PROJECT: 22-1009 PLAN, ASOTIN CREEK PA 3.2 DESIGN

Sponsor: Asotin Co Conservation Dist Program: Salmon State Projects Status: Preapplication

Parties to the Agreement

PRIMARY SPONSOR

Asotin County Conservation District

Address 720 Sixth St Ste B

City Clarkston **State** WA **Zip** 99403

Org Type District-Conservation

Vendor # SWV0010207-00

UBI

Date Org created

Org Notes

link to Organization profile

☐ Org data updated

SECONDARY SPONSORS

No records to display

LEAD ENTITY

Snake River Salmon Rec Bd LE

QUESTIONS

#1: List project partners and their role and contribution to the project.

External Systems

SPONSOR ASSIGNED INFO

Sponsor-Assigned Project Number

Sponsor-Assigned Regions

EXTERNAL SYSTEM REFERENCE

Source	Project Number	Submitter
HWS	22-1009	AFitzgerald

Project Contacts

Contact Name Primary Org	Project Role	Work Phone	Work Email
Alice Rubin Rec. and Conserv. Office	Project Manager	(360) 867-8584	alice.rubin@rco.wa.gov
Megan Stewart Asotin Co Conservation Dist	Project Contact	(509) 552-8100	megan@asotincd.org
Brad Riehle Asotin Co Conservation Dist	Alt Project Contact	(509) 552-8117	brad@asotincd.org
Ali Fitzgerald Snake River Salmon Rec Bd LE	Lead Entity Contact	(509) 382-4115	ali@snakeriverboard.org

Worksites & Properties

#	Worksite Name
#1	Asotin Creek PA 3.2 Design

Planning	Property Name
✓	Hendrickson

Worksite Map & Description

Worksite #1: Asotin Creek PA 3.2 Design

WORKSITE ADDRESS

Street Address

City, State, Zip

Worksite Details

Worksite #1: Asotin Creek PA 3.2 Design

SITE ACCESS DIRECTIONS

From Asotin, WA, take Asotin Creek Rd approximately 2.5 miles to project site.

TARGETED ESU SPECIES

Species by ESU	Egg Present	Juvenile Present	Adult Present	Population Trend
Steelhead-Snake River, Asotin Creek, Threatened	✓	✓	✓	Unknown

Reference or source used

TARGETED NON-ESU SPECIES

Species by Non-ESU	Notes
Bull Trout	

Questions

#1: Give street address or road name and mile post for this worksite if available.

7095 Asotin Creek Road

Project Location

RELATED PROJECTS

Projects in PRISM

PRISM Number	Project Name	Current Status	Relationship Type	Notes
No related project selected				

Related Project Notes

Questions

#1: Project location. Describe the geographic location, water bodies, and the location of the project in the watershed, i.e. nearshore, tributary, main-stem, off-channel, etc.

Asotin Creek is identified as a Priority Restoration Reach which is listed as a major spawning area that drains directly into the Snake River. The project begins at RM 4.0 and ends at RM 5.2.

#2: How does this project fit within your regional recovery plan and/or local lead entity's strategy to restore or protect salmonid habitat? Cite section and page number.

Northwest Marine Fisheries Service. 2017. ESA Recovery Plan for Snake River Spring/Summer Chinook Salmon (Oncorhynchus tshawytscha) & Snake River Basin Steelhead (Oncorhynchus mykiss). Portland, OR.
This project is identified as a top priority and located in a minor spawning area for Steelhead and a priority restoration reach in the Snake River Salmon Recovery Plan and 3 yr workplan.

#3: Is this project part of a larger overall project?

Yes

#3a: How does this project fit into the sequencing of the larger project?

This project was identified in the Asotin County Conceptual Restoration Plan during the Geomorphic and Watershed Assessment that was completed for Asotin, George, Alpowa, Couse and Tenmile Creek watersheds in Asotin County in 2018.

