Small Grant Program
Application
2017-2019

Application Processing Information (to be completed by the Small Grant Team Contact):
Application #: _____
Date Received: _____
Date Acted On: _____
____ Recommended ____ Denied
SGT Contact
Signature: _____

I. General Information

OWEB Funds Requested (round to nearest dollar) **$**3,170.00 **Total Project Cost $** 6,120.00

Name of Project (five words or fewer) Osmin Ranch Beaver Dam Analogs

Project Location (if more than one, include location/landowner information on each map)
This project occurs at (check one): X A single site ____ Multiple sites

Insert Watershed(s): Willow

Insert County or Counties: Morrow

Insert Township, Range, Section(s): T 3S, R 26E sections 2, 11& 12

Insert Longitude, Latitude: -119.535276, 45.326817

Insert Subbasin(s): 1707010401 Upper Willow Creek

Insert River or Creek Name: Balm Fork Creek

Insert River Mile (if applicable)

1. Have you previously submitted an application to OWEB, either through the regular or small grant program, for this project, or one similar to it on the same property? ____Yes Grant #_____ _x_ No
If yes, explain _____

2. Does this application propose a grant for a property in which OWEB previously invested funds for purchase of fee title or a conservation easement; or is OWEB currently considering an acquisition grant for this property?
____ Yes Grant #_____ _X_ No

If yes, explain _____

II. Contact Information

Applicant Org.: Morrow SWCD	Tax ID: 930797719	Contact: Kevin Payne
Mailing Address: PO Box 127 Heppner, OR		Zip: 97836
Phone: 541-676-5452	Email: kevin.payne@or.nacdnet.net	

Landowner(s): Al Osmin		
Landowner Address: 60355 Balm Fork Rd. Heppner, OR		Zip: 97836
Phone: 541-676-9707	Email:	

Project Manager for the Grantee: Kevin Payne		
Project Manager Address: PO Box 127 Heppner, OR		Zip: 97836
Phone: 541-676-5452 x111	Email: kevin.payne@or.nacdnet.net	

Fiscal Agent Org.: Morrow SWCD	Tax ID: 930797719	Contact: Janet Greenup
Fiscal Agent Address: PO Box 127 Heppner, OR		Zip: 97836
Phone: 541-676-5452 x109	Email: swcdmanager@centurytel.net	

Technical Contact: Kevin Payne	Phone: 541-676-5452 x111	Email: kevin.payne@or.nacdnet.net

III. Project Information

Priority Watershed Concern: the project will address — Check *One* Only.

x Instream Process & Function	____ Riparian Process & Function	____ Urban Impact Reduction
____ Wetland Process & Function	____ Road Impact Reduction	____ Upland Process & Function
____ Fish Passage	____ Water Quantity & Quality/ Irrigation Efficiency	

Small Grant Team Priority Project Type(s) addressed by the project (list specific eligible project type)**:**

Instream process and function.

1-a. Is the project consistent with the local watershed assessment or action plan?

X Yes Name primary assessment/plan Umatilla/Morrow Subbasin Plan

____ No

____ N/A—The watershed does not yet have an assessment or action plan

1-b. Is the project consistent with the local Agricultural Water Quality Management Area Plan?

x Yes ____ No

1-c. Is the project consistent with any developed plan for the property (e.g., local conservation or stewardship)**?**

____ Yes x No

If yes, name the plan(s): ____

2. Describe the current *watershed* PROBLEM(s) you are seeking to address.

This section of Balm Fork Creek is heavily incised. Years of human influence and channel manipulation have entrenched many creeks in the area (Please see photos). Steep banks that confine streams concentrate flows during high water and incised, narrow reaches don't sufficiently reduce stream velocities to allow for sediment deposition and aggradation. Without adequate sediment deposition, riparian vegetation can't gain a foothold and the water table can't elevate. There is a complete disconnect from the stream to the floodplain as well. These sections of stream also experience low and often intermittent flows during the summer months. These conditions contribute to high water temps, lack of habitat quantity and complexity, and reduced riparian vegetation.

3. Describe the SOLUTION(s) you are proposing to address the current problem(s). Attach a site map, color photo(s), and (if applicable) preliminary project drawings or designs.

Beaver Dam Analogs (BDA) will be installed to decrease the rate at which surface flow travels through the system and increase water capture capacity. This slowing of water release should allow for sediment deposition and an elevated water table. Ponding behind BDAs will provide deep pool or pond habitat and increase the duration and extent of surface flow during critical low flow periods. This inundation should also contribute to recharge of shallow alluvial aquifers and increase surface to groundwater connectivity. The elevated water table coupled with more frequent innundation should enhance the extant of riparian vegetation. Beaver Dam Analogs are temporary structures that last until the pool behind fills with sediment and is colonized by woody vegetation. Please see the attached design packet for more detail.

4. Insurance Information

If applicable, select all the activities that are part of your project (check all that apply). You will be required to submit the DAS Risk Assessment Tool for items 1-5:

☐ 1. Working with hazardous materials (not including materials used in the normal operation of equipment such as hydraulic fluid)

☐ 2. Earth moving work around the footprint of a well

☐ 3. Aerial application of chemicals

☐ 4. Transporting individuals on the water

☐ 5. Removal or alteration of structures that hold back water on land or instream including dams, levees, dikes, tidegates and other water control devices (this does not include temporary diversion dams used solely to divert water for irrigation)

☐ 6. Applicant's staff or volunteers are working with kids related to the project (DAS Risk assessment tool not required, additional insurance *is* required)

☐ 7. Applicant's staff are applying herbicides or pesticides (DAS Risk assessment tool not required, additional insurance *is* required

OWEB considers these projects to carry a greater risk to the organization, organization's employees, volunteers, and the community. If boxes 1-5 are checked above, the applicant must submit the DAS Risk Assessment, **http://www.oregon.gov/das/Risk/Pages/CntrctrInsReq.aspx**, with this application. Additional information regarding the insurance policy and requirements can be found here: **http://www.oregon.gov/OWEB/GRANTS/docs/insurance/Insurance-Requirements.pdf**.

5. Technical Guidance Source (check at least one and identify the Practice Code, or page and paragraph).

____ NRCS Field Office Technical Guide Practice Code _____	____ Guide to Placing Large Wood in Streams Page # / Para _____
____ Oregon Road/Stream Crossing Restoration Guide Page # / Para _____	____ Forest Practices Tech Note #4 Page # / Para _____
____ Nonpoint Source Pollution Control Guidebook Page # / Para _____	____ Forest Practices Tech Note #5 Page # / Para _____
____ Urban Subwatershed Restoration Manual Page # / Para _____	____ Tribal Natural Resource Plans and Water Plans (attach the relevant page or pages)

6. Maintenance and Post-Implementation Monitoring

a) Project maintenance is the responsibility of the landowner. What aspects of the project will be **maintained?** (See application instructions.)

Who will maintain?	What will be maintained?	How will it be maintained?	# of years # of times/year
Landowner	**Beaver Dam Analogs**	**Routine Maintenance**	**around time of install**

b) Post-implementation monitoring including photo points and visual inspection is *required* for small grants (Year-Two Status Report). What (if any) *additional* aspects of the project will be monitored post-implementation? (See application instructions)

Who will monitor?	What will be monitored?	Cite monitoring protocols	# of years # of times/year
Morrow SWCD	**Beaver Dam Analogs**	**NRCS standards & specs.**	**As needed & once at**

		Completion/YR2 reports	**YR2**

7. Who will be responsible for writing the Year-Two Status Report?

Name: Kevin Payne	Org.: Morrow SWCD	
Mailing Address PO Box 127 Heppner, OR		Zip 97836
Phone: 541-676-5452 x111	Email: kevin.payne@or.nacdnet.net	

8. Have the required permits been obtained for the project? ___Yes x No ___ Not Required
If yes, what permits have been issued? (Attach copies) ____
If no, what permits must be obtained and by when? A permit through DSL is not required for these locations due to the streams being non-ESH (please see correspondence supplement) but ODFW requires a Fish Passage Authorization Permit before installation. I have spoken to Greg Apke, ODFW State Fish Passage Lead, and will get him a completed BDA Fish Passage Plan for all sites if project is approved.

