

Partners of the North Santiam

Resiliency Action Plan Supplemental

December 2024

Prepared by:

GSI Water Solutions, Inc.

1600 SW Western Boulevard, Suite 240, Corvallis, OR 97333

This page intentionally left blank.

Contents

- Section 1: Governance Structure 7
 - 1.1 Purpose and Vision 7
 - 1.1.1 Purpose 7
 - 1.1.2 Vision 7
 - 1.2 Partners of the North Santiam 7
 - 1.2.1 Partners 7
 - 1.2.2 Technical Members 8
 - 1.2.3 Steering Committee 8
 - 1.2.4 PNS Coordinator 8
 - 1.3 Meeting Schedule and Objectives 9
 - 1.4 Decision-making Process 9
 - 1.4.1 Consensus Approach 9
 - 1.4.2 Types of Decisions and Decision-making Authority 10
 - 1.5 Partnership Signatures 10
- Section 2: Theory of Change and Initiatives 11
- Section 3: Project Prioritization Process 15
 - 3.1 Project Prioritization Approach 15
 - 3.2 Project Prioritization Process Steps 15
 - 3.2.1 Evaluation Criteria and Scoring Matrix Forms 16
 - 3.3 References 16
- Section 4: Monitoring Framework 17
 - 4.1 Monitoring Overview and Considerations 17
 - 4.1.1 Implementation Monitoring Approach 18
 - 4.1.2 Effectiveness Monitoring Approach 18
 - 4.1.3 Key Ecological Outcomes 18
 - 4.1.4 Monitoring Framework Approach 19
 - 4.1.5 Data 31
 - 4.2 References 33
- Section 5: Stakeholder Engagement Strategy 35
 - 5.1 Stakeholder Types 35
 - 5.2 Stakeholder Engagement Alignment 36
 - 5.3 Stakeholder Engagement Implementation 38
 - 5.3.1 Methods for Implementation 38
 - 5.3.2 Stakeholder Engagement Outreach Materials 38
 - 5.4 Stakeholder Engagement within the North Santiam Basin 38
- Section 6: Fundraising Plan 47
 - 6.1 Fundraising Approaches Applicable to All PNS Initiatives 47
 - 6.1.1 Internal Approaches 47
 - 6.1.2 External Approaches 48
 - 6.2 Funding Pursuit Considerations 49

6.3 Fundraising Approaches Specific to PNS Initiatives 49

6.4 Funding Sources 49

Exhibits

Exhibit 2-1. Initiatives, Strategies, and Implementation Actions..... 12

Exhibit 4-1. Types of Monitoring 18

Exhibit 4-2. Specific Ecological Outcomes Encompassed in Key Ecological Outcomes 19

Exhibit 4-3. Initiatives and Strategies Associated with the Selected Implementation Actions 20

Exhibit 4-4. Implementation Monitoring Metrics and Example Objectives/Targets..... 22

Exhibit 4-5. Effectiveness Monitoring Metrics and Example Objectives/Targets..... 24

Exhibit 4-6. Implementation and Effectiveness Monitoring Metrics for Ecological Outcomes and Potential Methods and Leads..... 27

Exhibit 5-1. Types of Stakeholders 36

Exhibit 5-2. Shows the PNS’s Initiatives and Respective Strategies..... 37

Exhibit 5-3. Entities, Entity Missions and Stakeholder Engagement Initiatives, and the PNS’ Plan for Alignment and Ideas for Where Alignment Could Be Strengthened 39

Exhibit 6-1. Funding Sources, Types, Areas of Interests, Amounts, Deadlines, and Associated Initiatives 50

Appendices

Appendix A Partnership Statement Template

Appendix B Theory of Change Results Chain: Riparian and Aquatic Habitat Enhancement Initiative

Appendix C Theory of Change Results Chain: Flow Restoration and Source Water Protection Initiative

Appendix D Theory of Change Results Chain: Oak Woodland and Prairie Restoration Initiative

Appendix E Evaluation Criteria and Scoring Matrix: Implementation Project Form

Appendix F Evaluation Criteria and Scoring Matrix: Monitoring Project Form

Appendix G Evaluation Criteria and Scoring Matrix: Planning/Stakeholder Engagement Form

Appendix H Outreach Materials Example

Abbreviations and Acronyms

BEF	Bonneville Environmental Foundation
BLM	Bureau of Land Management
CREP	Conservation Reserve Enhancement Program
CTGR	Confederated Tribes of Grand Ronde
DEQ	Oregon Department of Environmental Quality
DOGAMI	Oregon Department of Geology and Mineral Industries
EWEB	Eugene Water and Electric Board
MWBP	Mid-Willamette Beaver Partnership
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NSWC	North Santiam Watershed Council
ODFW	Oregon Department of Fish and Wildlife
OWEB	Oregon Watershed Enhancement Board
PNS	Partners of the North Santiam
SWCD	Soil and Water Conservation District
USACE	United States Army Corps of Engineers
USBOR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USFS	United States Forest Service
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
WVOPC	Willamette Valley Oak and Prairie Cooperative
BMP	Best Management Practice
cfs	cubic feet per second
BDA	Beaver dam analog
UAV	Unmanned aerial vehicle

This page intentionally left blank.