#4: Is the project on State Owned Aquatic Lands? Please contact the Washington State Department of Natural Resources to make a determination. **Aquatic Districts and Managers**

No

Property Details

Property: Hendrickson (Worksite #1: Asotin Creek PA 3.2 Design)

✓ **Planning**

LANDOWNER

Name	Tom Hendrickson
Address	7095 Asotin Creek Road
City	Asotin
State	WA Zip 99402
Type	Private

CONTROL & TENURE

Instrument Type	Landowner Agreement
Timing	Proposed
Term Length	Fixed # of years
# Yrs	10
Expiration Date	12/31/2032
Note	

Project Proposal

Project Description

The Asotin County Conservation District is sponsoring the Asotin Creek PA 3.2 Stream Restoration Design Project to develop a full design report, ready to construct engineering plans and complete environmental compliance including permit and cultural resource requirements. PA 3 was identified as a Tier 2 project in the Asotin County Conceptual Restoration Plan. This grant application will target 1.2 miles of the project area. The conceptual plan for PA 3.2 includes controlling invasive vegetation encroachment and add large woody debris to increase complexity. The Asotin Creek PA 3.2 Stream Restoration Design Project is located south of the City of Asotin, WA along Asotin Creek Road. The project begins at RM 4.0 and ends are RM 5.2. Asotin Creek is listed as an MSA and Priority Restoration Reach that flows directly into the Snake River.

Project Questions

#1: Problem statement. What are the problems your project seeks to address? Include the source and scale of each problem. Describe the site, reach, and watershed conditions. Describe how those conditions impact salmon populations. Include current and historic factors important to understand the problems.

Project Area 03.2 (PA-3.2) begins at RM 4.0 of the mainstem of Asotin Creek and ends at RM 5.2. This project area is upstream of the George Creek confluence and is a partly confined valley setting. The land is used as a working cattle ranch with a riparian buffer that has been enrolled in the Conservation Reserve Enhancement Program. The project area has pockets of mature cottonwood and alder trees but also has invasive species encroachment, including blackberries and reed canary grass.
The geomorphic function in PA 3.2 is limited due to confinement and lack of structural elements. The channel has been reduced to a single thread and has been straightened for a significant potion of the project area. Adding structural elements will increase high flow and predator refuge for fish as well as create more suitable spawning and rearing habitat.

The Asotin Conceptual Restoration Plan recommends adding structural elements to improve hydraulic and geomorphic complexity to increase fish cover and flow refuge, improve sediment sorting and increase large woody debris. It also recommends invasive vegetation control to improve long-term processes.
This project seeks funding to develop a full design report, ready to construct engineer plans and complete environmental compliance requirements for a project that when implemented will enhance fish habitat through this 1.2-mile reach on Asotin Creek.

#2: Describe the limiting factors, and/or ecological concerns, and limiting life stages (by fish species) that your project expects to address.

The primary limiting factors identified in the Asotin Conceptual Restoration Plan for PA 03 include habitat diversity , temperature and key habitat quantity. Fish species presence and use by life stage were also identified in the Restoration Plan for steelhead, spring chinook, fall chinook and bull trout. Fish life stages identified for steelhead and fall chinook included peak activity for migration, spawning, rearing and holding. Peak activity for spring chinook for migration and rearing and low to moderate activity for spawning and holding. For bull trout, migration was identified as a peak activity and holding as a low to moderate activity.

#3: What are the project goals? The goal of the project should be to solve identified problems by addressing the root causes. Then clearly state the desired future condition. Include which species and life stages will benefit from the outcome, and the time of year the benefits will be realized. **Example Goals and Objectives**

The goal of this project is to develop a final design report, construction ready engineered plans and complete environmental compliance requirements for the upper portion of PA-03 which includes RM 4.0 to RM 5.2. This will address the management objectives that were identified in the Asotin Conceptual Restoration Plan. The project will be designed provide instream habitat complexity through the placement of large wood structures, to enhance juvenile Snake River steelhead and Snake River spring/fall Chinook habitat for all life stages, control invasive vegetation encroachment, and promote riparian function. This project area in enrolled in the Conservation Reserve Enhancement Program and is in relatively good condition.

