annual planning and congressional appropriation processes to establish and provide the appropriate level of FCRPS funding for studies to develop an understanding of juvenile and adult salmon use of the Columbia River estuary. These studies support the actions to develop criteria for estuarine restoration (Action 158), restoration planning (Action 159), and implementation (Action 160) in Section 9.6.2.2.
Action 197	The Action Agencies and NMFS shall work within the annual planning and congressional appropriation processes to establish and provide the appropriate level of FCRPS funding for studies to develop an understanding of juvenile and adult salmon use of the Columbia River plume.
Action 198	The Action Agencies, in coordination with NMFS, USFWS, and other Federal agencies, NWPPC, states, and Tribes, shall develop a common data management system for fish populations, water quality, and habitat data.
Action 199	The Action Agencies shall implement the specific research/monitoring actions outlined in Appendix H.

IV. Future Needs

Project Recommendations - *existing program needs requiring additional Bonneville funding (for next 3 years*)

Nez Perce Tribal Conservation Enforcement Project 2000-055-00

The current project will require continued funding at slightly higher levels to maintain fishery, wildlife, and habitat protection. We refer the reader to "Section II. B." of this summary that documents increased calls to duty (case load), increased enforcement contacts and violations detected since project implementation, increased fishery seasons/closures in mainstem and tributary areas under NPT jurisdiction, and increased habitat-related enforcement demands.

In addition, major equipment items purchased in 1997 under a previous BPA-funded enforcement project (91-024) will need replacement over the next few years. The NPT enforcement budget during FY2000 and FY2001 included capital equipment items that were subsequently cut due to budget restrictions and the priority need to maintain personnel. The projected budget for the NPT Conservation Enforcement Project during the next three fiscal years, FY2003-2005, is estimated in Table 21.

Table 21. Projected three-year future budget needs for the NPT Conservation Enforcement Project, FY2003-2005.

FY2003	***FY2004***	***FY2005***
$505,407	$530,677	$557,211

Columbia River Inter-Tribal Fisheries Enforcement Project 2000-05600

The current project will require continued funding at slightly higher amounts to maintain existing (2000-2001) levels of fishery, wildlife, and habitat protection. Over the past two years we have experienced increased calls to duty (case load), increased enforcement contacts and violations detected since project implementation, increased fishery seasons/closures in mainstem areas under CRITFE jurisdiction.

In addition, major equipment items purchased in 1997 under a previous BPA-funded enforcement project (91-024) will need higher levels of maintenance and/or replacement over the next few years. The CRITFE enforcement budget during FY2000 and FY2001 included capital equipment items that were subsequently cut due to budget restrictions and the priority need to maintain personnel. The projected budget for the CRITFE mainstem enforcement project during the next three fiscal years, FY2003-2005, is estimated in Table 22.

Table 22. Projected three year future budget needs for the CRITFE Conservation Enforcement Project, FY2003-2005.

FY2003	***FY2004***	***FY2005***
$455,786	$478,575	$502,504

Needed Future Actions - *new program needs within the basin needing Bonneville funding and how these needs fit with the overall basinwide goals and objectives*

In the past decade various fish & wildlife management entities have documented the need and developed enhancement proposals for additional law enforcement actions to conserve severely depleted fish & wildlife stocks. As a consequence, several agencies and Tribes have received BPA funding, e.g., Oregon, Washington, Idaho, NMFS, CRITFC, Nez Perce Tribe, Umatilla Tribe, and the Shoshone Bannock Tribes. At present, CRITFC enforcement and NPT have ongoing BPA-funded projects, but it is reasonable to foresee that other state, federal or tribal entities may identify high priority conservation enforcement needs, now or in the future, that are not covered by baseline funding levels.

Currently funded conservation enforcement projects are focused primarily on protection of depleted fish & wildlife resources, with an emphasis on stocks listed for protection under the ESA. However, from a system-wide perspective, several categories of conservation enforcement should be considered:

1. Traditional fish & wildlife enforcement of laws, rules & regulations (including ranger model, police model, and game warden model);
2. Habitat Enforcement (including in-stream modifications, diversion and pumping screen compliance, fish passage blocks (e.g., dams, culverts), water quantity/quality, and pollution);
3. Public Education and Awareness (including volunteer participation, promoting voluntary compliance, education & information, violation hotlines, and signage);
4. Increased cooperation and coordination among enforcement entities, between enforcement and fish & wildlife management entities, with land and water management entities, and with other regulatory agencies.
5. Cooperative Compliance (including proactive community policing and facilitating citizens/entities to comply with mandatory regulations);
6. Increased enforcement efficiency via specialized equipment, communication systems, computer systems, and other advanced technology (e.g., GPS, portable data loggers, remote sensing, video, satellite, FLIR);
7. Enhanced data collection, monitoring, evaluation and Adaptive Management (e.g., consistent data collection protocols, data validation, system-wide data base systems, internet information systems, performance measures, scientific evaluation, managing for biological results).