9. Is this project required as a condition of a local, state, or federal permit, order, or enforcement action (e.g., a manure storage and management project required by ODA permit)?

____Yes x No

10. Project Partners. Show all anticipated funding sources, and indicate the dollar value for cash or in-kind contributions. Be sure to provide a dollar value for each funding source. If the funding source is providing in-kind contributions, briefly describe the nature of the contribution in the Funding Source Column. In the Amount/Value Column, provide a total dollar amount or value for each funding source.

Funding Source **Name the partner and contribution**	**Cash**	**In-Kind**	**Amount/ Value**
OWEB: BDA installation and materials, admin & reporting	3,170.00		3,170.00
Landowner: BDA Materials and County Land-use Form		2,750.00	2,750.00
Morrow SWCD: Project Management		200.00	200.00
Total Estimated Funds (add all amounts in the far right column)			$6,120.00

The total should equal the total cost of the project on page 1

11. Project Budget (Word). Itemize projected costs for each budget category that apply to your project. A minimum of 25% match is required. See application instructions and additional team conditions for further guidance.

PLEASE NOTE: Budgets may be submitted in either Word or Excel formats. Forms can be found here: **http://www.oregon.gov/OWEB/GRANTS/smgrant_forms.shtml**

Fill in the amounts, rounded to the nearest dollar; please do not include cents.

Expense Category	No. of Units	Unit Cost	OWEB Funds	Match Funds (In-Kind/Cash)	Description--*what will be purchased and by whom/who will perform the work.*
SALARIES, WAGES, AND BENEFITS. Refers to in-house staff/applicant employees for whom payroll taxes are paid. List position titles; include only costs of employees charged to this grant.					
Project Management	8	$25.00	$0	$200.00	Morrow SWCD
		$0	$0	$0	
		SUBTOTAL (1)	**$0**	**$200.00**	
CONTRACTED SERVICES. Labor, supplies, materials and travel to be provided by non-staff for project implementation.					
BDA Materials	9	$400.00	$900.00	$2,700.00	OWEB and Landowner
BDA Installation	9	$200.00	$1,800.00	$0	Contractor
		$0	$0	$0	
		$0	$0	$0	
		$0	$0	$0	
		$0	$0	$0	
		SUBTOTAL (2)	**$2,700.00**	**$2,700.00**	
MATERIALS AND SUPPLIES. Refers to items that are purchased by or invoiced to the applicant, and are "used up" in the course of the project. Costs to OWEB must be directly related to the implementation of this grant.					
		$0	$0	$0	
		$0	$0	$0	
		$0	$0	$0	
		SUBTOTAL (3)	**$0**	**$0**	
TRAVEL. Mileage. For current rates go to: http://www.oregon.gov/OWEB/Pages/forms_linked.aspx#					
		$0	$0	$0	
		$0	$0	$0	
		SUBTOTAL (4)	**$0**	**$0**	
OTHER. Land use signature costs, project permit costs, small equipment repair, commercial equipment rental.					
Land-use Form	1	$50.00	$0	$50.00	Through County Planning Dept.
		$0	$0	$0	
		SUBTOTAL (5)	**$0**	**$50.00**	
		MODIFIED TOTAL DIRECT COST (MTDC) (Add Subtotals 1-5)	**$2,700.00**	**$2,950.00**	
INDIRECT COSTS. Not to exceed 10% of Modified Total Direct Costs (MTDC). Compute by multiplying MTDC by 0.10 or less. See the current Budget Categories Definitions document for eligible costs. http://www.oregon.gov/OWEB/Pages/forms_linked.aspx#					
Indirect Costs	Not to exceed 10% of MTDC		$270.00	$0	
POST-GRANT					
Year-Two Status Report			$200.00	$0	(Not to exceed $200)
Post-Project Plant Establishment			$0	$0	(Not to exceed $1,000)
		PROJECT TOTALS	**$3,170.00**	**$2,950.00**	(Not to exceed $15,000 in OWEB funds)

We, the undersigned, attest that to the best of our knowledge the information contained in this application is true, that the proposed project is not required by a state or federal agency directive, and that the project will be completed within 24 months from the date of the team funding recommendation of the application. We understand that the submitted application is a matter of public record.

Also, should funding for this project be awarded we understand:

1) **We may not incur** any project expenses until all designated signatories have signed an OWEB grant agreement,

2) **We will be required to provide** proper accounting of project expenses, and

3) **We will be required to provide** necessary and normal maintenance to sustain the value of the project once it is completed.

By their signatures, the **landowner(s)** attest that they have no plans to sell their property as of the date of this application, are authorized to sign as landowner, and they agree to provide, upon prior request and at a mutually acceptable time, site access to the applicant or representatives of OWEB for a period up to two years following project completion to allow project work to be implemented, monitored, and maintained.

_____

Applicant Date

_____

Landowner Date

_____

Fiscal Agent Date

Attachment Checklist

____ Project location map (Required)

____ Color photographs of site (Required)

____ Site drawings/diagrams (if applicable)

____Juniper Checklist (if applicable)

____ Cooperative agreement, if 2 or more landowners (Optional) **May be submitted in lieu of ALL Landowner signatures on Application ALL Landowners must sign the Grant Agreement**

____ Racial and Ethnic Impact Statement (Required)

____ Restoration Metrics form (Required)

Other materials (as required by team)

Optional Forms At Application Stage

(Required at the time of Request for Release of Funds, see instructions)

____ Irrigation Efficiency

____ Culvert/Stream Crossing

____ Secured Match

____ Land Use

Racial and Ethnic Impact Statement

This form is used for information purposes only and must be included with the grant application.

Chapter 600 of the 2013 Oregon Laws require applicants to include with each grant application a racial and ethnic impact statement. The statement provides information as to the disproportionate or unique impact the proposed policies or programs may have on minority persons[1] in the State of Oregon if the grant is awarded to a corporation or other legal entity other than natural persons.

1. □ The proposed grant project policies or programs could have a disproportionate or unique **positive** impact on the following minority persons:

   Indicate all that apply:
   - ☐ Women
   - ☐ Persons with Disabilities
   - ☐ African-Americans
   - ☐ Hispanics
   - ☐ Asians or Pacific Islanders
   - ☐ American Indians
   - ☐ Alaskan Natives

2. □ The proposed grant project policies or programs could have a disproportionate or unique **negative** impact on the following minority persons:

   Indicate all that apply:
   - ☐ Women
   - ☐ Persons with Disabilities
   - ☐ African-Americans
   - ☐ Hispanics
   - ☐ Asians or Pacific Islanders
   - ☐ American Indians
   - ☐ Alaskan Natives

3. □ The proposed grant project policies or programs **will have no** disproportionate or unique impact on minority persons.

If you checked numbers 1 or 2 above, on a separate sheet of paper, provide the rationale for the existence of policies or programs having a disproportionate or unique impact on minority persons in this state. Further provide evidence of consultation with representative(s) of the affected minority persons.

I HEREBY CERTIFY on this 15th day of August, 2018, the information contained on this form and any attachment is complete and accurate to the best of my knowledge.

