EPA Puget Sound Financial and Ecosystem Accounting Tracking System (FEATS)

v. September 2012 for Lead Organization Subawardees

Photo by Rebecca Pirtle, Editor, Kingston Community News (Doe-Kag-Wats Estuary of the Suquamish Tribe)

PROJECT INFORMATION

1. Federal Grant Number	PA-00J322-01	***2a. Reporting Period Start Date:**	4/1/2016	***2b. Reporting Period End Date:**	9/30/2016

3. Subaward Organization (Name and complete address including zip code) Name: Sauk-Suiattle Indian Tribe Address 1: 5318 Chief Brown Lane Address 2: City: Darrington State: WA Zip Code: 98241-	**4. Subaward Project Manager Contact Information** Name: Scott Morris Phone: (360) 436-347 Ext: Fax: (360) 436-647 Email: smorris@sauk-suiattle.com

5a. EPA Program **LO - Tribal**	**5b. Subaward Project Title and Contract No.** Sauk-Suiattle Knotweed Eradication and Sediment Research / 13EPA PSP426	***6. Collaborating Organizations/Partners** Washington Conservation Corps Skagit Fisheries Enhancement Group U.S. Geological Survey Northwest Indian Fisheries Commission

<u>Subawardee Submission Instructions</u>: LO fills in the white boxes. Subawardee fills in the yellow boxes (boxes with asterisks). Refer to guidance document for how to fill out the boxes. After filling out the yellow boxes, save and e-mail it to your LO Project Manager for approval. LO will roll up the information and submit to EPA for approval.	**LO Project Manager:** Dani Madrone **LO:** Northwest Indian Fisheries Commission **Phone:** 360.528.4318 **email:** dmadrone@nwifc.org **LO Program Coordinator:** **LO:** **Phone:** **email:** **EPA Project Officer:** Lisa Chang	***7a. Name/Title of Person Submitting Report**	Scott Morris Water Quality Coordinator
		***7b. Date Report Submitted**	10/31/2016

FUNDING/COST ANALYSIS

8a. Total Assistance Amount Awarded:	$166,100.00	**8b. Funding Year (Federal Fiscal Year Funds Appropriated)**	FY 2013 ---------- ---------- ----------	***9. Amount Spent To-Date:**	$166,100.00	***10. Amount Reimbursed To-Date:**	$69,331.00
11. Match Amount Required	$0.00	***12. Total Match Amount Spent and Documented To-Date:**		***13. Have you experienced any cost overruns or high unit costs?**	No. One budgeted equipment required an unbudgeted battery, but was offset by cheaper training (see explanation in budget below.)		
***14. What issues or questions do you need the LO Project Manager to respond to?**	Financial reporting is back on track after a transition in Sauk-Suiattle Finance Dept. staff last year. A spreadsheet was provided last reporting period to the LO Project Manager showing how previous reporting errors were reconciled with actual expenditures.						

BUDGET UPDATE

	15a. APPROVED BUDGET			***15b. SPENT TO-DATE**		
	LO (EPA) Funds	MATCH	TOTAL	LO (EPA) Funds	MATCH	TOTAL
Personnel	$31,049.00	$0.00	$31,049.00	$31,049.00		$31,049.00
Fringe Benefits	$9,798.00	$0.00	$9,798.00	$9,798.00		$9,798.00
Travel	$0.00	$0.00	$ 0.00	$43.20		$ 43.20
Equipment	$9,600.00	$0.00	$9,600.00	$10,659.00		$10,659.00
Supplies	$2,759.00	$0.00	$2,759.00	$3,157.57		$3,157.57
Contracts	$93,715.00	$0.00	$93,715.00	$93,193.80		$93,193.80
Other	$250.00	$0.00	$ 250.00	$250.00		$ 250.00
TOTAL DIRECT CHARGES	$147,171.00	$0.00	$147,171.00	$148,150.57		$148,150.57
Indirect Charges	$18,929.00	$0.00	$18,929.00	$17,949.43		$17,949.43
TOTAL	$166,100.00	$0.00	$166,100.00	$166,100.00		$166,100.00
***Explain Any Discrepancies:**	Equipment expenditure exceeded budget because of the need for a lithium battery to power the electrofisher unit. Original budget neglected to include the battery. This was offset by the accompanying electrofishing training expenditure that ended up less than budgeted. Training was budgeted at $6,450, but only cost $4,949.23. Also, note that $6,700 was inadvertently placed in the "Other" category in Section 15a., but the approved workplan budget calls for only $250. It appears that the electrofishing training was added to the "Other" category by					

	mistake. The training should have been added to the "Contracts" category, which would have made that budgeted amount $93,715. I have discussed this with Tiffany Waters. NOTE: Dani Madrone has corrected the budget in 15a to reflect the approved budget.