#4: What are the project objectives? Objectives support and refine biological goals, breaking them down into smaller steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound). **Example Goals and Objectives**

The objective of this project is to provide a set of construction-ready designs, a full design report, complete the environmental compliance, secure permits, conduct cultural survey requirements and develop a bid package within two years of receiving funding. An engineer's cost estimate will also be developed to seek and secure funding for the construction phase. We anticipate this design will incorporate the following objectives as determined through the design process:
- install LWD structures and boulder clusters over approximately 6,300 feet of channel length to provide instream channel complexity and promote overbank flows
- control invasive vegetation and upland vegetation encroachment on approximately 5 acres to improve the riparian condition (full weed management inventory and plan will be completed and all invasive species and noxious weeds will be identified and mapped).
- develop a planting plant to enhance 2 to 3 acres with native riparian species to support long term riparian function and condition

#5: Scope of work and deliverables. Provide a detailed description of each project task/element. With each task/element, identify who will be responsible for each, what the deliverables will be, and the schedule for completion.

Hire consultant – October 2022
- This will be done through a competitive RFP process as soon as the SRFB contract is in place
Review of Conceptual Design – December 2022
- Conceptual Restoration Plan was developed during the Asotin Geomorphic and Watershed Assessment process. (PA 3 details are in the Asotin County Conceptual Restoration Plan: Technical Document & Appendices Section 8.1.5 on pages 81-83)
Complete Survey & Hydraulic Modeling – January 2023
Cultural Resource Review – March 2023
Preliminary Design – April 2023
Design Review – May 2023
- Asotin County Conservation District will invite SRSRB, RTT and landowner to provide review in addition to funding sources
Draft Design – July 2023
Design Review – August 2023
Permit Applications – September 2023
Final Design – November 2023
- This will include final drawings, design report, technical/construction specifications, construction quantities and cost estimate
Design Review – December 2023
Delivery of Full Design Package & Bidding Documents – January 2024

#6: What are the assumptions and physical constraints that could impact whether you achieve your objectives? Assumptions and constrains are external conditions that are not under the direct control of the project, but directly impact the outcome of the project. These may include ecological and geomorphic factors, land use constraints, public acceptance of the project, delays, or other factors. How will you address these issues if they arise?

There is one landowner in the project area who has already provided support for this project to be developed. That landowner will be included in the review and development of the designs. There has been significant recovery to the riparian vegetation throughout the project area and it will be a high priority to limit damage to the recovery riparian zones.

#7: How have lessons learned from completed projects or monitoring studies informed this project?

This project was identified during the Geomorphic & Watershed Assessment and Conceptual Restoration Plan process. Based on the complexity of the project, Asotin County Conservation District has decided the best approach would be to break this project into two phases: design and implementation. This will ensure a full design plan is developed which will provide clear direction for the implementation phase as well as provide all the necessary information to meet the environmental compliance requirements.

#8: Describe the alternatives considered and why the preferred was chosen.

This project is to develop a construction ready design plans. During the development of the designs, there will be a phase that identifies design options and a local team as well as RCO will be a part of selecting the design option to utilize.
Site evaluation, modeling and analysis that will be completed by the selected consultant, as a part of the design process to inform the design process. These tools will also be utilized to ensure the project, when implemented, will not negatively impact infrastructure (bridge and roads) or area above or below the project area.

#9: How were stakeholders consulted in the development of this project? Identify the stakeholders, their concerns or feedback, and how those concerns were addressed.

This project was identified during the Asotin County Geomorphic and Watershed Assessment development. The conceptual restoration plan was developed as a result of the process and this project was included in the plan. Landowners were engaged throughout the Assessment and Conceptual Restoration Plan development through public meetings and onsite visits. There has been no opposition to the conceptual restoration plan that was developed for PA 03. This project is being proposed on private property and the landowner is willing to proceed with the development of a design for the future implementation of the project. There are no identified public safety concerns identified at this time. In the event there is a safety concern identified, ACCD will address the concerns while completing the designs.

