

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

Section 1. General administrative information

~~Screens and Traps on the Walla Walla and Touchet~~

Bonneville project number, if an ongoing project 9601100

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>
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Subcontractors. List one subcontractor per row; to add more rows, press Alt-Insert from within this table

Organization	Mailing Address	City, ST Zip	Contact Name
Montgomery Watson			Bill Blaylock
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 AWatershed@ (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. CRITEC - 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. and V.

Draft Walla Walla Subbasin Master Plan. 1993. CTUIR - Present Rehabilitation Efforts, Existing Facilities (VI.B.4.) and Juvenile and Adult Collection and Transportation Facilities (VI.C.1.)

Reconnaissance Report Walla Walla Basin. 1997. COE - Fish and Lamprey Eel Passage Impediments (2.04b[1]) and Problems, Opportunities, and Objectives (3.06a[2], 3.07a[2], and 3.10a[5])

Subbasin.

Walla Walla

Short description.

Provide for safe outmigration of smolts in order to enhance summer steelhead and restore spring chinook populations in the Walla Walla Basin by improving screens, developing trap facilities and consolidating diversion points.

Section 2. Key words

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
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-
			Acquisitions		hancement/restoration

Other keywords.

passage, screens, bypasses, outmigration

Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship
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8805302	NE Oregon Walla Walla Hatchery Facility	Will provide juvenile passage benefits for spring chinook and summer steelhead produced from this hatchery after built
8343500	Umatilla Hatchery Satellite Facilities O&M	Will provide juvenile 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	Consolidate Garden City and Lowden 2 Diversion Canals	a	Finalize designs to consolidate ditches
		b	Combine diversion points and delivery systems
		c	Construct new juvenile screens and bypass
2	Consolidate Eastside and LWWR Diversion Canals	a	Design consolidation

Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	10/1998	09/1999	100%
2	10/1998	09/1999	100%

Schedule constraints.

None identified

Completion date.

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
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 will all be subcontracted for design, engineering and construction	1,400,000
Other		
TOTAL		1,400,000

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget	750	0	0	0
O&M as % of total	0	0	0	0

O&M of the project in outyears will be incorporated into ongoing O&M efforts.

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 improve juvenile passage conditions in the Walla Walla River by providing trap and haul facilities, decreasing the number of surface diversions, and improving juvenile screens and bypasses. A juvenile trap and haul facility is to be constructed in FY98 and new screens/bypasses are to be installed at two diversions under this project. The ditch consolidations to be completed under this proposal are the last two structural juvenile passage improvements currently identified in the basin.

Provisions for addressing the juvenile passage problems in the basin are a key component of the overall plan to rehabilitate and restore fish runs in the Walla Walla River. Outmigration survival benefits realized from completion of these projects should result in an increase in adult returns that will contribute directly 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 inadequate flow conditions from dewatering of river reaches. In addition, the high number of surface diversion points in the river may delay juvenile passage as smolts navigate screen and bypass facilities and can expose smolts to deficient screen sites. 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. Some efforts had begun in the basin to correct juvenile passage problems through the Mitchell Act and BPA tributary screens programs. In the last two years, funding became available to correct some of the major juvenile passage concerns which had not yet been addressed in the basin.

Two major capital projects are to be completed with funding supplied by this project in FY98; screen replacement at Burlingame Canal and screen replacement and trap and haul facility construction at Little Walla Walla Diversion. This FY99 proposal would fund consolidation of two diversions, eliminating one major surface diversion point. It also includes replacement of the deficient screens and bypasses currently in place at the two canals with one new screen and bypass facility. The FY2000 request would also fund consolidation of two diversions and eliminate a surface diversion point. No new screen or bypass would be required as part of that consolidation.

The project provides in-place, in-kind mitigation by increasing the survival of outmigrating juvenile salmon and steelhead. This, in turn, should result in increased adult returns to the Walla Walla River which directly addresses the NPPC rebuilding goal.

b. Proposal objectives.

The project has only two objectives; the consolidation of the Garden City and Lowden 2 canals including construction of new screens and bypass and fish ladder and consolidation of the Eastside and Little Walla Walla canals. The end result would be elimination of two surface diversion points and improvement of fish screen and bypass conditions.

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.

Planning documents identify the need for improvements in the juvenile passage conditions in the basin.

After completion, operation and maintenance of the Garden City/Lowden 2 screen site will probably be conducted through the WDFW Mitchell Act screen program along with the screens replaced at Burlingame Canal. Consolidation of the Eastside Ditch with the Little Walla Walla site will require no additional O&M above that which will already be occurring upon completion of the Little Walla Walla screen/bypass and trap and haul facility. O&M at Little Walla Walla facility will be the responsibility of 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 juvenile outmigration conditions and providing facilities for a contingency plan (trap and haul) for assisting juveniles when the river is dewatered.

d. Project history

This project has been ongoing since 1997. By the end of FY98 the project will have completed screen improvements at Little Walla Walla and Burlingame canals and will have constructed a trap and haul facility at Little Walla Walla Canal. Budget requests were \$179,546 for FY97 and \$2,750,000 for FY98.

e. Methods.

Ditch consolidation and design of the screen/bypass facility is being developed by Montgomery Watson 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.

Consolidation of these ditches will alleviate passage concerns at this site by eliminating a surface diversion point and providing improved screening and bypass capabilities for outmigrants. Proper operation and maintenance of facilities after construction is a critical link to maintaining improved passage conditions. Operation and maintenance of the Garden City/Lowden 2 site will be the responsibility of WDFW as part of their Mitchell Act screen program. Operation and maintenance of the Little Walla Walla site will be part of the Umatilla and Walla Walla Basins Trap and Haul Project which is also responsible for O&M oversight of all BPA funded screen/bypass and trap and haul facilities in the Umatilla Basin.

f. Facilities and equipment.

The engineering consultant firm involved in the design of these facilities have been involved in other passage related projects and it is anticipated that the general contractor will have the necessary qualifications to complete the construction. As far as the facilities themselves, designs will be inclusive to provide all needs and requirements to address the passage needs at these locations.

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 addresses a number of the juvenile migration concerns in the basin. Many entities are involved in the review of the project including WDFW, ODFW, NMFS, CTUIR, and the various involved irrigation districts.

These improvements to juvenile outmigration 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 juvenile passage improvements are just one of many projects entailed in the overall restoration program. Other projects include adult 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 for the facilities and ditch consolidation. Final design documents and construction plans will be published for distribution by Montgomery Watson.