ECOSYSTEM GOALS ADDRESSED

16a. Primary Goal	Healthy Habitat
16b. Additional Goals	Healthy Species ---------- ---------- ---------- ---------- ----------

DIRECT THREATS ADDRESSED

17a. Primary Threat	Invasive Species - Terrestrial
17b. Secondary Threat(s)	Climate Change ---------- ----------

LINKAGES TO PUGET SOUND ACTION AGENDA (Version Adopted August 2012)

18a. Primary Strategic Initiative	**Tribal Habitat Priorities**

18b. Sub-Strategies Employed	**A.1 A.5 A.6 C.4 B.5 D.5**

18c. Near-Term Actions Supported	

LINKAGES TO EPA PUGET SOUND PERFORMANCE MEASURES

19. Measure(s)	Habitat Restored/Protected ---------- ----------

LINKAGES TO PUGET SOUND DASHBOARD INDICATORS

20a. Primary Indicator	Floodplains
20b. Secondary Indicators	Freshwater Quality Wild Chinook Salmon ----------

PROJECT LOCATION

21a. Latitude	48.311740	**21b. Longitude**	-121.544620
21c. Hydrologic Unit Code	17110006 - Sauk	----------	----------

21d. Action Area	Whidbey	----------	----------

MEASURES OF SUCCESS (Key Outputs)

*22a. Description (e.g., "shellfish beds reopened")	*22b. Unit (e.g., "acres")	*22c. Project Target ("number")	*22d. Project Measure To-Date ("number")
Area surveyed for knotweed in Sauk and Suiattle watersheds (knotweed summer only)	acres	4500	4500
Percentage of knotweed patches in survey area determined "dead" (ie: no resurgence)	percent	60	68
Suspended sediment concentrations (SSC) elaborated at three Sauk River sites	SSC concentrations	3	3
Total area of land cleared of knotweed since beginning of project	square feet	45000	215784

PROJECT MILESTONES

Instructions: In the tables below, please explain your progress toward meeting agreed outputs for the period, **reasons for slippages**, and any additional information including **reflections, lessons learned, and/or thoughtful analysis**. When appropriate, include analysis and information of **cost overruns or high unit costs**, and changes to work plan or budget not requiring prior approval from EPA. We encourage photo documentation - please attach to the report as a separate document.

23a. Subaward Work Plan Component/Task: Sauk-Suiattle Knotweed Eradication

23b. 2012 Action Agenda Near-Term Action(s) Supported:

***23c. Estimated Costs:**
Actual Costs to Date:
(If required to report – contact your Project Manager)

23d. Sub-Task No.	23e. Sub-Task Description (include due date)	*23f. Date of Status	*23g. Status	23h. Outputs/Deliverables	*23i. Remarks
1.1	GPS survey knotweed in the Sauk River floodplain, by raft	9/30/14	COMPLETED	7 days of knotweed surveyed from RM 13 to RM 0; field data	WCC crew surveyed the lower 13 miles of the Sauk River, including all side channels.

