WASHINGTON STATE
Recreation and
Conservation Office

# Final Report

## Project #13-1001, Snake River - Asotin IMW PSMFC 2013

Submitted by Mark Jarasitis on 12/16/2014 Accepted by Mark Jarasitis on 12/16/2014

## CONTACTS


**Primary Sponsor:** Eco Logical Research Inc.

**Lead Entity:** Snake River Salmon Rec Bd LE

**Managing Agency:** Rec. and Conserv. Office

**Project Contact:** Stephen Bennett
bennett.ecological@gmail.com

**Alt Project Contact:** Nicolaas Bouwes
nbouwes@gmail.com

**RCO Grant Manager:** Keith Dublanica
Keith.Dublanica@rco.wa.gov


## DESCRIPTION OF THE COMPLETED PROJECT

**Project Start Date:** 11/30/2012 **FundingEnd Date:** 09/30/2015 **RCO Closure Date:**

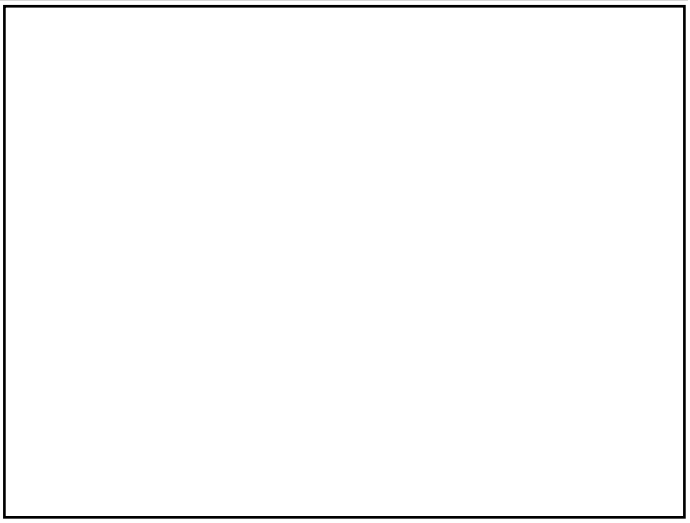
This project is a continuation of the Asotin Creek multi-year IMW project. The project is an Intensively Monitoring Watershed monitoring project. The project focuses on three tributaries to the Asotin Creek in Southwest Washington. The tributaries are: Charley Creek, North Fork Asotin Creek, and South Fork Asotin Creek. The purpose of the project is to link salmon and steelhead responses to specific mechanisms related to habitat restoration. The fundamental approach is to treat restoration as an experiment and concentrate a large restoration effort in order to increase the likelihood of detecting a population increase. This type of project will increase our understanding of wh at restoration activities are most effective, demonstrate how chnages in habitat influence survivial of various life stages of salmon and steelhead, determine what mangitude of restoraiton is required to cause a significant population response, and ultimately provide information to better evaluate the efficacy of habitat restoration. The restoraiton effort is focused on summer run steelhead habitat. The funds for this grant award will focus on continuing the IMW effort in the Asotin. This phase will include:

1) Continue baseline monitoring of 12 permanent sites for fish abundance and habitat condition,
2) Implement restoration treatment plan based on approval of the plan by the Regional Technical Team,
3) Monitoring a wide variety of response variables

## SITE LOCATION

**General Area of Project:** Asotin Creek is a tributary of the Snake River, flowing through the town of Asotin in SE Washington. The IMW is located in the upper Asotin watershed, including Charlie Creek, North Fork Asotin

**Waterbodies:**



| | |
|---|---|
| **Cong District 2012:** | 05 |
| **County:** | Garfield |
| **Leg District 2012:** | 09 |
| **Salmon Recov Reg 05:** | Snake River |
| **WAU:** | Tam Tam |
| **WRIA:** | Middle Snake |

**Sponsor Clarifications:**

Sponsor verified the above information is correct and complete.

## PROJECT NARRATIVE

Project continues with new agreement. This started with Walla Walla CC, then transferred to Eco Logical Research Inc.