Geographically, system-wide Conservation Enforcement Program needs should be identified according to the Ecological Provinces, subbasins, specific streams, and water bodies. The ongoing Conservation Enforcement projects are primarily focused on Zone 6 of the mainstem Columbia River and the Snake River mainstem and tributary areas (subbasins/watersheds) supporting anadromous salmonid runs. For a "system-wide" perspective of the Columbia Basin, however, the Columbia and Snake River systems can be subdivided into (a) anadromous stream reaches, and (b) areas blocked to anadromous fish migration by either natural barriers or man-made dams.

Conservation Enforcement Projects Proposed for FY2001-2002

At least five conservation enforcement proposals have been under consideration in the regional review process during FY2001-FY2002:

1. Design & Implement a System-wide Fish, Wildlife & Habitat Conservation Enforcement Web-Based Data Center by Steven Vigg & Company – Innovative Projects FY2001;
2. CRITFC proposal to Protect Fish Habitat Through Education and Enforcement – High Priority Projects FY2001;
3. Umatilla Tribal Fish & Wildlife Enforcement – Southern Plateau Provincial Review FY2002;
4. Increased funding for OSP Officers (ODFW multi-objective proposal -- # 25088) – Southern Plateau Provincial Review FY2002; and,
5. Shoshone-Paiute Tribe's Fish, Wildlife & Habitat Enforcement – Middle Snake Provincial Review FY2000, FY2001, FY2002

All of these projects were submitted to regional funding processes or Provincial reviews that are now completed – and were not initially funded. The complete project proposals and subsequent comments by the ISRP and other regional reviewers are available on the CBFWA web page. Some of these proposals submitted in previous fiscal years will be resubmitted via the FY2002 Provincial Review process. Brief summaries of the current law enforcement proposals are presented below:

Design & Implement a System-wide Fish, Wildlife & Habitat Conservation Enforcement Web-Based Data Center by Steven Vigg & Company

Estimated First Year Budget: $41,112

The purpose of this proposal is to develop a Columbia Basin web-based data center to facilitate system-wide conservation law enforcement data compilation & analysis and information sharing for enforcement programs, resource managers, and public information & education. It will facilitate linkage of law enforcement actions with biological data and facilitate evaluation of biological outcomes, and provide for enhanced efficiency, accountability and public awareness of conservation law enforcement efforts in the future. The target species are anadromous salmonids, sturgeon, resident fish, wildlife -- and their essential habitats in the Columbia Basin.

The conservation law enforcement (CLE) web-based data center would provide unprecedented access to unclassified fish, wildlife & habitat enforcement statistics and facilitate the linkage of enforcement data with biological data currently available on other web-based systems (e.g., StreamNet and DART). This system-wide CLE data system is necessary to fully evaluate the biological efficacy of Columbia Basin enforcement efforts and will greatly enhance public awareness.

The overall goal of the proposed work is to evaluate the alternatives and plan the design of a web-based conservation enforcement (CE) information center – that would maximize the accountability and cost-effectiveness of fish, wildlife & habitat law enforcement programs and contribute to regulatory compliance via public information. The NPPC directed

that Monitoring and Evaluation (M&E) be an integral part of the new Conservation Law Enforcement programs funded in FY2000, and that a linkage is documented between CE input-output and biological performance (outcomes).

A Columbia Basin CE data base is needed to facilitate a comprehensive M&E of enforcement projects and to maximize the efficacy of long-term enforcement efforts throughout the basin. A clear need exists to efficiently collect, verify, analyze and disseminate enforcement input-output statistics – including trends in illegal take – in relation to trends in fish and wildlife population status. The objectives of a web-based CE information center are: (1) compile and validate inter-agency enforcement data throughout the Columbia Basin; (2) provide a secure data system to enforcement professionals for basin-wide coordination of CE operations; (3) provide real time enforcement statistics to resource managers within a geographic information system framework; and (4) provide fishers and the general public with information on fish & wildlife laws, regulations, and enforcement activities to increase public awareness.