1.2	Complete additional knotweed surveys	9/30/14	COMPLETED	3 days of additional knotweed surveys; field data	WCC crew surveyed land owned by Sierra Pacific, The Nature Conservancy, Seattle City Light, Grandy Lakes, DNR and private landowners in and adjacent to the riparian areas of the lower Sauk River and tributaries.
1.3	Spray knotweed in the Sauk River floodplain, by raft	9/30/14	COMPLETED	4 days spent spraying knotweed from RM 13 to RM 0; field data	WCC crew sprayed knotweed with either glyphosate or imazapyr in the lower 13 miles of the Sauk River floodplain.
1.4	Conduct landowner outreach and spray knotweed in and near the Town of Darrington, by vehicle and foot	9/30/14	COMPLETED	10 days spent spraying and conducting outreach in Darrington; field data	This outreach has continued to spread now that the program is established, and we have located a few large patches previously unknown to us because they were not visible from public access roads.
1.5	Conduct landowner outreach, GPS survey, and spray knotweed in the Sauk Prairie area, by vehicle and foot	9/30/14	COMPLETED	10 days spent spraying, conducting GPS survey, and conducting outreach in Sauk prairie area; field data	Landowners on Sauk Prairie are more difficult for the Tribe to work with. In such cases we have relied on our counterparts with county government to interact with landowners. We do have a few parcels where we are able to spray.
1.6	Treat existing knotweed patch on WDNR land on Sauk Prairie	9/30/14	COMPLETED	1 day spent treating knotweed patch; field data; Annual Skagit CWMA report detailing results (# of knotweed patches identified, # of acres sprayed, pesticide used, GIS data)	This patch indicated an unexpected resurgence, most likely caused by brushcutters. We have been working with DNR to try to avoid brushcutting this spot so we can spray it.
1.7	Collaborate with SFEG, WCC, Snohomish County, and Skagit CWMA to review and assess previous field season and data	5/30/15	COMPLETED	Meeting minutes; field photos; data summaries	Colin Wahl was hired and began work Dec. 1, 2014 to replace Andrew McDonnell as the Field Coordinator. Since then, he worked with the knotweed data, compiling it from the GIS tables and sending it to SFEG to be included in that group's annual report.

23a. Subaward Work Plan Component/Task: Research How Sediment is Impacting Sauk and Suiattle Fish Runs

23b. 2012 Action Agenda Near-Term Action(s) Supported:

***23c. Estimated Costs:**
Actual Costs to Date:
(If required to report – contact your Project Manager)

23d. Sub-Task No.	23e. Sub-Task Description (include due date)	*23f. Date of Status	*23g. Status	23h. Outputs/Deliverables	*23i. Remarks
2.1	Develop a QAPP Addendum to update management, personnel, timelines, goals and protocols, as necessary.	9/11/2014	COMPLETED	Updated QAPP, if applicable	QAPP was approved 9/11/2014.
2.2	USGS and SSIT crews will maintain sensors measuring turbidity and temperature at three USGS river gages on the Sauk, including the new site established by this project, located at the Sauk Prairie Road bridge over the Sauk in Darrington. An automated sediment sampler will be installed at the downstream-most gage. Measurements will also be taken from the Suiattle River, near the Boundary Bridge on USFS 25 Road.	9/30/14	COMPLETED	Continuous turbidity and temperature data from four sites on the Sauk River at the following locations: 1) upstream of the White Chuck River confluence and therefore free of Glacier Peak's fluvial sediment influence; 2) downstream of the White Chuck River confluence and thus partially influenced by suspended-sediment load from Glacier Peak; 3) downstream of the Suiattle River confluence, thereby containing both White Chuck River and Suiattle River suspended sediment contributions from Glacier Peak; and 4) River Mile 12 on the Suiattle River, and approximately at River	Sensors have continued to collect data at all sites, with minimal problems.

				Mile 6 on the White Chuck River	
2.3	SSIT and USGS crews will conduct weekly field inspections to verify sensor measurements, calibrate and maintain the field sensors, with technical support from USGS.	9/30/14	COMPLETED	Field notes, audit logs.	SSIT crews have continued weekly visits to all sites, identifying occasional problems and finding solutions to minimize data collecting interruptions.
2.4	SSIT crews will use portable instruments to collect samples and discrete measurements of various water quality parameters complementary to the fixed station sensors, as determined by USGS.	9/30/14	COMPLETED	Field notes, data, lab reports.	Discrete measurements of water quality data continues to be collected during weekly site visits.
2.5	Sauk-Suiattle and USGS crews will continue to collect six to eight suspended-sediment samples per year at all five sites using either the Equal-Discharge Increment (EDI) or Equal-Width Increment (EWI) methods.	9/30/14	COMPLETED	Channel cross-section samples; all suspended sediment samples analyzed for concentration and the 'percent fines' at the USGS Cascade Volcano Observatory sediment lab; Subset of samples analyzed for density at the CVO and an additional subset of samples used for mineralogical analysis using X-ray diffraction or similar methods; GIS landslide inventory to assess sediment methods; Daily record of suspended-sediment load at each gage.	Turbidities have continued to be monitored via the Internet at USGS gages, and crews have been sent out to collect samples during high turbidity events, both storm-driven or late-summer snowmelt.
2.6	USGS will compile and analyze data, and prepare a web-based, peer-reviewed report, by the end of Year 3 to summarize the findings. USGS will prepare a more detailed “Scientific Investigations Report” (SIR) by the end of the five-year work plan (or sometime sooner if funding ends	9/30/14	COMPLETED	Web-based, peer-reviewed report that provides first interpretation of the sediment data and its potential significance for water quality and impact on fish; SIR that provides year-to-year variability in sediment	The web-based report is complete and can be found at this link: http://wa.water.usgs.gov/pubs/misc/sauk/ssc/