_____

Signature
Printed Name: Kevin D. Payne
Title: Natural Resource Specialist

1 "Minority persons" are defined in SB 463 (2013 Regular Session) as women, persons with disabilities (as defined in ORS 174.107), African-Americans, Hispanics, Asians or Pacific Islanders, American Indians and Alaskan Natives.

Restoration Metrics Form

OWEB receives a portion of its funds from the federal government and **is required to report** how its grantees have used both federal and state funds. The information you provide in the following form will be used for federal and state reporting purposes.

Please complete all portions of the form below as they apply to your project and submit all pages (do not exclude any pages). Please provide specific values, do not enter values like "2-3" or "<100". Enter your best approximation of what the project will accomplish.

If you have any questions, please contact Cecilia Noyes, OWEB Federal Reporting Coordinator, at 503-986-0204 (cecilia.noyes@state.or.us) or Ginger Lofftus, OWEB PCSRF Reporting Assistant, at 503-986-5372 (ginger.lofftus@state.or.us)

Section 1. Project Overview

Answer all five questions below, even if you have answered a similar question in a previous section in the grant application.

1. Land Use Setting: CHECK ONE BOX ONLY.

☐ **Urban/Suburban/Exurban** (Projects located within urban growth boundaries or rural residential areas)	☒ **Rural** (Projects located outside urban growth boundaries or rural residential areas.)

2. Dominant Watershed Setting: CHECK ONE BOX ONLY. Example: Your project involves managing erosion in the upland area with some erosion control extended to the riparian area. Because most of the work is to occur in the upland area, you would check only the Upland box below.

☐ **Estuary** (where freshwater meets and mixes with saltwater of ocean tides.)	☐ **Riparian** (adjacent to a water body, within the active floodplain.)
☒ **Instream** (below the ordinary high-water mark or within the active channel — includes fish passage.)	☐ **Upland** (above the floodplain.)
	☐ **Groundwater** (Projects that recharge groundwater or primarily affect the subsurface water table.)
☐ **Wetland** (areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.	

3. Total Acres Treated: .25 **Total Stream Miles Treated:**.25
*(**do not include** upstream stream miles made accessible to fish with passage improvements)*

4. Project Monitoring: ***All OWEB funded restoration projects require post-implementation status reporting including photo point monitoring.*** *Please indicate below:* 1) the location of the monitoring activities relative to the project, including photo point locations, 2) whether effectiveness monitoring is planned, and 3) whether additional monitoring will be conducted for this project.

4.1) Identify the location for the planned monitoring activities relative to the restoration project location. Check as many boxes as apply.

☒ Onsite	☐ Downstream	☐ Upstream	☐ Upslope

4.2) ☐ Effectiveness monitoring will be conducted for this project. Please note that effectiveness monitoring cannot be funded with OWEB Small Grant Funds. To review effectiveness monitoring and post-implementation status reporting definitions click on the link to the OWEB Web site below. http://www.oregon.gov/OWEB/MONITOR/effective_monitoring.shtml

4.3) Will this project conduct monitoring activities **beyond the required post-implementation status reporting and photo point monitoring**?

☐ Yes ☒ No If you answer yes, select the monitoring activities below, if you answer no proceed to Section 2.

Check all proposed monitoring activities

☐ Adult Fish presence/absence/abundance/distribution survey(s)	☐ Spawning surveys
☐ Juvenile Fish presence/absence/abundance/distribution survey(s)	☐ Upland vegetation (Presence/Absence)
☐ Instream Habitat surveys	☐ Water quality
☐ Macroinvertebrates	☐ Water quantity
☐ Noxious weed (Presence/Absence)	☐ Photo Points
☐ Riparian vegetation (Presence/Absence)	☐ Other (explain): _____

Section 2. Project Activities

Provide values for each Project Activity applicable to your application. **Leave blank any Project Activity or metric line that is not appropriate to your application.** All data entered in this form should be what you **plan** to do with the project. Data about **completed** projects will be reported at the end of the project to the Oregon Watershed Restoration Inventory (OWRI). For each activity type where you enter metrics, **estimate** the percentage of the total cost of the project (OWEB and **all** other funding sources, shown in **III. 9.**of this application) that applies to the activity. The sum of all of the activity cost percentages should equal 100%. Please distribute all administrative, project management and other general project costs among the various project activities when estimating percentages.

***Example**:* A project will remove a fish passage barrier, place large boulders instream, and plant a riparian buffer. You would enter the appropriate metrics into the Fish Passage, Instream Habitat, and Riparian Habitat activity sections of this form. Then, estimate the percentage of the total cost of the project for each activity. For instance: 20% towards Fish Passage activities, 25% towards Instream Habitat activities, and 55% towards Riparian Habitat activities.

Fish Screening Projects: Projects that result in the installation or improvement of screening systems that prevent fish from passing into areas that do not support fish survival, for example, into irrigation diversion channels.

Note: OWEB funds cannot be used for fish screening projects

____ % Estimate the percentage of total cost of the project applied to fish screening activities

New Fish Screens Installed

____ # Estimate the number of **new** screens installed (do not count diversions where existing screens are replaced)

____ cfs Estimate the cubic feet per second of flow influenced by **new** screen(s) installed (to nearest 0.01 cfs)

Existing Screens Replaced, repaired or modified

____ # Estimate the number of **existing** screens replaced, repaired or modified

____ cfs Estimate the cubic feet per second of flow influenced by **existing** screen(s) screens (to nearest 0.01 cfs)

Fish Passage Improvement: *Projects that improve fish migration by addressing a migration barrier problem.* Complete sections A-E as they apply to the proposed project. For projects that improve fish passage at road crossings complete both sections A (define the problem) and B (define the treatment). Non-road crossing improvements are reported in sections C and D. Section E should be completed for all fish passage improvement projects. Refer to the application instructions for additional information and examples.

A. Road Crossings – Define *Existing* Fish Passage Problem

1. Culverts hindering fish passage	____ # crossings
2. Bridges hindering fish passage	____ # crossings
3. Fords hindering fish passage	____ # crossings

B. Road Crossings – Define the Fish Passage *Improvements* to be implemented by this project

1. Culverts installed/improved -*Improvements include installing baffles inside culverts or installing/improving engineered bypasses (e.g. weirs) directly below a culvert outlet to improve passage.*	____ # crossings	____ str. mi with improved access*
2. Bridges installed/improved -*Improvements include installing/improving engineered bypasses (e.g. weirs) directly below a bridge crossing to improve passage.*	____ # crossings	____ str. mi with improved access*
3. Fords installed/improved	____ # crossings	____ str. mi with improved access*
4. Road Crossings removed and <u>not</u> replaced	____ # crossings	____ str. mi with improved access*

**Estimate stream miles in the main channel and tributaries made more accessible above the crossing(s) (to nearest 0.01 mile). If a barrier exists upstream, report the length made accessible up to that next upstream barrier.*

C. Fish Passage Barriers – Other than Road Crossings

1. Type(s) of barriers to be treated/removed to improve fish passage.	☐ Diversion Dam ☐ Push-up Dam ☐ Wood or Concrete Dam ☐ Weir (not associated with a road crossing) ☐ Logs ☐ Debris ☐ Boulder/Rock Barrier (not weirs) ☐ Landslide Other (explain) ____
2. ____ # Estimate the total number of **non-road** crossing barriers (listed above) to be removed or altered to improve passage.	