CRITFC Proposal to Protect Fish Habitat Through Education and Enforcement

Estimated First Year Budget: $303,575

The purpose of this proposed work is to protect salmon habitat by improving and coordinating enforcement activities, educating law enforcement administrators, local volunteers and the regulated community, and monitoring and tracking issues, reports and citations.

The proposal is designed to specifically address ESA stocks through immediate improvements to habitat by stopping illegal water diversions, illegal spawning ground destruction from un-permitted construction, and other illicit activities. Halting unlawful activities will have immediate effects. Page six of our proposal identifies the listed species in seven subbasins that will be directly protected by this proposal including steelhead, fall chinook, summer chinook, and sockeye. Three of the seven subbasins identified in the CRITFC proposal are the same three subbasins identified in the 2000 FCRPS Biological Opinion as requiring the highest priority (Methow, John Day and Salmon subbasins).
The project will have immediate on-the-ground benefits to critical habitat needs of endangered species. For example, if a person drives an All Terrain Vehicle through the middle of endangered salmon redds, and an enforcement officer stops them as a result of this program, this action would provide an immediate benefit for survival rates to an endangered salmon. Another example would be a construction site in violation of regulations that would cause sedimentation of spawning gravels, which if forced to comply with the law would provide immediate benefits to the habitat. Enforcement of habitat protection measures directly results in enforcement of reduced take of ESA listed species.

Umatilla Tribal Fish & Wildlife

Estimated First Year Budget: $163,369

The purpose of this proposed project is to increase law enforcement (LE) protection to fish, wildlife, their critical habitats and other essential natural resources within watersheds managed by CTUIR. The program will be coordinated with all other resource enhancement

projects of the tribe. The target species are coho, fall chinook, spring chinook, summer steelhead, bull trout and pacific lamprey. Summer steelhead are part of the listed Mid-Columbia ESU and bull trout are part of the listed Columbia River population segment plus riparian related wildlife species.

The following comments are from the FY2002 Plateau Provincial Review.

CBFWA comments:

This is a new project and not an ongoing project. The tribe currently has only 0.5 FTE for enforcement throughout NE Oregon which is inadequate. Through this proposal, enforcement is proposed for all seeded land. Reviewers indicate that there appears to be a lack of coordination among enforcement proposals. The CTWSRO, ODFW, and CTUIR need to meet and coordinate prior to funding. If funded, this project should be held to the same standards as the two existing conservation enforcement projects currently being funded under the fish and wildlife program.

ISRP 8/8/2001 (final) recommendation and comments:

Fundable. This is a proposal from the CTUIR Fish and Wildlife Enforcement division to provide three enforcement officers to enforce fisheries and habitat regulations on both reservation and ceded lands. The proposal makes a convincing case for funding enforcement officers. Only 0.5FTE is currently funded for fish and wildlife enforcement. Enforcement now has good coordination with fish and wildlife staff in the field, but it is unreasonable to expect that sufficient enforcement coverage could be maintained this way. Enforcement of fishing and habitat regulations is a necessary part of environmental management. The success of fish and wildlife restoration activities depends on maintaining enforcement coverage to minimize poaching and ensure compliance with habitat protection measures.

The proposal contains a substantial component of monitoring and evaluation, including the development of targets and criteria for specific performance objectives of the law enforcement program. Monitoring and evaluation focuses on coordination, contacts, warnings, arrests, seizures and critical habitat protected, improved public awareness and public participation, voluntary compliance and decreased illegal take of anadromous and resident fish stocks. It also refers to expected outcomes of increased survival and inter-dam passage, and improved spawning escapement, although it would not monitor these directly.

Increased funding for OSP Officers (ODFW multi-objective proposal)

Estimated First Year Budget: $309,538 (OSP component)

This FY2002 proposal to increase law enforcement effort in the Southern Plateau Province is Objective 7 of a large multi-faceted project -- # 25088: “Salmonid Population and Habitat Monitoring in the Oregon Portion of the Columbia Plateau”. The overall first year estimated budget for this project is $1.97 million.

The purpose of the enforcement component is to implement three new staff positions in the Oregon State Police-Fish and Wildlife Division to enhance enforcement and protection activities in the John Day, Deschutes, and Umatilla/Walla Walla River basins.

