

**Bonneville Power Administration Administration  
Fish and Wildlife Program FY99 Proposal Form**

**Section 1. General administrative information**

**Adult Fish Passage Improvement - Walla Walla River**

**Bonneville project number, if an ongoing project** 9601200

**Business name of agency, institution or organization requesting funding**

Confederated Tribes of the Umatilla Indian Reservation

**Business acronym (if appropriate)** CTUIR

**Proposal contact person or principal investigator:**

Name	<u>Gary James</u>
Mailing Address	<u>P.O.Box 638</u>
City, ST Zip	<u>Pendleton, OR 97801</u>
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**Subcontractors.** List one subcontractor per row; to add more rows, press Alt-Insert from within this table

<b>Organization</b>	<b>Mailing Address</b>	<b>City, ST Zip</b>	<b>Contact Name</b>
U.S. Army Corps of Engineers			Chris Hyland
Construction Contractor(s)			

**NPPC Program Measure Number(s) which this project addresses.**

**NMFS Biological Opinion Number(s) which this project addresses.**

**Other planning document references.**

If the project type is "Watershed" (see Section 2), reference any demonstrable support from affected agencies, tribes, local watershed groups, and public and/or private

landowners, and cite available documentation.

Wy Kan Ush Me Wa Kush Wit Volume II. 1995. CRITFC - Walla Walla River, Instream Flow and Passage (II.B.)

Walla Walla Subbasin Plan. 1990. CTUIR - Part II, Habitat Protection Needs, Habitat Protection Objectives and Strategies

Draft Walla Walla Annual Operating Plan. 1997. CTUIR - Sections I., III., and IV.

Draft Walla Walla Subbasin Master Plan. 1993. CTUIR - Present Rehabilitation Efforts (III.C.) and Facilities Needed to Implement Program (VI.C.2.)

Reconnaissance Report Walla Walla Basin. 1997. COE - Fish and Lamprey Eel Passage Impediments (2.04b[1]) and Problems, Opportunities, and Objectives 3.06a [1], 3.07a[1], and 3.10a[5])

**Subbasin.**

Walla Walla

**Short description.**

Provide for safe adult passage at several irrigation diversion dams in order to enhance summer steelhead and restore spring chinook populations in the Walla Walla River Basin.

**Section 2. Key words**

<b>Mar</b>	<b>Programmatic</b>	<b>Mar</b>	<b>Activities</b>	<b>Mar</b>	<b>Project Types</b>
<b>k</b>	<b>Categories</b>	<b>k</b>		<b>k</b>	
X	Anadromous fish	X	Construction	X	Watershed
	Resident fish		O & M		Biodiversity/genetics
	Wildlife		Production		Population dynamics
	Oceans/estuaries		Research		Ecosystems
	Climate		Monitoring/eval.	+	Flow/survival
	Other		Resource mgmt		Fish disease
			Planning/admin.		Supplementation
			Enforcement		Wildlife habitat en-

**Other keywords.**

passage, ladders, dam removal

**Section 3. Relationships to other Bonneville projects**

Project #	Project title/description	Nature of relationship
8805302	NE Oregon Walla Walla Hatchery Facility	Will provide adult passage benefits for spring chinook and summer steelhead produced from this hatchery after built
8343500	Umatilla Hatchery Satellite Facilities O&M	Will provide adult passage benefits for fish to be produced from hatchery operated by project #8343500
8802200	Umatilla and Walla Walla Basins Trap and Haul Project	Project #8802200 will operate and maintain facilities constructed under this project

**Section 4. Objectives, tasks and schedules**

***Objectives and tasks***

Obj 1,2, 3	Objective	Task a,b,c	Task
1	Construct Nursery Bridge Ladder	a	Finalize designs for adult ladder and trap
		b	Construct adult ladder and trap

***Objective schedules and costs***

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	10/1998	09/1999	100%

**Schedule constraints.**

This is a cost share project with COE and any changes in their budget schedule would affect this funding request.

**Completion date.**

1999 - O&M of the project in outyears will be conducted under project #8802200.

## Section 5. Budget

### *FY99 budget by line item*

<b>Item</b>	<b>Note</b>	<b>FY99</b>
Personnel		
Fringe benefits		
Supplies, materials, non-expendable property		
Operations & maintenance		
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		
PIT tags	# of tags:	
Travel		
Indirect costs		
Subcontracts	This amount represents 25% of the total project cost and is BPA's portion of the cost share for engineering and construction with COE	400,000
Other		
<b>TOTAL</b>		<b>400,000</b>

### *Outyear costs*

<b>Outyear costs</b>	<b>FY2000</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03</b>
Total budget	0	0	0	0
O&M as % of total	0	0	0	0

O&M of the project in outyears will be conducted under project #8802200.

## Section 6. Abstract

The Walla Walla River is heavily diverted for agricultural use. Inadequate flow and passage conditions are a primary factor in the decline of native summer steelhead runs and extirpation of spring chinook in the basin.

The goal of this project is to enhance adult passage conditions in the Walla Walla River by removing passage barriers and improving adult ladders. Two diversion dams were removed in FY97 and two ladders were improved in FY98 under the project. The fish ladder to be constructed under this proposal is the last structural adult passage improvement currently identified for the basin.

Correction of the adult passage problems in the basin is a key component of the overall

plan to rehabilitate and restore fish runs in the Walla Walla River. Adult survival benefits to production areas realized from the project's completion will contribute to the NPPC rebuilding goal.