#10: Does your project address or accommodate the anticipated effects of climate change?

Yes

#10a: How will your project be climate resilient given future conditions?

Many streams in Asotin County, including Asotin Creek, originate in the Blue Mountains and the current hydrologic regime is snow-rain dominated for these streams, however it is anticipated to shift to a rain dominated regime. This will likely decrease summer base flows and increase summer water temperatures. Healthy stream and riparian areas conditions are essential during climate change shifts since they provide a critical location in the ecosystem for habitat for both fish and wildlife. The restoration work proposed will improve the resiliency of the project area and overall watershed.

#10b: How will your project increase habitat and species adaptability?

This project will result in the implementation of structures and instream habitat rehabilitation increasing salmon and steelhead resiliency to climate change.

#11: Describe the sponsor's experience managing this type of project. Describe other projects where the sponsor has successfully used a similar approach.

The Asotin County Conservation District has been managing natural resource and habitat improvement projects for several years. We have built positive relationships with the landowners of Asotin County and have been successful in implementing projects from start to finish. Asotin County Conservation District also has great relationships with technical partners throughout the region and has utilized their expertise as needed.

#12: Will veterans (including the veterans conservation corps) be involved in the project? If yes, please describe.

No

Planning Supplemental

#1: Is the project an assessment / inventory?
No

#2: Is your project a Barrier / Screening Diversion Inventory Project?
No

#3: Is this a fish passage design / screening design project?
No

#4: Will the project develop a design?
Yes

#4a: Will a licensed professional engineer design of the project?
Yes

#4b: Will you apply for permits as part of the project scope?

Yes and complete cultural resource requirements

Planning Metrics

Worksite: Asotin Creek PA 3.2 Design (#1)

Area Encompassed (acres) (B.0.b.1)	25.4
Miles of Stream and/or Shoreline Affected (B.0.b.2)	1.20

DESIGN FOR SALMON RESTORATION

Final design and permitting (B.1.b.11.a RCO)

Total cost for Final design and permitting	$99,000
Project Identified in a Plan or Watershed Assessment. (1221) (B.1.b.11.a)	Northwest Marine Fisheries Service. 2017. ESA Recovery Plan for Snake River Spring/Summer Chinook Salmon (Oncorhynchus tshawytscha) & Snake River Basin Steelhead (Oncorhynchus mykiss). Portland, OR. Asotin County Watershed Assessment and Conceptual Restoration Plan
Priority in Recovery Plan (1223) (B.1.b.11.b)	The project is identified as a top priority and located in a major spawning area for steelhead and a priority restoration reach in the Snake River Salmon Recovery Plan and 3 year workplan

CULTURAL RESOURCES

Cultural resources

Total cost for Cultural resources	$6,000
Acres surveyed for cultural resources	25.40

Overall Project Metrics

COMPLETION DATE

Projected date of completion	1/31/2024

Planning Cost Estimates

Worksite #1: Asotin Creek PA 3.2 Design

Category	Work Type	Estimated Cost	Note
Cultural Resources	Cultural resources	$6,000	
Design for Salmon restoration	Final design and permitting (B.1.b.11.a RCO)	$99,000	
	Subtotal:	$105,000	
	Total Estimate For Worksite:	$105,000	

Summary

Total Estimated Costs:	$105,000
Total Estimated Planning Costs:	$105,000

Cost Summary

	Estimated Cost	Project %	Admin/AA&E %
Planning Costs			
Planning	$105,000		
SUBTOTAL	$105,000	100.00 %	
Total Cost Estimate	$105,000	100.00 %	

Funding Request and Match

FUNDING PROGRAM

Salmon State Projects	$84,000	80.00 %

SPONSOR MATCH

Other Monetary Funding	Grant - Federal		
Amount			$21,000.00
Funding Organization			Bonneville Power Administration (BPA)
Grant Program			Fish & Wildlife Program
	Match Total:	$21,000	20.00 %
	Total Funding Request (Funding + Match):	$105,000	100.00 %

Questions

#1: Explain how you determined the cost estimates

The conceptual design was completed that included site details and recommended actions for the project area. There have been several design projects completed throughout the region to develop construction ready designs for instream habitat projects. Based on those project costs and the priorities for this project area the cost estimates were determined.