The Shoshone-Paiute Tribe's fish & wildlife law enforcement project for the Duck Valley Indian Reservation

The Shoshone-Paiute proposal is being revised and re-submitted via the FY2002 Middle Snake Provincial Review. The Shoshone-Paiute Tribe proposed to evaluate existing fish & wildlife law enforcement efforts on the Duck Valley Indian Reservation (DVIR) and develop a plan to maximizing the effectiveness of the Tribes' natural resource protection -- with the goal of integrating enforcement with holistic natural resources management. A synopsis of the Shoshone-Paiute Tribe's FY2000 conservation enforcement proposal follows (Dodson 2000):

The Duck Valley Indian Reservation (DVIR) has valuable natural resources including native redband trout, rainbow trout purchased for fisheries, migratory waterfowl, rare raptors, and big game. The purpose of this project is to review existing fish & wildlife law enforcement efforts on the DVIR and to develop a plan for maximizing the effectiveness of the Shoshone Paiute Tribes' natural resource protection. The project will also test a "tribal ranger" concept conducting the creel surveys of reservoir and stream fisheries on the DVIR utilizing fisheries technicians in conjunction with existing game wardens. The long-term goal is the development of a conservation law enforcement program that is fully integrated with the fish, wildlife and habitat management goals and objectives – and will insure that future investments restoration are not neutralized by illegal take or habitat degradation. The integrated conservation law enforcement plan would address:(1) Enforcement of regulations for reservoir and stream fisheries; (2) collecting creel survey data on reservoir and stream fisheries; (3) protecting the small and ecologically sensitive populations of native endemic trout populations (including ESA listed stocks) from illegal take; (4) habitat protection and enhancement; (5) enforcement of regulations for wildlife hunting and trapping; (6) ways to enhance law enforcement efforts through interagency coordination and securing funding for additional wardens; and, (7) collecting data to monitor the effectiveness of law enforcement efforts. The review of enforcement work would include evaluation of equipment, personnel, command structure, enforcement operations, and biological support.

The Shoshone-Paiute Tribe's fish & wildlife law enforcement project for the Duck Valley Indian Reservation (Dodson 2000) is currently the only other conservation enforcement project proposed in the Snake River Basin. Previously, however, the Shoshone-Bannock Tribe received BPA funding for enhanced fish & wildlife law enforcement, and it may identify needs for future conservation enforcement funding.

Concepts for Future Conservation Enforcement Projects

Fish & Wildlife management entities in the Columbia Basin continually develop innovative ways to increase the effectiveness of conservation enforcement with limited human and financial resources. Incorporating some of the following concepts or project models into the CE Program in future years may enhance the overall cost-effectiveness of conservation enforcement in the Columbia Basin.

Columbia Basin Law Enforcement Council (CBLEC) – Enhance Cooperation and Effectiveness

The purpose of the Columbia Basin Law Enforcement Council (CBLEC) is to enhance inter-agency cooperation, coordination and effectiveness – and thus promote the missions, goals and objectives of the various fish & wildlife law entities throughout the basin. The following summary is provided by Dayna Matthews, NMFS West Coast Enforcement Coordinator and Chairman of CBLEC:

> In 1978, the National Marine Fisheries Service (NMFS, U.S. Fish and Wildlife Service (USFWS, Oregon Department of State Police, Fish & Wildlife Division (OSP), Washington Department of Game, and Washington Department of Fisheries (since merged into the Washington Department of Fish and Wildlife), and Idaho Department of Fish and Game (IDFG) formed the Columbia Basin Law Enforcement Council (CBLEC). CBLEC was established to provide a operational forum for regional fisheries enforcement agencies to coordinate fisheries enforcement on the Columbia River and its tributaries. In 1983, the Columbia River Inter-Tribal Fish Commission's enforcement department became a member.
>
> The council consists of representatives from each of the six member agencies and meets on a monthly basis. Each year, one representative is selected by the others as chairperson. Although the enforcement focus, emphasis, and/or strategies have changed through the 24 year history of CBLEC, the goal has remained the same: to provide protection of anadromous and resident fish and their critical habitat throughout the Columbia River Basin; to prevent illegal take by both traditional and non-traditional means, thereby increasing survival, population size, and spawning escapement, which will help rebuild endemic populations in the basin, and thus expedite recovery of depleted species.

