

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:

		l <u>—</u>	Recommended Denied
			GT Contact gnature:
General Information			_
OWEB Funds Requested (round to neare	st dollar) \$ <u>2,180.00</u>	Т	Total Project Cost \$ 4,230.00
Name of Project (five words or fewer) Mi	dway Ranch Beaver [<u>Damn</u>	<u>Analogs</u>
Project Location (if more than one, inclu This project occurs at (check one):			ormation on each map) Multiple sites
Insert Watershed(s): Willow			
Insert County or Counties: Morrow			
Insert Township, Range, Section(s): T3	3S. R25E s 35 & 36 T4S.	. R25E s	s 2
Insert Longitude, Latitude: -119.65701			_
Insert Subbasin(s): 1707010403 Rhea			
• •	<u>CIECK</u>		
Insert River or Creek Name:			
Insert River Mile (if applicable)			
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@c	or.nacc	dnet.net
Landowner(s): Gerald Hoeft Landowner Address:			Zip:
Phone:	Email:		ziρ.
Project Manager for the Grantee: Kevin Pa	yne		
Project Manager Address: PO Box 127 Hep	pner, OR		Zip: 97836
Phone: 541-676-5452 x111	Email: kevin.payne@d	or.nacc	dnet.net
Fiscal Agent Org - Morrow SWCD	Tax ID: 930797719		Contact: Janet Croonup
Fiscal Agent Org.: Morrow SWCD Fiscal Agent Address: PO Box 127 Heppner			Contact: Janet Greenup Zip: 97836
Phone: 541-676-5452 x109	Email: swcdmanager	r@cent	
			- y
Technical Contact: Kevin Payne	Phone: 541-676-5452 x11	1	Email: kevin.payne@or.nacdnet.net

III. Project Information **Priority Watershed Concern:** the project will address — Check *One* Only. <u>x</u> Instream Process & Function ____ Riparian Process & Function ____ Urban Impact Reduction Wetland Process & Function Road Impact Reduction Upland Process & Function ____ Water Quantity & Quality/ Irrigation Efficiency ____ Fish Passage 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? 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? \underline{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. These sections of Rhea Creek and Spring Hollow Creek are 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

Who will maintain?	What will be maintained?	How will it be maintained?	# of years # of times/year	
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.)				
Urban Subwatershed Page # / Para	Restoration Manual	Tribal Natural Resource (attach the relevant page o		
Nonpoint Source Poll Guidebook Page # / Para	ution Control	Forest Practices Tech N Page # / Para	ote #5	
Oregon Road/Stream Guide Page # / Para	n Crossing Restoration	Forest Practices Tech N Page # / Para	ote #4	
NRCS Field Office Ted Practice Code	chnical Guide	Guide to Placing Large Page # / Para	Wood in Streams	
5. Technical Guidance Sparagraph).	Source (check at least c	one and identify the Practio	ce Code, or page and	
volunteers, and the comr Risk Assessment,				

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)

Routine Maintenance

Beaver Dam Analog

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

Landowner

at time of install only

		re	ports		
7. Who will be responsibl	e for writing the Yea	ar-Two S	tatus Report?		
Name: Kevin Payne	С	rg.: Morr	ow SWCD		
Mailing Address PO Box 12	7 Heppner, OR				Zip 97836
Phone: 541-676-5452 x111	Eı	mail: kevi	n.payne@or.nacdnet.	net	
8. Have the required per If yes, what permits have If no, what permits must be locations due to the streat requires a Fish Passage Austrate Fish Passage Lead, approved.	been issued? (Attac e obtained and by ms being non-ESH (uthorization Permit k	ch copie when? please s pefore in	es) A permit through DS see correspondence astallation. I have spo	SL is r supp oken	not required for these plement) but ODFW to Greg Apke, ODFW
Is this project required action (e.g., a manure			-		
Yes <u>x</u> No					

Completion/YR2

YR2

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	Cash	In-Kind	Amount/
Name the partner and contribution			Value
OWEB: BDA install and materials	2,180.00		2,180.00
Landowner: BDA materials and County land-use form		1,850.00	1,850.00
Morrow SWCD: Project Management		200.00	200.00
Total Estimated Funds (add all amounts in the far right colu	ımn)		\$4,230.00

