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## PART I - ADMINISTRATIVE

### Section 1. General administrative information

#### Title of project

Pit Tag Purchase And Distribution

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**BPA project number:** 9808001  
**Contract renewal date (mm/yyyy):** 10/1999  Multiple actions?

**Business name of agency, institution or organization requesting funding**  
Pacific States Marine Fisheries Commission

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**Business acronym (if appropriate)** PSMFC

#### Proposal contact person or principal investigator:

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**NPPC Program Measure Number(s) which this project addresses**  
5.0F.9; 5.0F.10; 5.0F.11; 5.0F.12; 5.0F.13

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**FWS/NMFS Biological Opinion Number(s) which this project addresses**  
NMFS BO RPA Sec. 13;

The ITS No. 14 of NMFS' 1995 BiOp refers to the completion of the design and development of PIT tag detectors in the main stem dams. This projects provides the maintenance and operations of this hardware and data system.

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#### Other planning document references

NMFS Snake River Salmon Recovery Plan: 2.1.d.5  
Supplemental Biological Assessment on Federal Columbia River Power Operations, Submitted to NMFS and USFWS by U.S. Army Corps of Engineers, U.S. Bureau of Reclaimation, Bonneville Power Administration, December, 1994: Section 4.7

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#### Short description

Purchase and distribute PIT tags needed for BPA funded projects and track number of tags purchased and dollars spent on a per project basis.

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#### Target species

Chinook, Steelhead, Sockeye, Coho Salmon;

## Section 2. Sorting and evaluation

### Subbasin

Columbia / Snake River Basin - Region-wide.

### Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
<input checked="" type="checkbox"/> Anadromous fish <input type="checkbox"/> Resident fish <input type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Multi-year (milestone-based evaluation) <input type="checkbox"/> Watershed project evaluation	<input type="checkbox"/> Watershed councils/model watersheds <input checked="" type="checkbox"/> Information dissemination <input checked="" type="checkbox"/> Operation & maintenance <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Research & monitoring <input checked="" type="checkbox"/> Implementation & management <input type="checkbox"/> Wildlife habitat acquisitions

## Section 3. Relationships to other Bonneville projects

***Umbrella / sub-proposal relationships.*** List umbrella project first.

Project #	Project title/description

### ***Other dependent or critically-related projects***

Project #	Project title/description	Nature of relationship
9011	Characterize & Quantify Residual Steelhead in Clearwater River, Idaho	PIT Tagging Project
9104	Conduct Baseline Habitat and Pop. Dynamics Studies on Lampreys in Cedar Cr.	PIT Tagging Project
9105	Determine if Salmon are Successfully Spawning Below Lower Columbia MS Dams	PIT Tagging Project
9144	Monitor Natural Escapement & Productivity of John Day Basin Spring Chinook	PIT Tagging Project

8331900	Monitor Natural Escapement & Productivity of John Day Basin Spring Chinook	PIT Tagging Project
8332300	Monitor Smolts at the Head of Lower Granite Reservoir and Lower Granite Dam	PIT Tagging Project
8335000	Nez Perce Tribal Hatchery	PIT Tagging Project
8605000	White Sturgeon Mitigation and Restoration in the Columbia and Snake Rivers	PIT Tagging Project
8712700	Smolt Monitoring By Non-Federal Agencies	PIT tagging project
8712702	Comparative Survival Rate Study (CSS) of Hatchery Pit Tagged Chinook	PIT tagging project
8712703	Imnaha River Smolt Monitoring Program Project	PIT tagging project
8806400	Kootenai River White Sturgeon Studies and Conservation Aquaculture	PIT tagging project
8902401	Evaluate Juvenile Salmonid Outmigration and Survival in the Lower Umatilla	PIT tagging project
8906500	Annual Fish Marking - Missing Hatchery Production Groups	PIT tagging project
8909800	Salmon Supplementation Studies in Idaho Rivers	PIT tagging project
8909801	Salmon Supplementation Studies in Idaho Rivers	PIT tagging project
8909802	Salmon Supplementation Studies in Idaho Rivers	PIT tagging project
8909803	Salmon Supplementation Studies in Idaho Rivers	PIT tagging project
9000500	Umatilla Hatchery Monitoring and Evaluation	PIT tagging project
9000501	Umatilla and Walla Walla Basin Natural Production M&E Project	PIT tagging project
9005500	Steelhead Supplementation Studies in Idaho Rivers	PIT tagging project
9008000	Columbia Basin PIT Tag Information System	PIT tagging project
9102800	Monitoring Smolt Migration of Wild Snake River Spring/Summer Chinook	PIT tagging project
9102900	Life History and Survival of Fall	PIT tagging project