D. Fish Ladders or Engineered Bypasses (not associated with Road Crossings)

1. Fish ladders will be installed/improved	____ # fish ladders to be installed/improved
2. Engineered bypasses will be installed/improved. This includes weirs, rock boulder step pools, and chutes constructed/roughened in bed rock. Do not count engineered bypasses located at a road crossing to improve passage at the crossing. These types of improvements should be identified above in section B as a Road Crossing Fish Passage Improvement.	____ # engineered bypasses to be installed/improved

E. Fish Passage Summary Metrics

1.____ % Estimate the percentage of total cost of the project applied to fish passage improvements

2. ____ mi Estimate the total stream miles that will be made more accessible in the main channel and tributaries above the project (to nearest 0.01 mile). *This metric summarizes the stream miles for all of the proposed passage improvements (defined above in Sections A-D). If a barrier exists upstream of the project, report the length made accessible up to that next upstream barrier.*

3. ____ # Estimate the total number of barriers (this includes road crossings, diversion dams, push up dams, wood or concrete dams, weirs, etc.) to be removed or altered to improve passage.

Instream Flow: Projects that maintain and/or increase the instream flow of water. Irrigation improvements that are primarily designed to improve water quality should be reported under Upland – Agriculture Management. **Check all proposed activities.**

☐ Irrigation practice improved to increase instream flows (e.g. install diversion headgate, replace open ditches with pipes)	☐ Water flow gauges installed to measure water use
☐ This project will dedicate instream flow.	☐ Other (explain): Beaver Dam Analogs

_____ % Estimate the percentage of total cost of the project applied to instream flow activities

_____ mi. Estimate the miles of stream where increased flow is the result of decreased/eliminated water withdrawals

_____ cfs Estimate the increase in flow of water in the stream as a result of conservation effort (cubic feet per second)

_____ mm/dd/yyyy Initial start date of irrigation practice improvement

_____ mm/dd/yyyy Final end date of irrigation practice improvement (if improvement is permanent enter 12/31/9999)

_____ mm/dd/yyyy Water lease/agreement initial start date of no withdrawal

_____ mm/dd/yyyy Water lease/agreement final end date of no withdrawal (if lease/agreement is permanent, enter 12/31/9999)

Instream Habitat: Projects that are designed to improve instream habitat conditions. **Check all proposed activities.**

☒ Channel reconfiguration and connectivity (e.g., creating instream pools, meanders, improving floodplain connectivity, off-channel habitat, removal or alteration of levee or berm, removal of sediment)	☐ Spawning gravel placement
☐ Channel structure - large wood placement	☐ Plant Removal/control (instream) List scientific names of plants _____
☐ Channel structure - boulder placement	☐ Carcass or nutrient placement: ☐ salmonid carcass; ☐fish meal brick; ☐other nutrient
☐ Channel structure placement (other than large wood or boulder placements), e.g., engineered structures or deflectors, barbs, weirs, etc.	☐ Other (explain): _____
☐ Streambank stabilization through resloping and/or placing rocks, logs (e.g. revetments, gabions, barbs), or bioengineering on streambank	

100 % Estimate the percentage of total cost of the project applied to instream habitat activities

.25 mi. Estimate the miles of stream to be treated with instream habitat treatments (to nearest 0.01 mile)

_____ % Estimate the percentage of insteam activity costs for carcass or nutrient placements. If you do not select carcass/nutrient placements as an instream activity, leave this value blank. *Example: Your project will place salmon carcasses. You estimated that 25% of the total project cost will apply to instream habitat activities and one half of the instream improvements costs will apply to the carcass placement, you would report 50%.*

Riparian Habitat: Projects above the ordinary high-water mark of the stream and within the floodplain of the stream. **Check all proposed activities.**

☐ Riparian planting	☐ Non-native/noxious plant control
☐ Riparian exclusion fencing	☐ Vegetation management (e.g. prescribed burnings, stand thinning, stand conversions, silviculture)
☐ Livestock exclusion by means other than fencing (includes placing obstacles to exclude livestock, people, vehicles, etc., but not for individual plant protection)	☐ Debris/structure removal (OWEB funds cannot be used for general trash removal)
☐ Water gap development (fenced livestock crossing or livestock bridge)	☐ Other (explain): _____ *Do not report livestock water developments here, report livestock water developments under upland habitat treatments.*

_____ % Estimate the percentage of total cost of the project applied to riparian habitat activities

_____ ac. Estimate the acres of riparian habitat to be planted (to nearest 0.1 acres)

_____ ac. Estimate the acres of riparian habitat to be treated for non-native/noxious weeds (to nearest 0.1 acres)

_____ ac. Estimate the total riparian acres to be treated. (to nearest 0.1 acres)

_____ mi. Estimate the miles of riparian streambank to be treated (to nearest 0.01 mi).
Stream sides treated ☐ one ☐ two (Do not double count miles if a second side is treated)

Upland Habitat: Projects implemented above the floodplain. **Check all proposed activities.**

☐ Planting/seeding for erosion control (e.g., convert from crops to native vegetation, plant area where non-native/noxious weeds removed, grassed waterways, windbreaks, filter strips) List scientific names of plants _____	☐ Livestock Manure Management (e.g., feedlot improvements to reduce runoff , relocate/improve manure holding structures and manure piles to reduce/eliminate drainage into streams)
☐ Slope stabilization (e.g., grade stabilization, landslide reparation, terracing slopes)	☐ Upland Livestock Management (<u>other</u> than livestock water developments), e.g., grazing plans, fencing
☐ Non-native/noxious plant control; List scientific names of plants: _____	☐ Restore Historic Upland Habitats (e.g. oak woodland, oak savannah, upland prairie restoration)
☐ Juniper removal/control	☐ Livestock/Wildlife Water Developments
☐ Vegetation Management (<u>other</u> than non-native/noxious plant control or juniper removal, e.g. tree thinning, brush control, burning) List scientific names of plants: _____	☐ Erosion control structures not already reported under Upland Agriculture Management or Road Drainage System and Surface Improvements.
☐ Upland Agriculture Management (e.g., no/low-till, wind breaks, filter strips, crop rotation, terracing, water and sediment control basins, grade stabilization and irrigation improvements)	☐ Other (explain): _____

_____ % Estimate the percentage of total cost of the project will apply to upland habitat activities

_____ # Estimate the number of livestock/wildlife water developments

_____ac. Estimate the acres of upland habitat to be treated for non-native/noxious plants (to nearest 0.1 acres)

_____ac. Estimate the total acres of upland habitat to be treated (do not include acres of upland habitat affected by livestock water developments (to nearest 0.1 acres)

_____ % Estimate the percentage of upland activity costs applied to Livestock Manure Management. If you do not select Livestock Manure Management as an upland activity, leave this value blank.
Example: Project will relocate a feedlot to reduce livestock manure runoff. You estimated that 33% of the total project cost will apply to upland habitat activities and one half of the upland improvements costs will apply to the feedlot relocation, you would report 50%.

Road Activities: Projects designed to improve road impacts to watersheds. **Check all proposed activities**.

☐ Road drainage system and surface improvements & reconstruction	☐ Other (explain): _____
☐ Road closure, relocation, obliteration (decommissioning)	

_____ % Estimate the percentage of total cost of the project applied to road activities

_____ mi. Estimate the miles of road treated (to nearest 0.01 mile)

Urban Impact Reduction: **Check all of the urban impact related activities that will be used by this project.**

☐ Toxin reduction: list names of each toxic species, element or material: _____	☐ Bioswales
☐ Pesticide reduction: list names of each pesticide: _____	☐ Detention Facility
☐ Stormwater/wastewater modification or treatment (includes rain gardens)	☐ Other urban impact reduction (explain): _____

Check all of the water quality limiting factors addressed by the Urban Impact Reduction activities selected above. Do not select limiting factors addressed by other types of restoration activities.