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.

ill ill the amounts, for	inaca ic	Tille fical	cst dollar, p	nease <mark>ao no</mark>	include certs.
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 B position titles; include only					ees for whom payroll taxes are paid. List
Project Management	8	\$25.00	\$0	\$200.00	Morrow SWCD
		\$0	\$0	\$0	
	SU	JBTOTAL (1)	\$0	\$200.00	
CONTRACTED SERVICES. L	abor, sup	plies, mater	ials and trave	I to be provide	d by non-staff for project implementation.
BDA materials	6	\$400.00	\$600.00	\$1,800.00	OWEB and Landowner
BDA installation	6	\$200.00	\$1,200.00	\$0	Contractor
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
	SU	JBTOTAL (2)	\$1,800.00	\$1,800.00	
	. Refers to	items that a	are purchased		d to the applicant, and are "used up" in plementation of this grant.
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
SUBTOTAL (3)		\$0	\$0		
TRAVEL. Mileage. For curr	ent rates	go to: http:/	/www.oregor	n.gov/OWEB/Pa	ages/forms_linked.aspx#
-		\$0	\$0	\$0	
		\$0	\$0	\$0	
	SU	JBTOTAL (4)	\$0	\$0	
OTHER. Land use signatur	e costs, p	roject permi	it costs, small	equipment rep	air, commercial equipment rental.
Land-use Form	1	\$50.00	\$0	\$50.00	Through County Planning Dept.
		\$0	\$0	\$0	
	SU	JBTOTAL (5)	\$0	\$50.00	
MODIFIED TOTAL I		OST (MTDC) ubtotals 1-5)	\$1,800.00	\$2,050.00	
INDIRECT COSTS. Not to e less. See the current Budg http://www.oregon.gov/	exceed 10 get Categ	% of Modifie pories Definit	ions documei		. Compute by multiplying MTDC by 0.10 or osts.
Indirect Costs		t to exceed % of MTDC	\$180.00	\$0	
POST-GRANT					
Year-Two Status Report			\$200.00	\$0	(Not to exceed \$200)
Post-Project Plant Establis	hment		\$0	\$0	(Not to exceed \$1,000)
•		ECT TOTALS	\$2,180.00	\$2,050.00	(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.

		Attachment Checklist
Applicant	 Date	Project location map (Required)
		Color photographs of site (Required)
 Landowner	 Date	Site drawings/diagrams (if applicable)
Landowner	Date	Juniper Checklist (if applicable)
Fiscal Agent	Date	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 persons¹ 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.
po pro	licie ovid EREE	checked numbers 1 or 2 above, on a separate sheet of paper, provide the rationale for the existence of each programs having a disproportionate or unique impact on minority persons in this state. Further e evidence of consultation with representative(s) of the affected minority persons. BY CERTIFY on this 15th day of August, 2018, the information contained on this form and any nament 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 Noves, 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

if you have answered a similar question in a previous section in

the	Land Use Setting: CHECK ONE BOX ONLY.	wered a similar question in a previous section in
	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 ONL in the upland area with some erosion control extended occur in the upland area, you would check only the Up	to the riparian area. Because most of the work is to
	Estuary (where freshwater meets and mixes with saltwater of ocean tides.)	Riparian (adjacent to a water body, within the active floodplain.)
		Upland (above the floodplain.)
	Instream (below the ordinary high-water mark or within the active channel — includes fish passage.)	Groundwater (Projects that recharge groundwater or primarily affect the subsurface water table.)
	☐ Wetland (areas inundated or saturated by surface sufficient to support a prevalence of vegetation ty	or groundwater at a frequency and duration pically adapted for life in saturated soil conditions.
_		
3.	Total Acres Treated: <u>.25</u> Total Stream Miles Treated (do not include upstream stream miles made accessible	
4.	Project Monitoring: All OWEB funded restoration projincluding photo point monitoring. Please indicate believely to the project, including photo point locations and 3) whether additional monitoring will be conduct	ow: 1) the location of the monitoring activities s, 2) whether effectiveness monitoring is planned,
	4.1) Identify the location for the planned monitoring ac Check as many boxes as apply.	ctivities relative to the restoration project location.
		☐ Upslope
		Grant Funds. To review effectiveness monitoring itions click on the link to the OWEB Web site below.