	Chinook Salmon in Columbia River Basin	
9105500	Supplementation Fish Quality (Yakima)	PIT tagging project
9105500	Supplementation Fish Quality (Yakima)	PIT tagging project
9107100	Snake River Sockeye Salmon Habitat and Limnological Research	PIT tagging project
9107200	Redfish Lake Sockeye Salmon Captive Broodstock Program	PIT tagging project
9107300	Idaho Natural Production Monitoring and Evaluation Program (INPMEP)	PIT tagging project
9202604	Spring Chinook Salmon Early Life History	PIT tagging project
9302900	Survival Estimates for Passage of Juvenile Salmonids Through Dams & Res.	PIT tagging project
9401001	Mitigation for Excessive Drawdowns at Hungry Horse & Libby Reservoirs - Lib	PIT tagging project
9403400	9403400	PIT tagging project
9506300	Yakima/Klickitat Monitoring and Evaluation Program	PIT tagging project
9603201	Begin Implementation of Year 1 of the K Pool Master Plan Program	PIT tagging project
9604000	Evaluate the Feasibility and Risks of Coho Reintroduction in Mid-Columbia	PIT tagging project
9700100	PIT Tag System Transition	PIT tagging project
9800702	Grande Ronde Supplementation - O&M/M&E - Nez Perce Tribe Lostine	PIT tagging project
9800703	Conduct Satellite Facility O&M and Program M&E for Grand Ronde Spring Chino	PIT tagging project
9801001	Grande Ronde Basin Spring Chinook Captive Broodstock Program	PIT tagging project
9801002	Captive Rearing Initiative for Salmon River Chinook Salmon	PIT tagging project
9801004	Monitor and Evaluate Yearling Snake R Fall Chinook Upstream of Lwr Granite	PIT tagging project
9801006	9801006	PIT tagging project
9808001	PIT Tag Purchase and Distribution	PIT tagging project
	USACE - Evaluation of Juvenile	PIT tagging project

	Salmonid Transportation	
	USACE - Estuarine Recovery of PIT-Tagged Juvenile Salmonids	PIT tagging project
	LSRCP - Lower Snake River Compensation Program	PIT tagging project
	USACE - Caspian Tern Predation on Juvenile Salmonids in the Columbia River	PIT tagging project
	USACE - Evaluation of the Effects of Multiple Dam Passage on the Physiologi	PIT tagging project
	USACE - Relative Survival of Juvenile Salmon Passing Through the Spillway o	PIT tagging project
	USACE - Evaluation oo the Effects of Homing in Adult Chinook	PIT tagging project
	USACE - Snake River Drawdown Modeling in CRISP	PIT tagging project

## Section 4. Objectives, tasks and schedules

### *Past accomplishments*

Year	Accomplishment	Met biological objectives?
0		
0	.	
0		
1998	First year of project. Tags purchased and distributed.	Yes

### *Objectives and tasks*

Obj 1,2,3	Objective	Task a,b,c	Task
1	Administrative Management and Coordination	a	Upon receipt of funding from BPA, in accordance with council's prioritization process, and upon request from individual project sponsors, PSMFC shall purchase and distribute PIT tags for Columbia River Basin Research, Monitoring and Evaluation
		b	Provide quarterly accounting of pit tag inventory on hand.

**Objective schedules and costs**

<b>Obj #</b>	<b>Start date mm/yyyy</b>	<b>End date mm/yyyy</b>	<b>Measureable biological objective(s)</b>	<b>Milestone</b>	<b>FY2000 Cost %</b>
1	10/1999	9/2000			100.00%
0	10/1999	3/2000			0.00%
3	3/1999	3/2000			0.00%
4	3/1999	3/2000			0.00%
5	3/1999	3/2000			0.00%
				<b>Total</b>	100.00%

**Schedule constraints**

16-26 week lead time for tag manufacture.

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**Completion date**

On-going project. Request multi-year funding.