Montana Fish, Wildlife and Parks -- Conservation Enforcement & Public Outreach

Montana Fish, Wildlife and Parks would propose to enhance the Montana enforcement program in a two-prong approach. The two aspects work together in enhancing the on the ground enforcement efforts and providing additional public information and education (I&E).

Three positions would be required to implement this project. Two positions would be Game Wardens with field duties that would address enforcement needs within the Columbia Basin of western Montana. This would help supplement current state efforts to the increasing public demands for enforcement to protect native and ESA fish and wildlife. These positions could also serve to provide educational programs i.e., Fish Identification, to Montana Park visitors, streamside anglers and hunters. Landowner and Rancher personal contacts would also be an important element of these positions to reach fish and wildlife management goals.

One position would be dedicated to Public Education and Information. This person's responsibility would be to develop and implement an I&E program directly for conservation enforcement related issues. The benefits of this position would help minimize violations, explore hunter and angler ethics, and improve the education & knowledge of anglers and sportspersons to minimize unnecessary fish and wildlife mortality of native and ESA species. This position could also begin a data base development for tracking enforcement and education efforts, to best determine future needs and strategies. This person would also be responsible for project reporting.

The Third element would be to increase funding for operational expenses of all wardens who work the Columbia Basin of western Montana. This would allow enhanced enforcement efforts to be focused during times of high public use, as well as patrols of critical spawning and staging areas of bull trout and cutthroat trout.

WDFW Salmon Recovery Cooperative Compliance Program

The Washington Department of Fish and Wildlife (WDFW) Enforcement Program has recently organized an Environmental Protection Division to focus on conservation enforcement. During the past two years WDFW has been involved in a variety of conservation enforcement program development efforts within Washington that appear to have a broader application for fish and wildlife resource protection in the future. The following project summary was provided by Captain Mike Bireley, WDFW[11].

ISSUE: Fisheries/Habitat - Salmon Recovery (salmon, steelhead, bull trout)

STATUS: In Effect - Ongoing

NEED:
The Washington Department of Fish and Wildlife is responsible for the enforcement of four specific state laws relevant to fisheries resource protection that are pertinent to salmon recovery and the federal Endangered Species Act. These four laws involve fish screening of surface water diversions, fish passage related to man-made dams and/or obstructions, illegal harvest of protected species and the state hydraulics code. Other environmental-related state laws also play an important role in salmon recovery and ESA, such as water rights, water quality and metering of diversions.

RATIONALE:
Throughout the state of Washington there are multiple watersheds actively engaged in salmon recovery and restoration initiatives. In virtually all of these areas, fish screening, fish passage and hydraulics activities have been identified as critical factors needing additional or stepped-up enforcement emphasis. Due to the nature of these issues and the inherent potential for serious conflicts to arise within communities as the result of federal, state or private environmental agencies or organizations initiating increased emphasis on compliance, public support and participation is vital for successful resource protection to occur. Voluntary public compliance is viewed as a highly desirable approach to accomplish conservation enforcement goals and objectives. In order to achieve a higher level of voluntary compliance it is increasingly important to focus on the development of resource protection programs that emphasize community oriented problem solving.

[11] Washington Department of Fish and Wildlife, Enforcement Program, Environmental Protection Division, P.O. Box 456, Walla Walla, WA 99362; phone: 509.527.4137.

SCOPE/AREA:
The need for programs of this type exist statewide but are especially important within 16 watersheds identified as having critical salmon recovery issues and have been over-appropriated for water use.

JURISDICTION:
Primary state agency jurisdiction for salmon recovery rests with the Department of Fish and Wildlife. The Washington Department of Ecology also plays a critical role in fisheries protection, specifically with regards to salmon, as a result of their jurisdiction for administering state laws involving water quality, water rights and water usage.

DESCRIPTION:
The WDFW Enforcement Program began development in 2000 of a new community oriented resource protection program known as the Cooperative Compliance Review Program. This program was initially developed as a pilot project in the Walla Walla River Basin to address compliance with state fish screening and hydraulics code laws and regulations in response to the listing of steelhead and bull trout within that watershed as threatened under the federal Endangered Species Act. The program offered participants reduced risk of liability under state law, as well as technical and financial assistance in return for voluntary commitment and follow-through to achieve compliance. During the first six months of this program, a total of over 300 landowners applied to participate, identifying in excess of 450 surface water diversions currently in violation of state laws involving fish screens, fish passage and hydraulics permitting requirements. Current estimates identify a total of over 300 additional surface water diverters within the basin yet to be identified as possible future participants.