4.3) Will this project conduct monitoring activities beyond the reporting and photo point monitoring?	e required post-implementation status
Yes No If you answer yes, select the monitoring Section 2.	activities below, if you answer no proceed to
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):
project. Data about completed projects will be reported at the en Restoration Inventory (OWRI). For each activity type where you en cost of the project (OWEB and all other funding sources, shown in activity. The sum of all of the activity cost percentages should equ project management and other general project costs among the percentages. Example : A project will remove a fish passage barrier, place large You would enter the appropriate metrics into the Fish Passage, Inst sections of this form. Then, estimate the percentage of the total co 20% towards Fish Passage activities, 25% towards Instream Habitat activities. Fish Screening Projects: Projects that result in the install prevent fish from passing into areas that do not support fish surviv	ter metrics, estimate the percentage of the total III. 9.of this application) that applies to the all 100%. Please distribute all administrative, various project activities when estimating boulders instream, and plant a riparian buffer. Tream Habitat, and Riparian Habitat activity ost of the project for each activity. For instance: activities, and 55% towards Riparian Habitat ation or improvement of screening systems tha
Note: OWEB funds cannot be used for fish screening projects	
% Estimate the percentage of total cost of the project app	lied to fish screening activities
New Fish Screens Installed	
# Estimate the number of new screens installed (do not coureplaced)	unt diversions where existing screens are
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, repair	ed 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. Bridge s 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 not replaced	# crossings	str. mi with improved access*

C. Fish Passage Barriers - Other than Road Crossings

-	
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

4		Fig. Contract and the second account and account			P L L - C. L.		
Ί.	%	Estimate the percentage	e or total cos	st of the project a	applied to fish	passage improve	ements

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.

^{*}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.

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):			
% Estimate the percentage of total cost of the project applied to instream flow activities				
mi. Estimate the miles of stream where increased flowithdrawals	ow is the result of decreased/eliminated water			
cfs Estimate the increase in flow of water in the stresecond)	eam as a result of conservation effort (cubic feet per			
mm/dd/yyyy Initial start date of irrigation practice i	mprovement			
mm/dd/yyyy Final end date of irrigation practice in 12/31/9999)	mprovement (if improvement is permanent enter			
mm/dd/yyyy Water lease/agreement initial start da				
mm/dd/yyyy Water lease/agreement final end date enter 12/31/9999)	e of no withdrawal (if lease/agreement is permanent,			
Instream Habitat: Projects that are designed to im activities.	prove instream habitat conditions. Check all proposed			
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 r	☐ Carcass or nutrient placement: ☐ salmonid carcass; ☐ fish meal brick; ☐ other nutrient			
Channel structure placement (<u>other</u> 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 inst	tream 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 habitates.	nigh-water mark of the stream and within the floodplain of
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 p	planted (to nearest 0.1 acres)
ac. Estimate the acres of riparian habitat to be t	reated for non-native/noxious weeds (to nearest 0.1 acres)
ac. Estimate the total riparian acres to be treate	d. (to nearest 0.1 acres)
mi. Estimate the miles of riparian streambank to Stream sides treated one two (Do not double coun	
Upland Habitat: Projects implemented above the	he 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 (other 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 wat	er developments
ac. Estimate the acres of upland habitat to be	treated for non-native/noxious plants (to nearest 0.1 acres
·	be treated (do not include acres of upland habitat
not select Livestock Manure Management as Example: Project will relocate a feedlot to red	duce livestock manure runoff. You estimated that 33% of bitat activities and one half of the upland improvements