☐ Bacteria	☐ Pesticides	☐ Nutrients
☐ Dissolved Oxygen	☐ Toxics	☐ Sediment
☐ Heavy Metals	☐ High Temperature	☐ Other (explain): _____

_____% Estimate the percentage of total cost of the project applied to urban impact activities

Wetland Habitat: *Projects designed to create or improve wetland areas.* **Check all proposed activities**.

☐ Wetland planting	☐ Artificial wetland area created from an area not formerly a wetland
☐ Non-native/noxious/invasive plant control	☐ Other (explain): _____
☐ Wetland improvement/restoration of existing or historic wetland (other than vegetation planting or removal)	

_____ % Estimate the percentage of total cost of the project applied to wetland habitat activities

_____ ac. Estimate the acres of wetland habitat to be treated for non-native/noxious/invasive plants (to nearest 0.1 acres)

_____ ac. Estimate the acres of artificial wetland created (to nearest 0.1 acres)

_____ ac. Estimate the total acres of wetland habitat (existing or historic) treated (to nearest 0.1 acres)

Estuarine Habitat: *Projects that result in improvement or increase in the availability of estuarine habitat.*
Check all proposed activities.

☐ Estuarine planting	☐ Non-native/noxious plant control
☐ Channel modification/creation (e.g., improve intertidal flow to existing estuarine habitat)	☐ Creation of new estuarine habitat where one did not exist previously by methods other than tidegates or dikes
☐ Dike or berm modification/removal	☐ Estuarine culvert modification/removal
☐ Removal of existing fill material	☐ Exclusion devices
☐ Placement of fill material (for proper terrestrial function)	☐ Other (explain): _____

_____ % Estimate the percentage of total cost of the project applied to estuarine habitat activities

_____ ac. Estimate the acres of estuarine habitat to be treated for non-native/noxious plants (to nearest 0.1 acres)

_____ ac. Estimate the total acres of estuarine habitat (existing or historic) to be treated (to nearest 0.1 acres)

Section 3. Salmon/Steelhead Populations Targeted and Expected Benefits to Salmon/Steelhead

The information provided will be used by OWEB better to meet federal and state reporting requirements. Completion of this section is required but will not be used to evaluate this application for funding.

☒ This project is **NOT** specifically designed to benefit salmon or steelhead.

► **If you check this box, STOP here.**

Targeted Salmon/Steelhead Populations: Select one or more of the salmon ESUs (Evolutionary Significant Unit) or steelhead DPSs (Distinct Population Segment) that the project will address/benefit. For species where the ESU/DPS name is not known or determined, use the species name with unidentified ESU (e.g., Chinook salmon – unidentified ESU). Additional information on the designation and location of the salmon/steelhead populations can be found at: http://www.westcoast.fisheries.noaa.gov/maps_data/species_population_boundaries.html

Chinook Salmon (*Oncorhynchus tshawytscha*)		**Coho Salmon** (*O. kisutch*)	
☐	Deschutes River summer/fall-run ESU	☐	Lower Columbia River ESU
☐	Lower Columbia River ESU	☐	Oregon Coast ESU
☐	Mid-Columbia River spring-run ESU	☐	Southern Oregon/Northern California ESU
☐	Oregon Coast ESU	☐	unidentified ESU
☐	Snake River Fall-run ESU	**Steelhead** (*O. mykiss*)	
☐	Snake River Spring/Summer-run ESU	☐	Klamath Mountains Province DPS
☐	Southern Oregon and Northern California Coastal ESU	☐	Lower Columbia River DPS
☐	Upper Klamath-Trinity Rivers ESU	☐	Middle Columbia River DPS
☐	Upper Willamette River ESU	☐	Oregon Coast DPS
☐	unidentified ESU	☐	Snake River Basin DPS
Chum Salmon (*O. keta*)		☐	Washington Coast DPS (SW Washington)
☐	Columbia River ESU	☐	Upper Willamette River DPS
☐	Pacific Coast ESU	☐	Steelhead/Trout unidentified DPS
☐	unidentified ESU		

Expected Benefits: Write a brief description of the goals and purpose of the project and how it is expected to benefit salmon/steelhead or salmon/steelhead habitat. **See Application Instructions for helpful examples.**

Osmin Ranch Beaver Dam Analogs

Lower site area.

Lower site area.

Osmin Ranch Beaver Dam Analogs

Middle site area.

Middle site area.

Osmin Ranch Beaver Dam Analogs

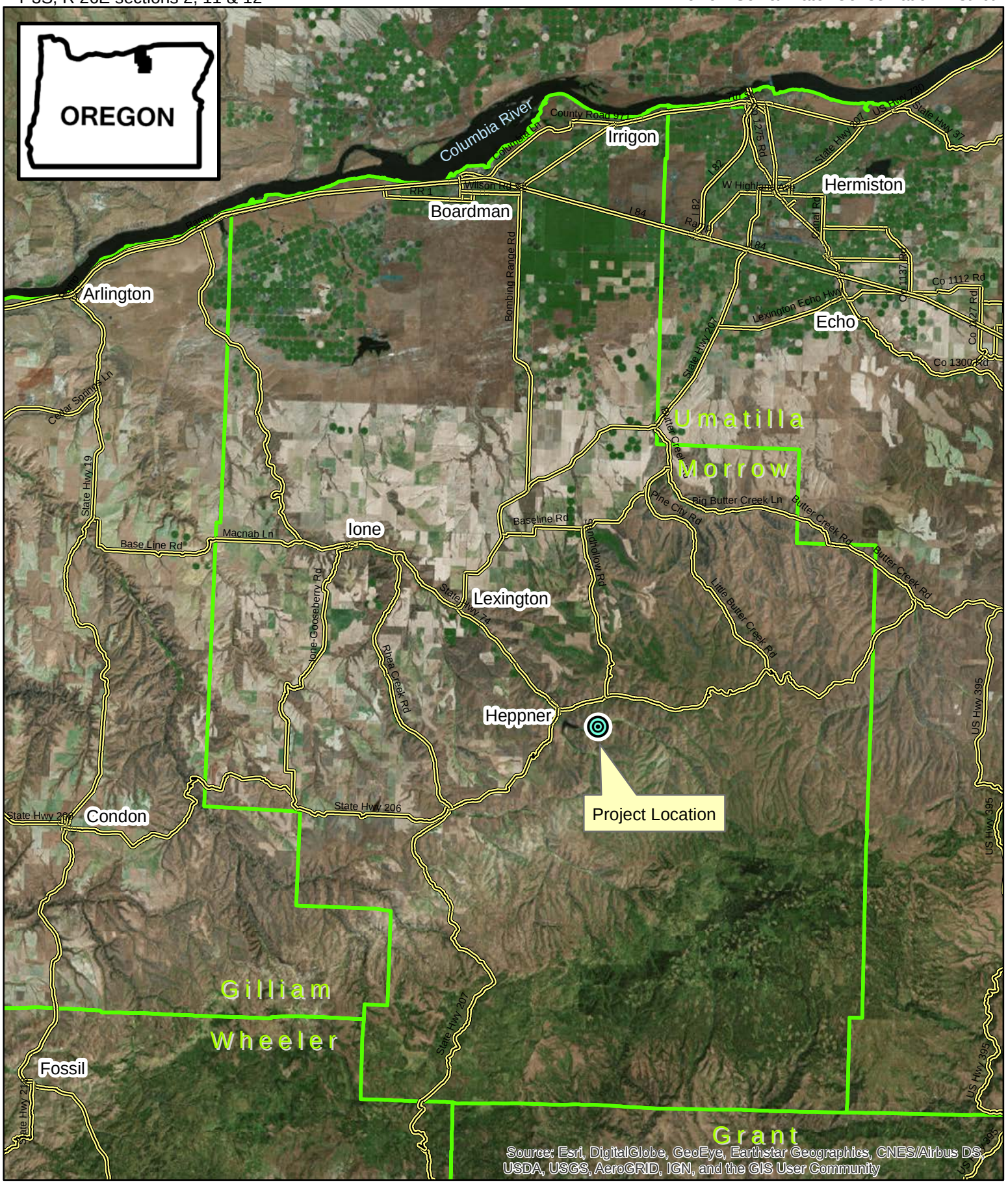
Upper site area.