Cultural Resources

Worksite #1: Asotin Creek PA 3.2 Design

#1: Describe any planned ground disturbing pre-construction/restoration work. This includes geo-technical investigation, fencing, demolition, decommissioning roads, etc.

This project is for planning and design work only. There will a geo technical analysis being proposed for the planning and may require large test pits be excavated

#2: Describe the existing project area conditions. The description should include existing conditions, current and historic land uses and previous excavation/fill (if depths and extent is known, please describe).

Adjacent land is used for cattle grazing and winter feeding. The channel has been reduced to single thread and straightened in most of the PA. Geomorphic and hydraulic diversity is low and there are very few structural elements aside from occasional LWD. Riparian function in this reach is variable, ranging from limited to full. There are some examples in the PA where riparian function is high to full (e.g., RM 3.5 and 4.2 and 5.2 to 5.5). However, there are several long sections where riparian vegetation is limited to a thin extent along the channel margin. Alder and cottonwood are the dominant canopy species in PA-03 and likely provide adequate shade to the stream channel.

#3: Will a federal permit be required to complete the scope of work on the project areas located within this worksite?

No

This project is for planning and design work only.

#4: Are you utilizing Federal Funding to complete the scope of work? This includes funds that are being shown as match or not.

Yes

#4a: Please list the federal agency and funding sources.

BPA

#4b: Does the federal funding you are utilizing as match require you to receive state funding?

No

#5: Do you have knowledge of any previous cultural resource review within the project boundaries during the past 10 years?

No

#6: Are there any structures over 45 years of age within this worksite? This includes structures such as buildings, tidegates, dikes, residential structures, bridges, rail grades, park infrastructure, etc.

No

Project Permits

Permits and Reviews	Issuing Organization	Applied Date	Received Date	Expiration Date	Permit #
None - No permits Required					

Attachments

Required Attachments	5 out of 6 done
Applicant Resolution/Authorizations	
Cost Estimate	✓
Landowner acknowledgement form	✓
Map: Planning Area	✓
Photo	✓
RCO Fiscal Data Collection Sheet	✓

PHOTOS (JPG, GIF)

Photos (JPG, GIF)


499170


499171

PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
	02/02/2022	Map: Planning Area	Maps_PA 3.2-Brad.pdf	BradR	Maps_PA 3.2-Brad.pdf, 499172	✓
	02/02/2022	Photo	DSCF3895.JPG	BradR	DSCF3895.jpg, 499171	✓
	02/02/2022	Photo	DSCF3915.JPG	BradR	DSCF3915.jpg, 499170	✓
	01/31/2022	RCO Fiscal Data Collection Sheet	FiscalDataCollectionSheet 2022.pdf	MeganS	FiscalDataCollectionSheet 2022.pdf, 498925	
	01/31/2022	Landowner acknowledgement form	Appendix_F_Landowner_Ack_Form - T. Hendrickson_3.2.pdf	MeganS	Appendix_F_Landowner_Ack_Form - T. Hendrickson_3.2.pdf, 498922	
	01/21/2022	Cost Estimate	SRFB_Cost_Estimate - PA 3.2 Design.xlsx	MeganS	SRFB_Cost_Estimate - PA 3.2 Design.xlsx, 498144	✓

Application Status

Application Due Date: 06/27/2022

Status Name	Status Date	Submitted By	Submission Notes
Preapplication	01/03/2022		

I certify that to the best of my knowledge, the information in this application is true and correct. Further, all application requirements due on the application due date have been fully completed to the best of my ability. I understand that if this application is found to be incomplete, it will be rejected by RCO. I understand that I may be required to submit additional documents before evaluation or approval of this project and I agree to provide them.