Road Activities: Projects designed to improve road impacts to watersheds. Check all proposed activities.					
Road drainage system and surreconstruction	face improvements &	Othe	er (explain):		
Road closure, relocation, oblite (decommissioning)	eration				
% Estimate the percentage of	of total cost of the pro	oject applied t	o road activities		
mi. Estimate the miles of road	treated (to nearest 0.	.01 mile)			
Urban Impact Reduction: project.	Check all of the urba	an impact rela	ted activities that will be used by this		
Toxin reduction: list names of e element or material:	Toxin reduction: list names of each toxic species, element or material:		ales		
Pesticide reduction: list names	of each pesticide:	☐ Deter	ntion Facility		
Stormwater/wastewater modif (includes rain gardens)	ication or treatment	Other	urban impact reduction (explain):		
Check all of the water quality limiting above. Do not select limiting factor			mpact Reduction activities selected ation activities.		
☐ Bacteria	Pesticides		Nutrients		
☐ Dissolved Oxygen	Toxics		Sediment		
☐ Heavy Metals	☐ High Temperatur	е	Other (explain):		
☐ Wetland planting		Artificial wetland area created from an area not formerly a wetland			
☐ Non-native/noxious/invasive p	lant control	Other (explain):			
 Wetland improvement/restoration of existing or historic wetland (other than vegetation planting or removal) 					
% Estimate the percentage of	of total cost of the pro	ject applied to	o 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 artific	cial wetland created	(to nearest 0.1	acres)		
ac. Estimate the total acres of	wetland habitat (exis	ting 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):			
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

Chino	ook 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			Lower Columbia River DPS
	Coastal ESU			
	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**.



Site #1, Rhea Creek.



Site #2, Rhea Creek.



Site #3, Rhea Creek.



Site #4, Rhea Creek.

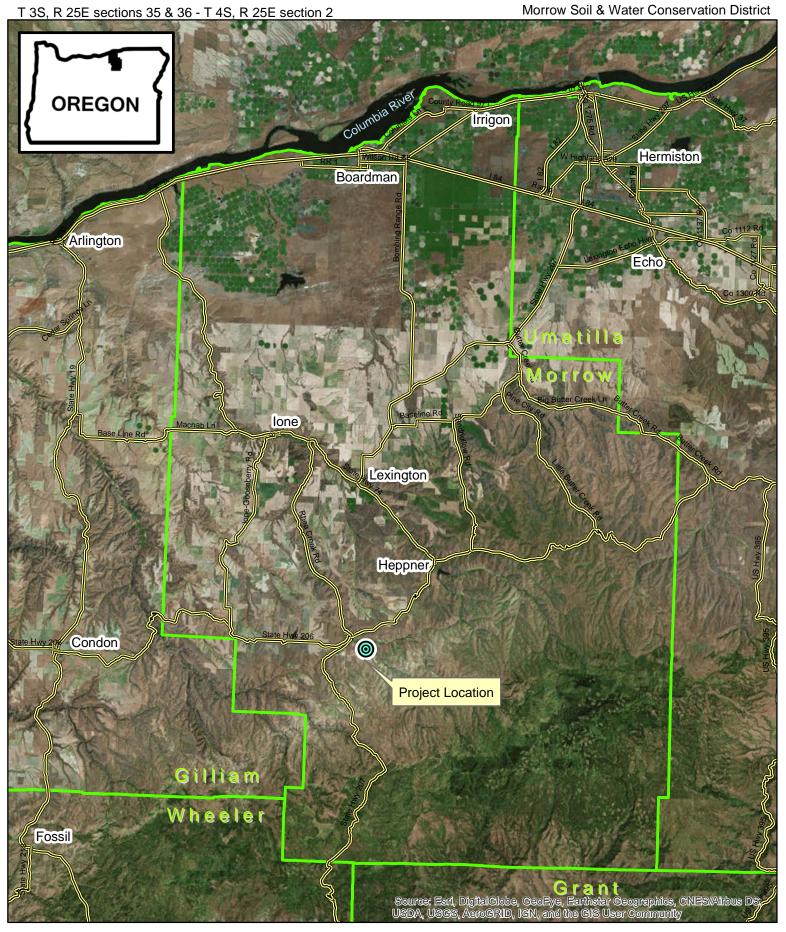


Site #1, Spring Hollow Creek.