Upper site area.

Osmin Ranch Beaver Dam Analogs Location Map

T 3S, R 26E sections 2, 11 & 12

Morrow Soil & Water Conservation District

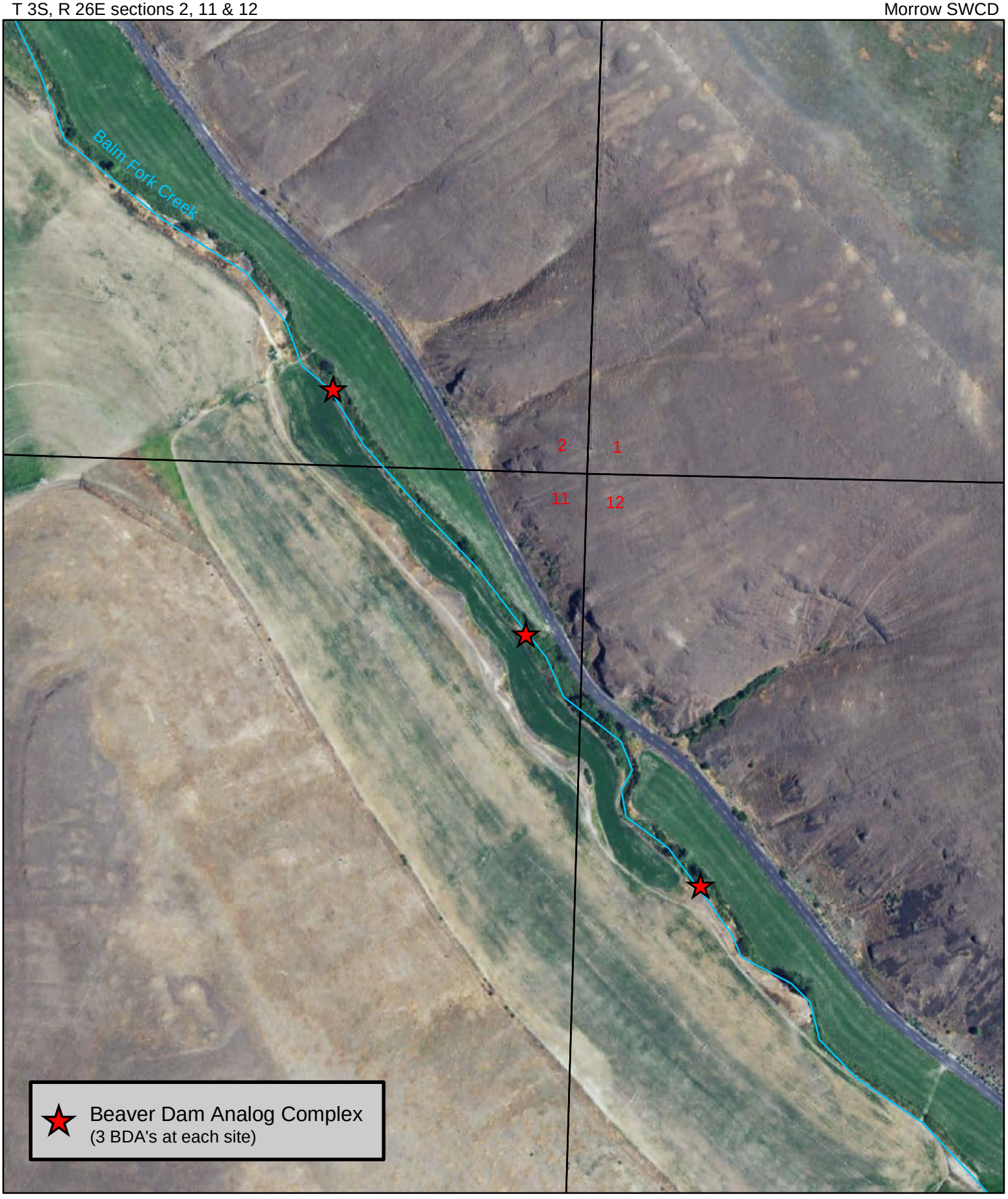


0 21,250 42,500 85,000 127,500 170,000 Feet

Osmin Ranch Beaver Dam Analogs

T 3S, R 26E sections 2, 11 & 12

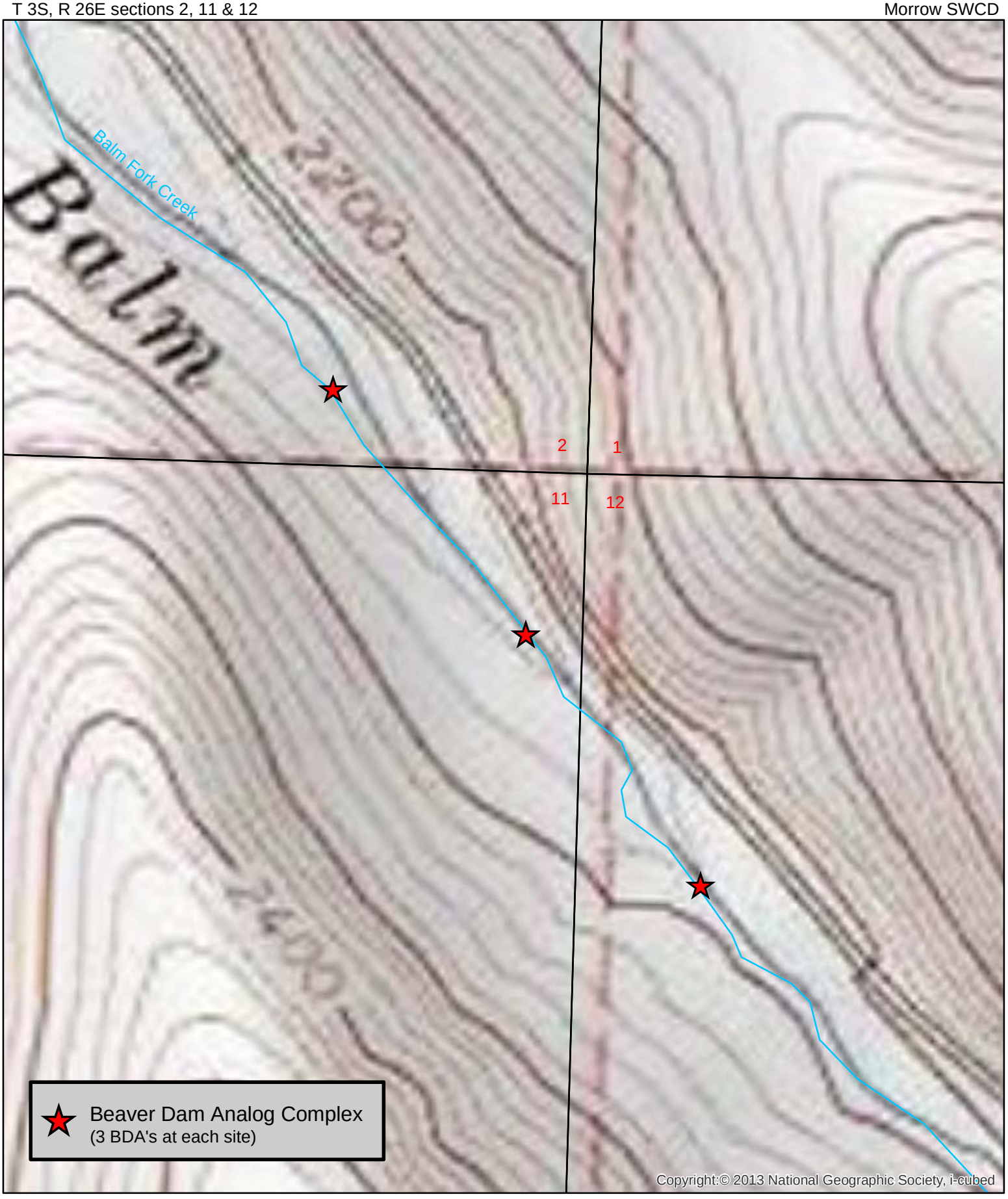
Morrow SWCD



Osmin Ranch Beaver Dam Analogs

T 3S, R 26E sections 2, 11 & 12

Morrow SWCD



0 170 340 680 1,020 1,360 Feet

Morrow SWCD Beaver Dam Analog Design Packet

The proposed actions are based on outcomes from the Bridge Creek Intensively Monitored Watershed Project and the Middle Bear Creek BDA Restoration Project both of which are in Wheeler County, Oregon. Many of the restoration goals from these two projects were analogous to those identified in Morrow County. BDAs offer an effective and cost efficient means for achieving restoration goals.

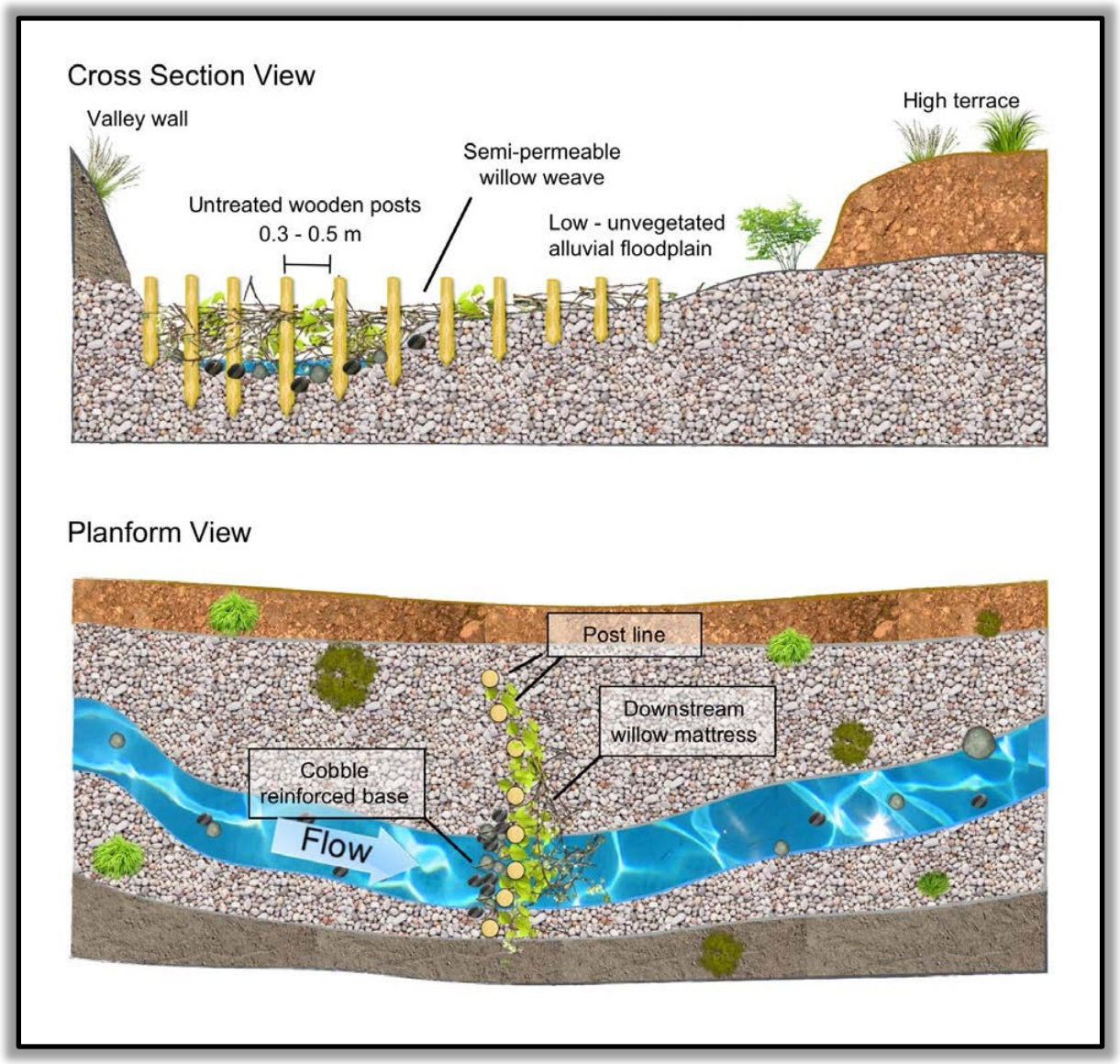
Herb Winters (Gilliam County SWCD) and Nick Weber (Eco Logical Research Inc.) have both been contacted and have offered their expertise in planning and installation. Both of them have implemented successful BDA projects.

Example of BDA from Bridge Creek in Wheeler County, OR to be installed in Morrow County.

Design

BDA structures are designed to function as part of a complex so individual structures work together to maximize restoration benefits according to limitations set by stream segment characteristics. Structures supported by downstream structures will lower the needed crest elevation to dissipate the gradient. Structures are constructed of natural, untreated posts approximately 3 - 4" in diameter. Posts are driven into the active channel and floodplain features using a hand-operated portable hydraulic post pounder. Once installed, posts will