## AMENDMENTS

| # | Type | Applied Date | Description |
|---|---|---|---|
| 6 | Time Extension | 06/24/2014 | The project period of 11/30/2012 to 09/30/2014 is extended to allow the contracting party until 09/30/2015 to complete the project. |
| 4 | Cost Change | 01/28/2014 | additional funds added from PSFMC for FY 2014 for the continuation of the IMWs in the Asotin (Snake Region) |
| 3 | Time Extension | 01/14/2014 | The project period of 11/30/2012 to 12/31/2013 is extended to allow the contracting party until 09/30/2014 to complete the project. |
| 2 | Project Sponsor Change | 11/08/2013 | Existing contractor:<br>Walla Walla Community College<br>500 Tausick Way<br>Walla Walla, WA 99362<br>509-524-4792<br><br>Change to new contractor:<br>Eco Logical Research, Inc.<br>PO Box 706<br>Providence, UT 84332 |
| 1 | Time Extension | 07/22/2013 | The project period of 11/30/2012 to 09/30/2013 is extended to allow the contracting party until 12/31/2013 to complete the project. |

## OVERALL PROJECT COSTS

| Funding Formula: | Requested | | Original | | Final | |
|---|---|---|---|---|---|---|
| Pacific States Projects: | $219,648.00 | (100%) | $219,648.00 | (100%) | $422,424.00 | (100%) |
| **Total:** | $219,648.00 | (100%) | $219,648.00 | (100%) | $422,424.00 | (100%) |

| | | | |
|---|---|---|---|
| **Paid To Date:** | $422,424.00 | | **Last Released Billing:** 10/06/2014 |
| **Remaining RCO Funds:** | $0.00 | | **Pending Billing:** No |
| **Advance Balance:** | $0.00 | **Match Bank:** $0.00 | **Number of Billings:** 9 |
| **Admin Limit:** | $0.00 | **Admin Spent:** $0.00 | |
| **A&E Limit:** | $0.00 | **A&E Spent:** $0.00 | |

| Billed Cost Summary: | Original Agreement | Expended | Non-Reimbursable | Total Billed |
|---|---|---|---|---|
| Non-Capital | | | | |
| Non-Capital Costs | | $421,061.67 | | $421,061.67 |
| Non-Capital Total | $422,424.00 | $421,061.67 | | $421,061.67 |
| Total | $422,424.00 | $421,061.67 | | $421,061.67 |

| Project Cost Metrics: | Original Agreement | Final |
|---|---|---|
| PCSRF Federal Funds: | $422,424.00 | $422,424.00 |
| State Funds: | | |
| Other Federal Funding: | | |
| Pending Billing - RCO Share Approved: | | |
| Retainage - RCO amount retained: | | $0.00 |
| Amount of other monetary funding: | $0.00 | $986.00 |
| Project identifier for the other monetary funding: | None | none |
| Source of other monetary funding: | None | none |
| Value of Donated Unpaid Labor (Volunteers): | $0.00 | $0.00 |
| Source of Donated Un-paid labor contributions: | N/A | n/a |
| Number of hours volunteers contributed to the project: | | 0 |
| Describe how the value of the volunteers was determined: | | n/a |
| Value of Donated Paid Labor: | $0.00 | $0.00 |
| Source of Donated Paid Contributions: | | n/a |
| Value of Other In-Kind Contributions: | $0.00 | $0.00 |
| Source of Other In-Kind Contributions: | | n/a |
| Description of other In-Kind contributions: | N/A | n/a |