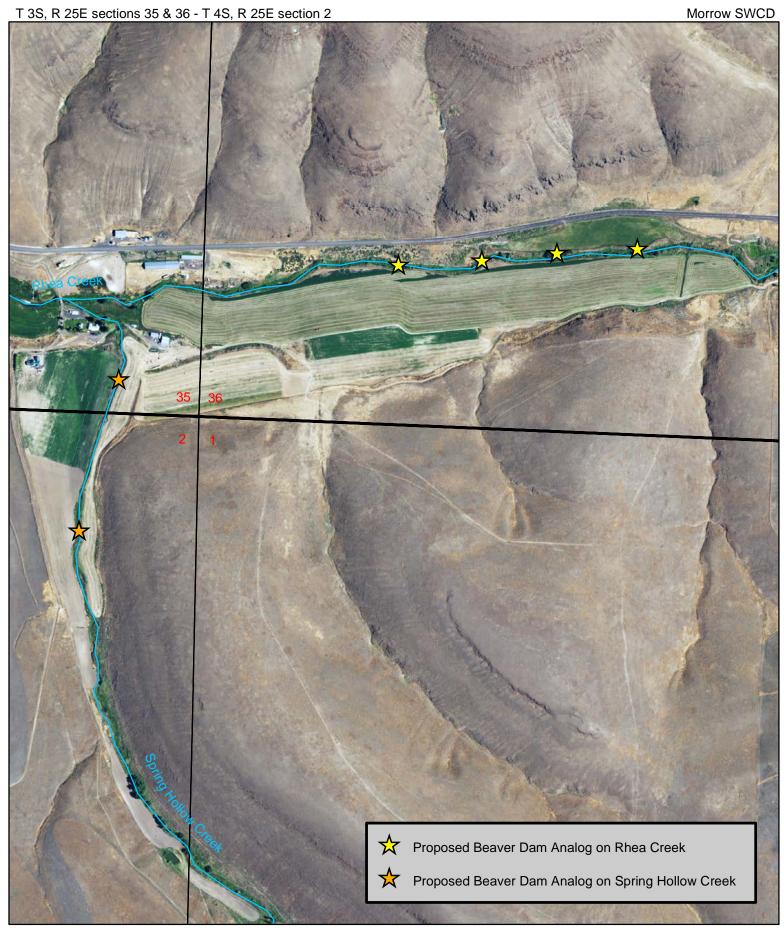


Site #2, Spring Hollow Creek.