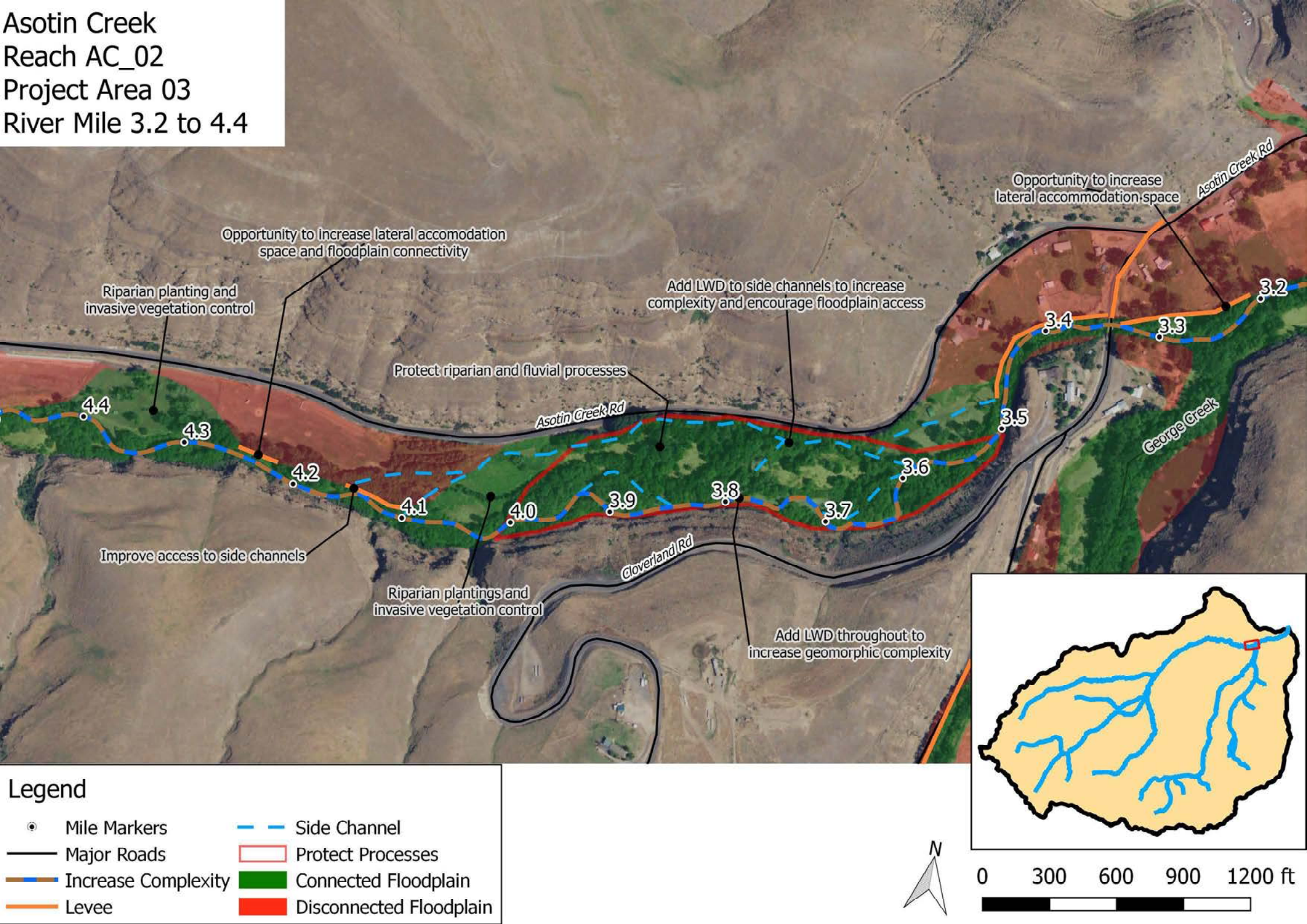
Date of last change: 02/04/2022

