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PROJECT: 17-1073 MON, WDFW MONITORING OF ASOTIN IMW  
Sponsor: Dept of Fish & Wildlife    Program: Pacific States Projects    Status: Active  
Project Start Date: 01/01/2017    Agreement End Date: 12/31/2018

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Final Report Status: Accepted 01/03/2019

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## Description

### PROJECT AGREEMENT DESCRIPTION

WA Dept of Fish and Wildlife proposes to support one year of ongoing monitoring in the Asotin Cr Intensively Monitored Watershed project (Asotin IMW). The project started in 2008 and is expected to run until 2019. Funds will support i) juvenile steelhead PIT tagging and mark-recapture surveys, and ii) habitat monitoring using parts of the Columbia Habitat Monitoring Protocol (CHaMP). These two monitoring efforts are being used to assess the effectiveness of large woody debris (LWD) to increase juvenile productivity in Asotin Cr. Three tributaries will be monitored: Charley, North Fork Asotin, and South Fork Asotin Cr.

### FINAL PROJECT DESCRIPTION

The Washington Department of Fish and Wildlife successfully completed all goals associated with the ongoing monitoring for the Asotin Creek Intensively Monitored Watershed project. The project agreement started on 1 January 2017 and was amended and extended several times to include the 2018 field season. The project also received a cost increase to allow for the complete replacement of three Instream PIT Tag Arrays in the Asotin Subbasin.

The initial contract was extended in June 2017 to the end of the federal fiscal year (30 September 2017) to cover the majority of the field season and complete the project. The project agreement was then extended again on 15 November 2017 with a cost increase (\$26,000) from the new PSMFC agreement with the RCO. With this amendment the project was extended until 30 June 2018. A final time extension was granted on 15 June 2018 to extend the project until 31 December 2018; this was followed by a final cost increase effective 15 July 2018. This cost increase was specific to the Instream Array replacement.

The multiple amendments, extensions and cost increases are mostly due to the fluid nature of the PSMFC funding mechanism and the Salmon Recovery Funding Board processes and should not be viewed as any fault of the project or the sponsors in getting the fieldwork completed. This project has always completed the vast majority of its fieldwork and data collection from June through the month of October. This field schedule doesn't align with the SRFB funding calendar or the federal fiscal year.

## Narrative

The 2017 consisted of assisting the IMW by installing temporary PIT array upstream of Headgate Dam to assess the potential upstream movement of PIT tagged juveniles into the IMW project area. WDFW staff also completed electrofishing surveys at supplemental sites in the upper headwaters of Charley Creek and the South Fork Asotin Creek, as in previous years. Staff availability and timing prevented sampling in the upper North Fork Asotin Creek site. The data collected at the temporary PIT array site and during field sampling were passed on to Stephen Bennett the IMW Principal Investigator for analysis and summarization.

The 2018 field season was more of a return to previous agreements with Ecological Research. WDFW field staff was responsible for leading the summer and fall field sampling efforts, in addition to temporary PIT array deployment, operation and maintenance and the installation of the new arrays. The new arrays replaced aging antennas and transceivers at the Asotin Creek Mouth (ACM), Cloverland Bridge (ACB), and the Asotin Creek Forks (AFC) sites. The new equipment is more resilient and robust, have higher memory capacity, and have a much better read range than the older technology. The installation occurred over the course of three weeks in October 2018 and is complete. The sites are still being manually downloaded in the field and the data transferred to PTAGIS on a weekly or monthly basis, depending on the season and volume of detections.

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## Worksites

### Worksite #1: Asotin worksite

Worksite Address (Optional)  
Street Address  
City  
State, Zip

## Worksite Details

### Worksite #1: Asotin worksite

Worksite Name Asotin worksite

#### WORKSITE DESCRIPTION

The project will take place within the Asotin Creek watershed in the Intensively Monitored Watershed study area which includes Charley Creek, North Fork Asotin Creek, and South Fork Asotin Creek. Asotin Creek. Monitoring is the only activity that is occurring.