	prematurely and at least three years of data are collected.)			loads, timing of sediment pulses and possibly an inference of trends.	

23a. Subaward Work Plan Component/Task: Sauk Stream Habitat and Fish Assemblage Assessment

23b. 2012 Action Agenda Near-Term Action(s) Supported:

***23c. Estimated Costs:**
Actual Costs to Date:
(If required to report – contact your Project Manager)

23d. Sub-Task No.	23e. Sub-Task Description (include due date)	*23f. Date of Status	*23g. Status	23h. Outputs/Deliverables	*23i. Remarks
3.1	Incorporate new fish surveys into QAPP addendum	9/30/14	COMPLETED	Approved QAPP	QAPP addendum was completed Aug. 12, sent to NWIFC and EPA. Comments were received from EPA in mid-August and revisions were made by Aug. 27.
3.2	Conduct fish habitat surveys on selected streams on Sauk Prairie	9/30/16	COMPLETED	Habitat surveys completed; Baseline habitat datasets	Habitat surveys were conducted on Dan Creek in fall of 2015. Surveys on Gravel Creek and Suiattle Slough were completed in summer 2016. Flow and temperature readings were also measured during the habitat surveys.
3.3	Conduct fish distribution surveys on selected streams on Sauk Prairie	9/30/16	COMPLETED	Tribal natural resource staff trained in operating backpack electrofisher; Tribal natural resource staff trained in juvenile fish identification; Fish distribution surveys completed; Baseline fish assemblage datasets	Electrofishing surveys were delayed in 2014 after the loss of our original field coordinator, who resigned in June 2014. The electrofishing training of all SSIT staff occurred during 2015. Surveys were conducted during 2016 on Dan Creek and Gravel Creek. Time ran out in the summer of 2016 before electrofishing surveys could be conducted on Suiattle Slough, so that survey will be picked up in 2017 with separate funding.

3.4	Develop technical report and submit for NWIFC GIS database entry	9/30/16	COMPLETED	Technical report; GIS database entry	Grant Kirby completed the technical report. Coho and Chinook salmon fry were collected in the transect reaches. One trout juvenile was also captured and assumed to be a steelhead. All three species spawn in Dan Creek. Gravel Creek had a sparse distribution of Coho salmon fry and cutthroat trout juveniles utilizing the stream.

CHALLENGES AND SOLUTIONS (specific to reporting period)

*24a. Task No., Sub-Task No.	*24b. Challenge	*24c. Solution
3.3 fish distribution surveys on Sauk Prairie.	Low flows in summer 2015 caused us to delay fish distribution surveys until better flows return, so that juvenile fish are not harmed by warm water temperatures. When flows returned, however, they came very late and all at once in successive storm events, such that shocking for juvenile fish would likely harm adult spawners. The work window was too tight, practically nonexistent, this fall.	Surveys will begin when flow and temperature conditions permit safe operation for fish. Salary budgeted for these activities was modest and will have to be augmented by in-kind contributions, but is still planned for the next available safe opportunity.

HIGHLIGHTS/LESSONS LEARNED/REFLECTIONS

***25.**

In retrospect, we should have had a better contingency plan for working around the lack of a field coordinator when the position was left open in 2014. That said, most of the work was shifted to other staff and performed on time for this grant.