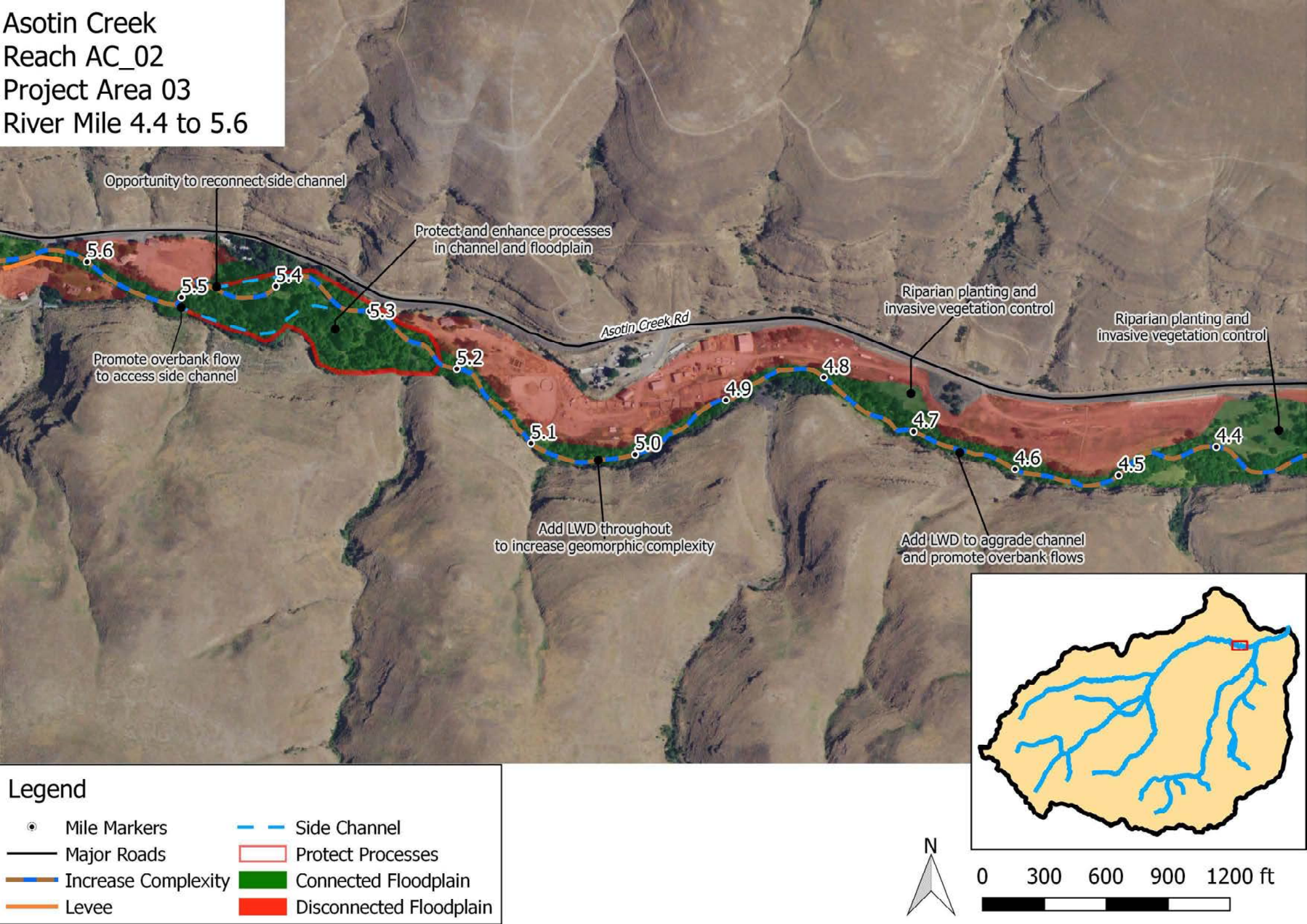
Asotin Co Conservation Dist; Asotin Creek PA 3.2 Design (#22-1009)