#### Geographic Coordinates

From mapped point: Latitude 46.230669 Longitude -117.321575  
For Directions: Latitude 46.337719 Longitude -117.059597

#### SITE ACCESS DIRECTIONS

The Asotin watershed and IMW study area can be accessed from the town of Asotin by heading up Asotin Creek Road.

## Monitoring Metrics

### Worksite: Asotin worksite (#1)

Targeted salmonid ESU/DPS (A.23)

The salmon ESU (Evolutionarily Significant Unit) or steelhead DPS (Distinct Population Segment) name that the project is targeting. For species where ESU/DPS name is not known or determined, use the species name with unidentified ESU (e.g., Chinook salmon - unidentified ESU).

Targeted species (non-ESU species)

Select one or more of the fish species that this project will benefit.

Priority in Recovery Plan

Priority in Recovery Plan. How is the project prioritized or justified by the above plan? (i.e. addresses a priority action, occurs in a priority area, or targets a priority species). Include page reference. If project was not identified in a Plan, enter 'None'

#### Current Agreement

#### Final

No Salmon ESU or Steelhead DPS	No Salmon ESU or Steelhead DPS
✓ Chinook Salmon-Snake River Fall-run ESU	Chinook Salmon-Snake River Fall-run ESU
✓ Chinook Salmon-Snake River Spring/Summer-run ESU	Chinook Salmon-Snake River Spring/Summer-run ESU
Chinook Salmon-unidentified ESU	Chinook Salmon-unidentified ESU
✓ Steelhead-Snake River Basin DPS	✓ Steelhead-Snake River Basin DPS
Steelhead/Trout-unidentified DPS	Steelhead/Trout-unidentified DPS
✓ None	✓ None
Unknown	Unknown
Brook Trout	Brook Trout
Brown Trout	Brown Trout
Bull Trout	Bull Trout
Cutthroat	Cutthroat
Kokanee	Kokanee
✓ Rainbow	✓ Rainbow
Searun Cutthroat	Searun Cutthroat

*Not Collected at Closure*

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Number of Reports Prepared (E.0.e.1)	1	1
Number of reports prepared by the project on management or restoration data collected and RM&E outcomes. These reports could be progress reports, monitoring reports, or final reports associated with research. Reports should be uploaded into the PCSRF database (see A.19.a and A.19.b). If none, enter zero.		
Name Of Report (E.0.e.2)		
Name of report(s) (Author, date, title, source, source address. Endnote citation format). If no reports prepared, enter 'none'.		
Project Identified in a Plan or Watershed Assessment (E.0.c)		
Name of the Plan, Watershed Assessment or Recovery Plan that identifies the need or justification for conducting this project. (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'none'.		
Number of Cooperating Organizations (E.0.d.1)	0	0
Number of organizations cooperating with this project by concurrently conducting field work on other components of a Comprehensive Strategy or Program. If none, enter zero.		
Name Of Cooperating Organizations (E.0.d.2)		
Name(s) of cooperating organizations. If none, enter 'none'.		
Complement Habitat Restoration Project (E.0.b)		
Name of the habitat restoration project that is complemented by this project. Record name of the habitat project complemented, project ID number and project sponsor. If project does not complement a habitat project, enter 'none'.		

### Monitoring

Field projects that monitor effectiveness of restoration projects; salmonid abundance; biological or physical indices; salmonid harvests; or, water quality/quantity (flow). Monitoring projects collect fish abundance or habitat condition data usually over multiple years to assess trends or to assess effectiveness of restoration actions.