## PROJECT METRICS

| | Original Agreement | Final |
|---|---|---|
| **Completion Date** | | |
| Projected date of completion: | 09/30/2013 | 09/30/2014 |
| **Project Goals** | | |
| Goals, purpose, and expected benefits: | The fundamental approach of IMW projects is to treat restoration as an experiment and concentrate a large restoration effort in order to increase the likelihood of detecting a population increase (Fullerton et al., Roni et al. 2010).<br><br>The following outline lists how the project will implement the experimental and monitoring design in the Asotin Creek sub-basin The goals and purpose of this study in Asotin Creek and related basin is to:<br>1. Project Management and Coordination<br>o Technical and Stakeholder Coordination<br>o Landowner and Community Outreach<br>o Budget and Equipment Management<br>2. Implementation Asotin IMW Design<br>o Experimental Design<br>o Monitoring Design<br>o Restoration Design<br>3. Data Management, Reporting and Deliverables<br>o Data Management<br>o Mapping and Spatial Analysis<br>o Data Analysis and Synthesis<br><br>The goal of these IMW projects is to link salmon and steelhead population responses to specific mechanisms related to habitat restoration. These initiatives will increase our understanding of what restoration activities are the most effective, demonstrate how changes in habitat influence survival of various life stages of salmon and steelhead, determine what magnitude of restoration is required to cause a significant population response, and ultimately provide information to better evaluate the efficacy of habitat restoration as a means of salmon and steelhead conservation and enhancement (Bayley 2002, PNAMP 200 | The fundamental approach of IMW projects is to treat restoration as an experiment and concentrate a large restoration effort in order to increase the likelihood of detecting a population increase (Fullerton et al., Roni et al. 2010).<br><br>The following outline lists how the project will implement the experimental and monitoring design in the Asotin Creek sub-basin The goals and purpose of this study in Asotin Creek and related basin is to:<br>1. Project Management and Coordination<br>o Technical and Stakeholder Coordination<br>o Landowner and Community Outreach<br>o Budget and Equipment Management<br>2. Implementation Asotin IMW Design<br>o Experimental Design<br>o Monitoring Design<br>o Restoration Design<br>3. Data Management, Reporting and Deliverables<br>o Data Management<br>o Mapping and Spatial Analysis<br>o Data Analysis and Synthesis<br><br>The goal of these IMW projects is to link salmon and steelhead population responses to specific mechanisms related to habitat restoration. These initiatives will increase our understanding of what restoration activities are the most effective, demonstrate how changes in habitat influence survival of various life stages of salmon and steelhead, determine what magnitude of restoration is required to cause a significant population response, and ultimately provide information to better evaluate the efficacy of habitat restoration as a means of salmon and steelhead conservation and enhancement (Bayley 2002, PNAMP 200 |

## WORKSITE #1: Asotin Creek 2012

**Worksite Description:** Asotin Creek is a tributary of the Snake River, flowing through the town of Asotin in SE Washington. The IMW is located in the upper Asotin watershed, including Charlie Creek, North Fork Asotin Creek, and South Fork Asotin Creek.

**Driving Directions:** From Lewiston, drive south on SR 129 to Asotin Creek

**Coordinates for Worksite Directions - Latitude:** 0.00 **Longitude:** 0.00

**Sponsor Clarifications:**

Sponsor verified the above information is correct and complete.

## WORKSITE #1 COSTS

| Worksite Billed Cost: | Estimated | Expended | Non-Reimbursable | Total Billed |
|---|---|---|---|---|
| Equipment | | $2,348.07 | | $2,348.07 |
| Non-Capital Costs | $219,648.00 | $421,061.67 | | $421,061.67 |
| Worksite Total | $219,648.00 | $423,409.74 | | $423,409.74 |

| Worksite Costs by Category: | Original Agreement | Final |
|---|---|---|
| Monitoring funding: | $219,648.00 | $423,410.00 |

## WORKSITE #1 METRICS

| | Original Agreement | Final |
|---|---|---|
| Targeted salmonid ESU/DPS: | Steelhead-Snake River Basin DPS | Steelhead-Snake River Basin DPS |
| Targeted species (non-ESU species): | None | None |
| Number of Reports Prepared: | 4 | 4 |
| Name Of Report: | IMW Project Implementation in the Asotin Watershed (Progress) and FINAL | IMW Project Implementation in the Asotin Watershed (Progress) and FINAL |
| Project Identified in a Plan or Watershed Assessment: | Snake River Regional Recovery Plan | Snake River Regional Recovery Plan |
| Number of Cooperating Organizations: | 5 | 5 |
| Name Of Cooperating Organizations: | Snake River Region, Walla Walla Community College, RTT | Snake River Region, Walla Walla Community College, RTT |
| Complement Habitat Restoration Project: | n/a | n/a |
| **Monitoring** | | |
| Acres of watershed area monitored: | 1.0 | 1.0 |
| Record Name Of Strategy/Program : | n/a | n/a |
| Stream Miles Monitored: | 0.00 | 0.00 |
| **Intensively monitored watershed** | | |
| Total cost for Intensively monitored watershed: | | |
| # acres (to nearest 0.1 acre) Intensively monitored watershed: | 0.0 | 0.0 |
| # miles (to nearest 0.01 mile) Intensively monitored watershed: | 0.00 | 0.00 |

## SPONSOR CERTIFICATION

[X] I certify that this project has been completed in accordance with the project agreement.

[X] I certify that, to the best of my knowledge, the information in the Final Report is true and correct.

Submitted by Mark Jarasitis on 12/16/2014