## **Section 7. Project description**

### **a. Technical and/or scientific background.**

The Walla Walla River is heavily diverted for agricultural use. This causes both inadequate flow conditions from dewatering of river reaches and physical passage barriers from associated diversion structures. Inadequate flows and migration conditions during critical portions of both adult and juvenile migration periods was the primary contributor to the extirpation of salmon and depression of the native summer steelhead populations in the basin.

Beginning in the early 1990's, CTUIR began to develop a comprehensive plan, similar to that being implemented in the Umatilla Basin, to rehabilitate summer steelhead populations and restore spring chinook to the Walla Walla Basin. A key plan component was to address the inadequate migration conditions which led to the decline and extirpation of the basin's anadromous populations. In the mid 1990's, funding became available to begin improving adult passage conditions in the basin.

Four of the five adult passage concerns identified by basin planning documents have been corrected with funding supplied by this project. In FY97, the Marie Dorian and Maiden diversion dams were removed. In FY98, ladder improvements will be completed at the Burlingame and Hofer diversion dams. This FY99 proposal would fund the last identified need which is improving the ladder and passage situation at Nursery Bridge Diversion Dam.

The project provides in-place, in-kind mitigation by increasing access to natural spawning areas for adults. This, in turn, should result in increased natural production which should address the NPPC rebuilding goal by increasing the number of fish produced by the basin.

### **b. Proposal objectives.**

The project has only one objective, the construction of a new fish ladder and trap at Nursery Bridge Diversion Dam.

### **c. Rationale and significance to Regional Programs.**

As stated in Section 7.a., inadequate passage conditions were the primary contributor to the decline and extirpation of the anadromous fish runs in the Walla Walla Basin. All planning documents for the basin identify the need for adult passage improvements at the Nursery Bridge site.

This project provides a unique opportunity for cooperation and cost sharing. The COE is

funding 75% of engineering and construction costs for the project and BPA is responsible for the remaining 25%. After completion, operation and maintenance of the Nursery Bridge ladder and trap, as well as the other ladders constructed under the project, will be conducted by the Umatilla and Walla Walla Basins Trap and Haul project. Completion of the project also provides a critical need for success of the two hatchery related BPA projects identified in Section 3 by improving passage conditions for adults to headwater production areas and supplying a broodstock collection location for the program.

**d. Project history**

This project has been ongoing since 1996. By the end of FY98 the project will have completed ladder improvements at Hofer and Burlingame diversion dams and will have removed the Maiden and Marie Dorian diversion dams. Cost obligations were \$190,114 for FY96 and \$658,952 for FY97.

**e. Methods.**

The design of this facility is being developed by COE with input and review from many other fish management entities including passage engineers from NMFS, Fish Screening Oversight Committee members, and other agency staff with passage backgrounds.

Construction of the ladder in itself will not alleviate the passage concerns at this site. Proper operation and maintenance of the facility after construction is the critical link to improving passage conditions at this location. Operation and maintenance of the ladder will be the responsibility of the Umatilla and Walla Walla Basins Trap and Haul Project which is also responsible for O&M oversight of the other ladder sites in the Walla Walla Basin and all the ladders in the Umatilla Basin.

**f. Facilities and equipment.**

The engineering groups involved in the design of the facility have been involved in other passage related work and it is anticipated that the general contractor will have the necessary qualifications to complete the construction. As far as the facility itself, designs will be inclusive to provide all needs and requirements to address the passage and trapping needs at this location.

**g. References.**

Confederated Tribes of the Umatilla Indian Reservation,  
Oregon Department of Fish and Wildlife, Washington  
Department of Fisheries and Washington Department  
of Wildlife. 1990. Columbia Basin System Planning,  
Walla Walla Subbasin, September, 1990. Submitted  
to Northwest Power Planning Council and Columbia

Basin Fish and Wildlife Authority, Portland,  
Oregon.

U.S. Army Corps of Engineers. 1997. Walla Walla River  
Watershed, Oregon and Washington - Reconnaissance  
Report. U.S. Army Corps of Engineers, Walla Walla  
District, Walla Walla, Washington.

## **Section 8. Relationships to other projects**

As stated previously, inadequate flow and passage conditions were a primary reason for the decline and extirpation of anadromous fish populations in the Walla Walla Basin. This project is the last of five adult passage improvements identified in the basin to address the adult migration concerns. This project is a unique funding effort in cost sharing between the Corps of Engineers and BPA. COE is funding 75% of the engineering and construction costs with BPA responsible for the remaining 25%. In addition, many entities including ODFW, NMFS, and CTUIR are providing review and input to COE on the design of the facility.

These improvements in adult passage conditions are a key factor in a comprehensive effort to rehabilitate summer steelhead and restore spring chinook in the basin. The coordination and O&M of the overall passage program will be coordinated by the Umatilla and Walla Walla Basins Trap and Haul Project. Other entities involved in the Walla Walla restoration effort include Walla Walla Watershed Council, COE, ODFW, WDFW, CTUIR, USBR, and a number of soil and water conservation districts and irrigation districts.

These adult passage improvements are just one of many projects entailed in the overall restoration program. Other projects include juvenile passage, habitat enhancement, flow augmentation, and supplementation.

## **Section 9. Key personnel**

Name: Gary A. James

Title: Fisheries Program Manager, CTUIR

Months Funded under this project: 0 (All funding is subcontracted for engineering and construction)

Education: BS Fisheries 1979 Oregon State University

Experience: 20 years fisheries experience, last 15 years as CTUIR Fisheries Program Manager; expertise in multi-project fisheries program development, coordination, and oversight.

## **Section 10. Information/technology transfer**

Meetings are held regularly to discuss the designs of the facility. Final design documents

and construction plans will be published for distribution by COE.