Acres of watershed area monitored (E.1.b.2)	180.0	180.0
Number of acres of watershed area monitored by this project worksite (to nearest 0.1 acre). If there is more than one type of monitoring and the monitoring types overlap area, report total area for all types (i.e., do not double-count areas of overlap).		
Record Name Of Strategy/Program (E.1.d)		
Record name of strategy/program (Author, date, title, source, source address. Endnote citation format).		
Stream Miles Monitored (E.1.b.1)	25.00	25.00
Number of miles of stream monitored for habitat condition, water quality, or salmonid abundance and productivity at this project worksite(to nearest 0.01 mile).		
<b>Salmonid smolt or fry monitoring (E.1.c.2)</b>		
Salmonid smolt or fry monitoring.		
Total cost for Salmonid smolt or fry monitoring	\$20,500	<i>Not Collected at Closure</i>
Enter the cost (to the nearest dollar) of this work type, as close as you can reasonably get it.		
# miles (to nearest 0.01 mile) monitored for Salmonid smolt or fry (E.1.c.2.a)	25.00	25.00
# miles (to nearest 0.01 mile) of stream monitored for salmonid smolt or fry.		

## Overall Metrics

	Current Agreement	Final
<b>Completion Date</b>		
Projected date of completion	6/30/2017	12/31/2018
Estimated date the scope of work will be completed.		
<b>Project Goals</b>		
Goals, purpose, and expected benefits (A.17)		
Short description of the goals and purpose of the project and how it is expected to benefit salmonids or salmonid habitat.		

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Monitoring Costs

Date of Last Released Billing 12/26/2018

Proposed Final

Worksite: Asotin worksite (#1)

	SPLIT OUT FINAL TOTAL BELOW	\$20,500.00	\$180,899.44
Monitoring Costs (E.1.a)		\$20,500	\$180,899
	Difference		\$0

Billed Summary

Date of Last Released Billing 12/26/2018

Category	Project Agreement		Totals To Date		
	RCO	Total	Expended	Non Reimbursable	Total Billed
Non-Capital					
Non-Capital Costs			180,899.44		180,899.44
Non-Capital Total	196,500.00	196,500.00	180,899.44		180,899.44
Total	196,500.00	196,500.00	180,899.44		180,899.44

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### Sponsor Match

	Proposed	Final
<b>Project Funding</b>		
PCSRF Federal Funds (A.10)		
State Funds (A.11)		
Other Federal Funding	\$196,500.00	\$176,850.00
Retainage - RCO amount retained		\$4,049.44
<b>Sponsor Match: Monetary Funding</b>		
Amount of other monetary funding (A.12)	\$0	\$0
Source of other monetary funding (A.12.a)		
Timing of other monetary funding		<i>Not Collected at Closure</i>
<b>Sponsor Match: Donated Un-paid Labor (volunteers)</b>		
Value of Donated Unpaid Labor (Volunteers) (A.13.a.2)	\$0	\$0
Source of Donated Un-paid labor contributions (A.13.a.4)		
Number of hours volunteers contributed to the project (A.13.a.1)	<i>Collected at Closure</i>	0
Describe how the value of the volunteers was determined (A.13.a.3)	<i>Collected at Closure</i>	
<b>Sponsor Match: Donated Paid Labor</b>		
Value of Donated Paid Labor (A.13.b.1)	\$0	\$0
Source of Donated Paid Contributions (A.13.b.2)		
<b>Sponsor Match: Other In-kind Contributions</b>		
Value of Other In-Kind Contributions (A.13.c.1)	\$0	\$0
Source of Other In-Kind Contributions (A.13.c.3)		
Description of other In-Kind contributions (A.13.c.2)		
Amount Total	\$196,500	\$180,899
Total Billed		\$180,899
Difference		\$0

### Attachments

PHOTOS (JPG, GIF)

FILES AND PHOTOS

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
No attachments match filter criteria						

## Final Report, Project 17-1073

### Certify & Submit

#### Status History

Report Status	Date	User	Note
Accepted	01/03/2019	Keith Dublanica	Thank you for submitting this Final Report and concluding a successful project... -kd
Submitted	12/31/2018	Ethan Crawford	Thank you for your support!
Draft	11/27/2018	Ethan Crawford	