extend no more than 18-20" above the active channel bed, which is within and in many cases lower than the height range of natural beaver dams currently found on Bear Creek and within the Bridge Creek watershed. For a single structure posts are spaced approximately 12-18" apart, and driven to a depth of approximately 12-18" into the streambed. Following installation of the post line, willow stems will be woven in between the posts and reinforcement material such as cobble, gravel, and sediment added to the base of the structure to create a semi-permeable structure that

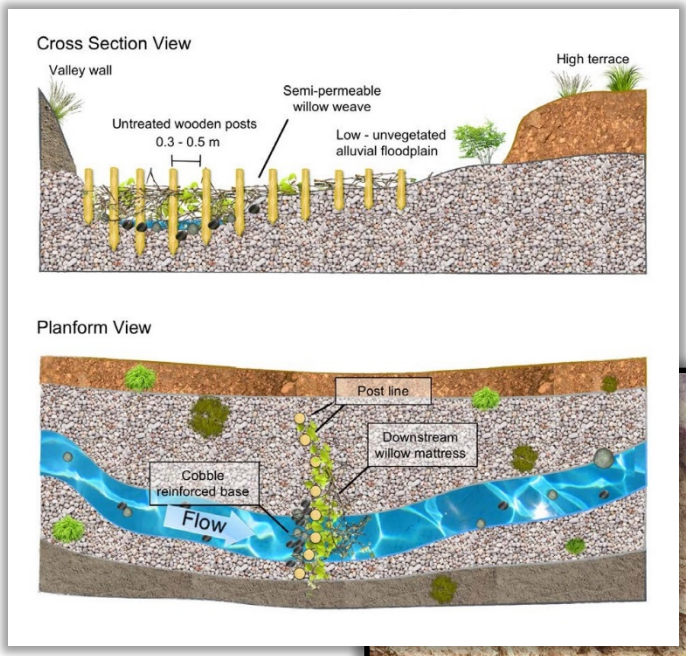
functionally resembles a natural beaver dam. The willow weaving acts as a dam, yet is passable to fish and consistent with the adult and juvenile fish passage criteria provided in NOAA's Anadromous Salmonid Passage Facility Guidelines (NMFS 2008) and the Aquatic Resources Biological Opinion for Restoration Actions on Federal Lands in Oregon and Washington (NMFS 2013). Reinforcing the base of BDA structures prevents flow from scouring under the dam and facilitates pond formation, raises the water table, and triggers many hydraulic and geomorphic feedbacks. As with natural beaver dam construction, reinforcement materials are sourced within the vicinity of the complex and care is exercised such that the modest amount of material moved does not unnecessarily destabilize the banks or bed. Beaver dam analogues are temporary structures that last until the pool behind the dam fills with sediment and is colonized by woody riparian vegetation (circa < 5 yr.). The placement and spacing between structures has been designed to be consistent with that of natural beaver complexes, and is dependent on valley, floodplain, and channel characteristics of specific stream segments.