BUDGET:
Based on this level of response, WDFW and cooperating agencies were successful in obtaining over $725,000 in salmon recovery funding from the Salmon Recovery Funding Board and the Bonneville Power Administration to assist applicants in the Walla Walla Basin with cost-sharing for site and facility upgrades to meet state and federal fish protection criteria. In addition, the 2001 Washington Legislature appropriated $600,000 to WDFW to development similar cooperative compliance programs in a total of four watershed basins within the state, including two on the eastside of the state and two on the westside.

LINKAGE:
The legislature also appropriated additional funding to WDFW for fish screens and to WDOE for installation of metering devices on surface water diversions in conjunction with cooperative compliance initiatives by WDFW as well as in the remaining 16 critical watersheds of the state.
Funding linkage also exists with regards to ongoing habitat restoration efforts in various basins, as well as with efforts to fund new initiatives involving flow enhancements and improved irrigation efficiencies.

COORDINATION:
Coordination with various local, state, federal and private agencies and organizations is a critical component of Cooperative Compliance. Within the Walla Walla Basin, funding assistance has been obtained through close working relationships with local Conservation District staff; water right review and consultation has been provided by the Department of Ecology; site assessments and preliminary designs have been prepared through a partnership with the Walla Walla Community College Irrigation Technology Program utilizing college staff and students; a variety of regional private environmental organizations have been involved in all aspects of program development and have played a major role in obtaining additional state funding and consultation and review with the federal services (NMFS, USFWS) has been an integral part of the program from it's concept. Coordination and information has also occurred with agricultural entities such as the Washington Farm Bureau, the local media such as the Walla Walla Union Bulletin and frequent contacts with local state legislators.

FUTURE PLANS:
The Cooperative Compliance Program is currently funded in the Walla Walla Basin through the remainder of the 02-03 Biennium. Considerable efforts will be expended to identify and recruit additional participants into the program during the coming year. Efforts are also underway to develop an Urban Salmon Recovery Program to address similar issues within the cities of Walla Walla and College Place. At present, WDFW Enforcement staff is involved in the preliminary planning stages for implementation of a Cooperative Compliance Program in the Upper Yakima Basin as well.

Federal DOJ Matching Grant – CRITFE Budget Leverage Opportunity

Recently, CRITFE was awarded a 3-year funding grant by the U.S. Department of Justice, (Tribal Resource Grant Program – TRGP). However, there are cost-share requirements that may prevent CRITFE from implementing the full grant project. Beginning in 2002, CRITFE will be looking into the feasibility of cost-share funding from BPA or other regional funding sources. We view this as a valuable and unique opportunity to leverage regional funds with matching funds from the Department of Justice (DOJ).

The DOJ grant provides funding for equipment for Mobile Data Computers and Computer Aid Dispatching. This equipment will streamline and enhance communications and record maintenance because a majority of communications will be computerized. Presently communication occurs through voice dispatch and developing records manually. The new system will allow the patrol officers to essentially eliminate the need to spend time in the office writing reports, reading e-mail, maintaining evidence records, etc. Additionally, it will computerize and streamline records maintenance -- which will decrease the need for dispatch workload and over-time.

Currently, CRITFE has a total of 14 commissioned officers, however, when you take into consideration office time, vacations, training, court etc. there is an insufficient number of officers to adequately police our primary patrol areas (336 linear miles of the Columbia). The new equipment will nearly eliminate the time officers presently spend in the office because

they will be able to write reports, access computer data (registration checks, warrants/wanted info, stolen property, vehicles, etc.), read e-mail and communicate directly with each other as well as supervisors via e-mail. This will keep the officers in the field where their presence will be seen – even if there are stationary working on their computers. This is the equivalent of putting additional patrol officer presence in the field.

Additionally, the DOJ grant could provide funding for CRITFE to hire two (2) additional patrol officers. Two additional field officers, in conjunction with the ability to keep all officers out of the office, will greatly enhance patrol coverage, resource protection and regulatory enforcement. With a very reasonable cost-share percentage add-on to CRITFE's existing BPA funding, all of the enhancements of the DOJ funding can and will be directed towards implementation of the goals and objectives of CRITFE's BPA funding enforcement efforts.

Matching funds of approximately $110,000 from regional funding could leverage about $600,000 of DOJ funding -- this would increase CRITFE's current BPA-funded project by over 80%, in addition to the efficiency enhancements previously described.

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