Attachment #499170, DSCF3915.JPG

Asotin Co Conservation Dist; Asotin Creek PA 3.2 Design (#22-1009)

Attachment #499171, DSCF3895.JPG


Asotin Creek
Reach AC_02
Project Area 03
River Mile 3.2 to 4.4
Opportunity to increase lateral accomodation space and floodplain connectivity
Riparian planting and invasive vegetation control
Add LWD to side channels to increase complexity and encourage floodplain access
Protect riparian and fluvial processes
Opportunity to increase lateral accommodation space
Asotin Creek Rd
George Creek
Improve access to side channels
Riparian plantings and invasive vegetation control
Cloverland Rd
Add LWD throughout to increase geomorphic complexity
4.4
4.3
4.2
4.1
4.0
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
Legend
Mile Markers
Major Roads
Increase Complexity
Levee
Side Channel
Protect Processes
Connected Floodplain
Disconnected Floodplain
N
0
300
600
900
1200 ft


Asotin Creek
Reach AC_02
Project Area 03
River Mile 4.4 to 5.6
Opportunity to reconnect side channel
Protect and enhance processes in channel and floodplain
Promote overbank flow to access side channel
Asotin Creek Rd
Riparian planting and invasive vegetation control
Riparian planting and invasive vegetation control
Add LWD throughout to increase geomorphic complexity
Add LWD to aggrade channel and promote overbank flows
5.6
5.5
5.4
5.3
5.2
5.1
5.0
4.9
4.8
4.7
4.6
4.5
4.4
Legend
Mile Markers
Major Roads
Increase Complexity
Levee
Side Channel
Protect Processes
Connected Floodplain
Disconnected Floodplain
N
0
300
600
900
1200 ft

DESIGN PROJECTS

The costs on this page are for design projects, not for the design phase of a restoration grant.

See Manual 18, Appendix D for additional information regarding allowable costs.

				OVERALL PROJECT	GRANT REQUEST	MATCH			
				Budget must account for all costs to complete the project	*Enter only the amount of the grant request*	*The Grant Request and Match should equal the total project cost and Budget Check cell should be 0. Sponsors must account for all sources and types of match need to complete the project.*			
				Amount	Amount	Match	Funding not reported in PRISM	Source (Grant, Cash, Materials, Labor, Volunteers, etc)	Match Type (federal, state, local)
Design Costs									
Category	Task Description	Qty	Rate						
Survey	*Site Review & Investigation*	**1.00**	$ 24,000.00	$ 24,000	$ 16,000	$ 8,000	$ -	BPA Contract	Federal
Other	*Meetings & Coordination*	1.00	$ 8,000.00	$ 8,000	$ 8,000	$ -	$ -	BPA Contract	Federal
Final design	*Design Engineering*	1.00	$ 52,000.00	$ 52,000	$ 42,000	$ 10,000	$ -	BPA Contract	Federal
Permits	*Environmental Permitting*	1.00	$ 3,000.00	$ 3,000	$ 3,000	$ -	$ -		
Cultural resources	*Cultural Resources*	1.00	$ 6,000.00	$ 6,000	$ 3,000	$ 3,000	$ -	BPA Contract	Federal
Administrative	*Grant Administration*	1.00	$ 12,000.00	$ 12,000	$ 12,000	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			$ -	$ -	$ -	$ -	$ -		
			STotal	$ 105,000	$ 84,000	$ 21,000	$ -		
Indirect Costs									
	Description	Approved Rate	Total Project Base						
	Indirect	0.000%	$ -	$ -	$ -	$ -	$ -		
	Indirect	0.000%	$ -	$ -	$ -	$ -	$ -		
			STotal	$ -	$ -	$ -	$ -		
			GTOTAL	**$ 105,000**	**$ 84,000**	**$ 21,000**	**$ -**		