Generalized design elements and channel position for BDAs showing cross-section (top) and planform (bottom) view of the channel.

MORROW
Soil & Water Conservation District

Morrow SWCD Beaver Dam Analog correspondence with regards to regulatory requirements/plans/permits etc.



From: HARTMAN Heidi [mailto:heidi.m.hartman@state.or.us]
Sent: Wednesday, August 08, 2018 2:27 PM
To: Payne, Kevin - NRCS-CD, Heppner, OR <kevin.payne@or.nacdnet.net>
Subject: RE: Beaver Dam Analog Structures in Morrow County

Hi Kevin,

So I looked up all of the lat/longs you provided. There were two sites that didn't match the creek you said they were on; landowner #2 and #3 (see my comments below). You may want to double check those lat/longs for accuracy and send me updated locations.

All of the other sites were on non-ESH creeks, so you can removal and/or fill up to 50 cyds without a DSL permit. You will still need to coordinate with the Army Corps to find out what their regulatory requirements are.

Heidi Hartman
Aquatic Resource Coordinator
Baker, Gilliam, Grant, Hood River, Jefferson, Morrow,
Sherman, Umatilla, Union, Wallowa, Wasco & Wheeler Counties
Oregon Department of State Lands
1645 NE Forbes Road, Suite 112
Bend, OR 97701

Landowner #1:
-119.6474 45.2589 Rhea Creek – non ESH
-119.6612 45.2542 Spring Hollow Creek – non ESH

Landowner #2:
-119.3652 45.1341 (This might be sticky, as it is over the top off the N. Fork John Day): Martin Creek, non ESH, mapped PEM1C wetland

Landowner #3:
-119.4494 45.1350 Rutabaga Creek – non ESH
-119.5735 45.1868 Balm Creek (Pronounced BAM): Houselog Creek, non-ESH

Landowner #4:
-119.5352 45.3267 Balm Fork Creek – non ESH

Please let me know if you need anything else. Thank you!

Kevin D. Payne
Assistant District Manager -
Natural Resource Specialist
Morrow SWCD
430 W. Linden Way
PO Box 127
Heppner, OR 97836
541-676-5452 x111

From: HARTMAN Heidi [mailto:heidi.m.hartman@state.or.us]
Sent: Wednesday, August 08, 2018 2:56 PM
To: Payne, Kevin - NRCS-CD, Heppner, OR <kevin.payne@or.nacdnet.net>
Subject: RE: Beaver Dam Analog Structures in Morrow County

As long as your cumulative removal/fill is less than 50 cyds in waters of the state (wetlands and waterways), then a DSL permit isn't required. I would advise to try and minimize any adverse effects to wetlands in the project area; for example locating staging areas and construction access routes in upland if possible and operating when the wetland is drier. Be sure to check with ODFW to determine the in-water work window for each project as you will need to work in stream only during those times.

Heidi Hartman
Aquatic Resource Coordinator
Baker, Gilliam, Grant, Hood River, Jefferson, Morrow,
Sherman, Umatilla, Union, Wallowa, Wasco & Wheeler Counties
Oregon Department of State Lands
1645 NE Forbes Road, Suite 112
Bend, OR 97701
Office: 541-388-6060 | Fax: 541-388-6480 | Cell: 541-419-7650

From: Payne, Kevin - NRCS-CD, Heppner, OR <kevin.payne@or.nacdnet.net>
Sent: Wednesday, August 8, 2018 2:37 PM
To: HARTMAN Heidi <Heidi.M.Hartman@dsl.state.or.us>
Subject: RE: Beaver Dam Analog Structures in Morrow County

Martin Creek is absolutely right. Does the wetland delineation change things?

From: HARTMAN Heidi [mailto:heidi.m.hartman@state.or.us]
Sent: Wednesday, August 08, 2018 2:35 PM
To: Payne, Kevin - NRCS-CD, Heppner, OR <kevin.payne@or.nacdnet.net>
Subject: RE: Beaver Dam Analog Structures in Morrow County

The other one I had a question about is landowner #2, can you please clarify the location of the project?

Heidi Hartman
Aquatic Resource Coordinator
Baker, Gilliam, Grant, Hood River, Jefferson, Morrow,
Sherman, Umatilla, Union, Wallowa, Wasco & Wheeler Counties
Oregon Department of State Lands
1645 NE Forbes Road, Suite 112
Bend, OR 97701
Office: 541-388-6060 | Fax: 541-388-6480 | Cell: 541-419-7650

From: Payne, Kevin - NRCS-CD, Heppner, OR <kevin.payne@or.nacdnet.net>
Sent: Wednesday, August 8, 2018 2:34 PM
To: HARTMAN Heidi <Heidi.M.Hartman@dsl.state.or.us>
Subject: RE: Beaver Dam Analog Structures in Morrow County

Thank you Heidi,
I will clear up the Houselog vs. Bam (Balm) confusion as the sites are after the confluence of the two and the landowner calls it Balm, but it must be houselog. I will get a hold of the Army Corps. Thanks again.

From: Payne, Kevin - NRCS-CD, Heppner, OR kevin.payne@or.nacdnet.net
To: Greg D Apke [mailto:Greg.D.Apke@state.or.us]

Greg,
Thank you for the email. I appreciate all the information. I just want to have all my ducks in a row before I get too far along. Thanks again!

Kevin D. Payne
Assistant District Manager -
Natural Resource Specialist
Morrow SWCD
430 W. Linden Way
PO Box 127
Heppner, OR 97836
541-676-5452 x111

www.morrowswcd.org

From: Greg D Apke [mailto:Greg.D.Apke@state.or.us]
Sent: Tuesday, August 14, 2018 11:20 AM
To: kevin.payne@ornacdnet.net
Cc: Greg D Apke <Greg.D.Apke@state.or.us>; William Duke <William.B.Duke@state.or.us>
Subject: Beaver Dam Analog (BDA) projects
Importance: High

Kevin - Good to chat with you earlier today. As discussed, I've attached the ODFW BDA Fish Passage Plan Application. Please give this some consideration as you begin to package your BDA fish passage application for ODFW's review (see attachment). Just so you know, there is a monitoring and reporting component of the state's fish passage authorization (permit). Please know this will be required.

Contact me if you have any questions Kevin.

Thanks, Greg

****

Greg Apke
Oregon Department of Fish and Wildlife - Fish Division
Statewide Fish Passage Program Leader
4034 Fairview Industrial Drive SE
Salem, Oregon 97302
503-947-6228 (office)
503-931-4361 (cell)
greg.d.apke@state.or.us
ODFW Fish Passage Internet Access
MyODFW.com

****