Midway Ranch Beaver Dam Analogs Location Map







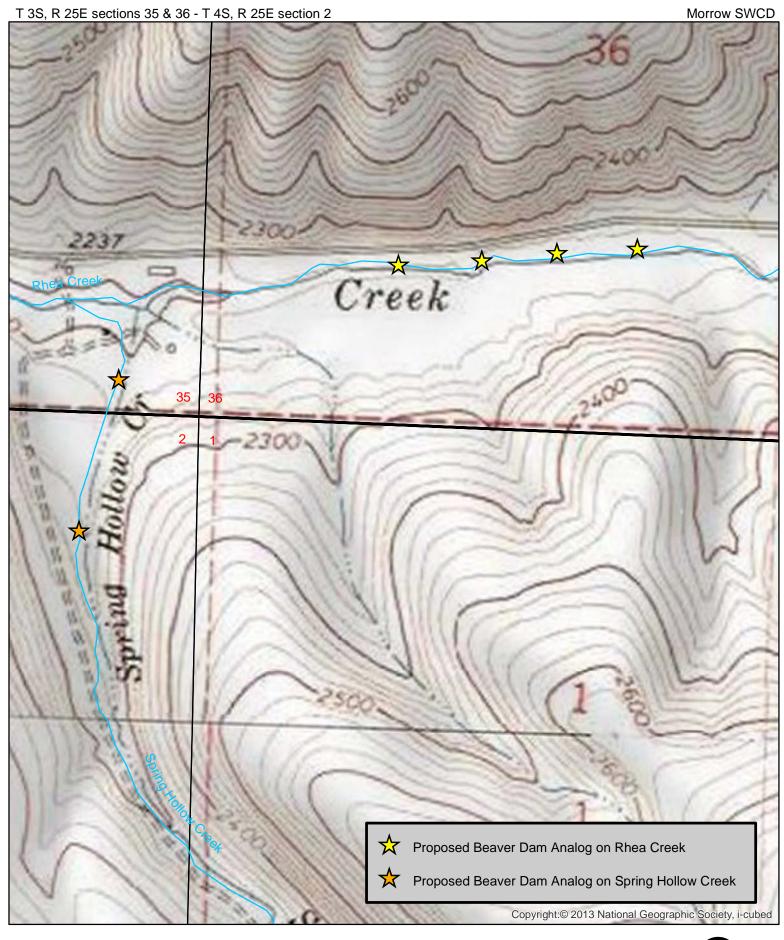
340

680

1,360

2,040





680

340

1,360

2,040



2,720

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.

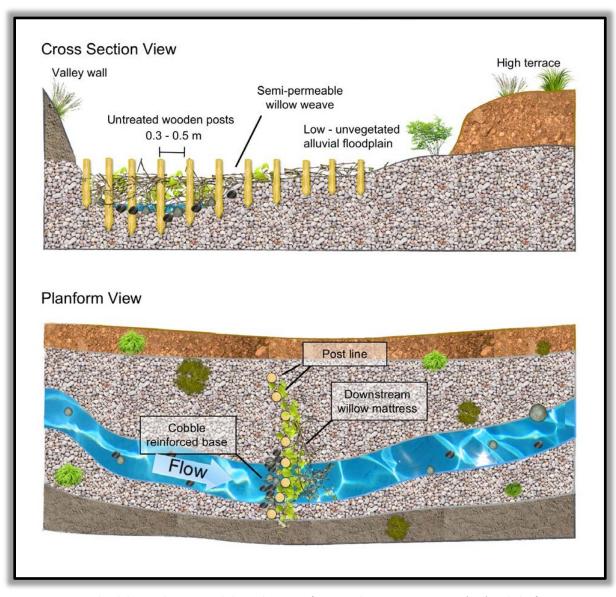


Example of BDA from Bridge Creek in Wheeler County, OR to be installed in Morrow County.

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

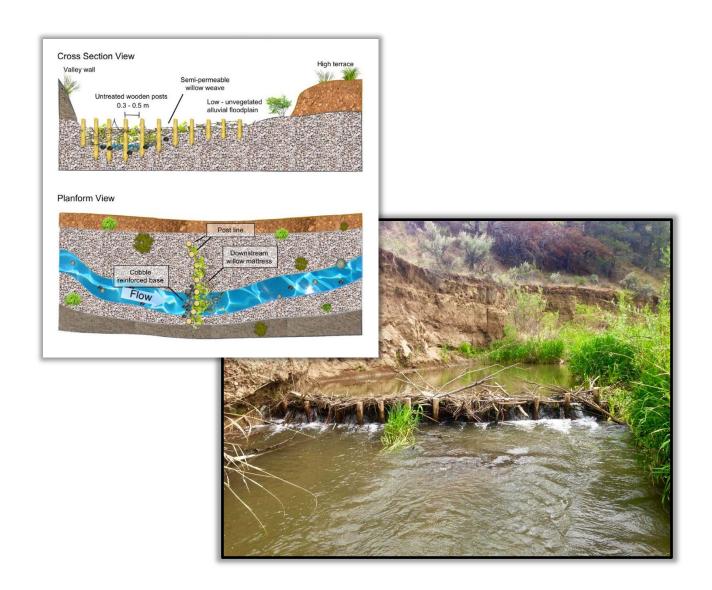
functionally resembles a natural beaver dam. The willow weaving acts as a dam, yet is passable to fish and consistent with the adult and juvenile fish passage criteria provided in NOAA's Anadromous Salmonid Passage Facility Guidelines (NMFS 2008) and the Aquatic Resources Biological Opinion for Restoration 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 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

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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



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