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**Section 5. Budget**

**FY99 project budget (BPA obligated):** \$1,041,221

**FY2000 budget by line item**

<b>Item</b>	<b>Note</b>	<b>% of total</b>	<b>FY2000</b>
Personnel		%0	
Fringe benefits		%0	
Supplies, materials, non- expendable property		%0	
Operations & maintenance		%0	
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		%0	
NEPA costs		%0	
Construction-related support		%0	
PIT tags	# of tags: Placeholder account for purchase of pit tags. Budget starts with zero dollars. \$'s are xfered in from PIT tagging F&W projects after prioritization process.	%0	
Travel		%0	
Indirect costs		%0	
Subcontractor		%0	

Other		%0	
<b>TOTAL BPA FY2000 BUDGET REQUEST</b>			<b>\$ 0</b>

**Cost sharing**

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
		%0	
		%0	
		%0	
		%0	
<b>Total project cost (including BPA portion)</b>			<b>\$ 0</b>

**Outyear costs**

	FY2001	FY02	FY03	FY04
<b>Total budget</b>				

**Section 6. References**

Watershed?	Reference
<input type="checkbox"/>	

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**PART II - NARRATIVE**

**Section 7. Abstract**

Purchase and distribute PIT tags to BPA funded projects.

**Section 8. Project description**

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

This project is a placeholder for the bulk purchase of PIT tags for the FWP PIT tagging projects. The project relies on services and knowledge held within the PTAGIS program (9008000) to coordinate the forecasting, purchasing, distribution and reporting of PIT tag requirements for FWP programs in the Columbia Basin.

**b. Rationale and significance to Regional Programs**

Centralized purchasing of PIT tags required by BPA funded projects has the advantage of lower tag costs due to a bulk purchase agreement with the manufacturer.

Centralized distribution of PIT tags provides the PTAGIS project (9008000) with the ability to identify researchers who have not submitted Tagging and Release Information prior to interrogation of PIT tagged fish at the dams. This provides better data integrity of the PTAGIS data set.

PSMFC does not charge overhead on the purchase of these tags, which saves money for the FWP.

**c. Relationships to other projects**

Tagging projects request tags from this project. See previous section on relationship to other projects for list of other related projects.

**d. Project history (for ongoing projects)**

In the Fall of 1997, the PIT tag procurement and distribution task was removed from the PTAGIS project (9008000) and this new, place-holder project implemented.

There exists some documents which refer to this project as 9008001.

**e. Proposal objectives**

1. PIT Tag Procurement and Distribution

Purchase and distribute PIT tags approved by NPPC, funded by BPA and required by researchers.

Prepare quarterly inventory status and purchase reports.

**f. Methods**

PIT tagging projects propose new F&W tagging projects through the CRB FWP Prioritization Process. When projects are approved, dollars are allocated for this project for purchase of PIT tags, by de-allocating those dollars from tagging projects.

This process eliminates the overhead expenses that are charged by other agencies to the FWP for the purchase of PIT tags. PSMFC does not charge overhead for the purchase of PIT tags.

**g. Facilities and equipment**

PSMFC accounting system and PTAGIS database system are used to account for tags by the project.

**h. Budget**

This is a place-holder project required by the PIT tag marking projects. Dollars are transferred from the marking projects into this project for the purchase of tags. Tagging projects issue a “Distribution Request Form” to have tags distributed to their projects.

**Section 9. Key personnel**

Carter Stein

Program Manager

2080 Hrs per Year

Duties: Develop PTAGIS annual work plan and budgets;

Manage system development life cycle for PTAGIS software;

Investigate new technical capabilities related to software engineering techniques, new hardware and software and applicability to PTAGIS;

Work with PTSC to develop and update Basin wide standards for PIT tag information processing.

Develop production supportable implementations of new PIT tag

technologies in cooperation with National Marine Fisheries Service.

Supervise four full time positions, two Field Systems Engineers and two Programmer Analysts.

Degrees Earned:

Master of Business Administration, University of Portland, 1992

Bachelor of Science, Computer Science, Portland State University, 1985

Current Employer:

Pacific States Marine Fisheries Commission since September, 1992

Accomplishments:

Conversion of PTAGIS prototype database into stable production environment.

Established PIT tag Operations and Maintenance Field Office in Kennewick, WA.

Managed installation of PIT interrogation systems at Lower Monumental and McNary Dams.

Lead development of technical specifications for ISO based stationary transceiver system for deployment in Columbiar River Basin.

Lead development of technical specification for ISO based portable transceiver system for deployment in Columbia River Basin.

Recent Employer

Tektronix, Inc. 1978-1992

Senior Software Engineer; CAX Data Management  
Systems Development Project Leader

Publications:

Monitoring Endangered Salmon in the Columbia River Basin, Stein, Clough, Apr. 1995,  
Presented to Computer Associates / Ingres World Conference, July 1995.

**Section 10. Information/technology transfer**

This is a tag distribution and procurement project. User related information will be distributed in the PTAGIS Newsletter periodically.

**Congratulations!**