Section 1: Governance Structure

1.1 Purpose and Vision

The Partners of the North Santiam (PNS) is a group of local, county, state, federal, and tribal entities; local and regional businesses; nonprofit entities; and other committed stakeholders that rely on and support the well-being of the North Santiam River Watershed (NSW). PNS participants recognize that clear roles and responsibilities are essential to the success and effectiveness of the partnership, and as such, the PNS has developed the following formalized governance structure with implementation accountability.

1.1.1 Purpose

This governance structure will provide an understanding for the PNS to implement collaborative plans, and will set forth guiding principles for the PNS to follow. The purpose of this governance structure is to¹:

1. Formalize the participation of members in the PNS, and define the roles of the partnership members.
2. Set guiding principles in identifying and selecting restoration projects for implementation in collaboration with partnership members.
3. Provide a governance process and structure in which the PNS will make larger partnership decisions and actions.

1.1.2 Vision

The vision of the North Santiam Partnership is as follows:

The North Santiam River Watershed is made more resilient by Partners implementing coordinated actions to restore ecological processes that maintain habitat for species while supporting and improving social and economic interests in local communities.

For many years, the entities addressing watershed issues have worked in the NSW both independently and collaboratively (see Section 4 of the Resilience Action Plan for a history of collaboration). Over time, these entities realized that more could be achieved through working together, such as through shared learning, marshaling of shared expertise and resources, and collective strategic planning and implementation. Therefore, starting in Spring of 2015, entities in the NSW formed the PNS.

1.2 Partners of the North Santiam

The PNS governance structure consists of Partners or Technical Members who are willing to fill the following roles: Steering Committee, PNS Coordinator, Initiative Leads, Initiative Co-leads. Partners, Technical Members, and governance roles are described in detail below. Each participating partner organization brings a unique expertise and skillset to the table (partners and missions outlined in Exhibit 5-3).

1.2.1 Partners

Partners are participating entities that have signed a formal Statement of Partnership, are regularly able to attend meetings, and can participate in consensus-based decision-making. They offer time and technical expertise to PNS efforts. Partners are responsible for ensuring effective communications about PNS

¹ Moote, Ann. 2023. Governance Documents: A Guide Prepared for the Oregon Watershed Enhancement Board. <https://www.oregon.gov/oweb/Documents/FIP-Char-Bonneville-Environmental-Foundation-Governance-Documents-March-2023-Accessible.pdf>

activities within their organizations, providing timely input on PNS documents and efforts, providing updates about the efforts and projects of their organization related to the North Santiam Basin, and working collaboratively. Partners agree to do their best to consider the interests of all Partners.

1.2.2 Technical Members

Technical Members are participating entities in the PNS that are unable to sign a formal Statement of Partnership and/or unable to regularly attend meetings. They offer time and technical expertise to PNS efforts. Technical Members are responsible for ensuring effective communications about PNS activities within their organizations, providing timely input on PNS documents and efforts, providing updates about the efforts and projects of their organization related to the North Santiam Basin, and working collaboratively.

1.2.3 Steering Committee

The Steering Committee provides guidance and oversight for PNS efforts, including helping plan meetings and reviewing documents. The Steering Committee consists of Partners who are actively collaborating on ongoing projects in the PNS service area. Steering Committee members will be identified during the winter quarterly meeting.

The Steering Committee is led by a Chair. The role of the Steering Committee Chair is to facilitate Steering Committee actions. If the Partners opt to contract out the PNS Coordinator role, a Steering Committee member's organization will serve as the fiscal agent and that Steering Committee member will serve as project manager in partnership with the Chair (if different), ensuring that a partnership Coordinator is in place and meeting their stated responsibilities. Additionally, the Steering Committee Chair appoints Initiative Representatives and Co-Representatives for each of the PNS Initiatives. The PNS Initiatives include:

- PNS Communications Plan
- Stakeholder Engagement Strategy
- Funding Plan
- Monitoring Framework

1.2.4 PNS Coordinator

High-performing, systems-oriented partnerships are typically led by a centralized coordinator.² The PNS Coordinator serves as a collaborative leader, facilitator, and planning and project manager. Specifically, the role of the Coordinator is to convene meetings, to coordinate collection and sharing of information, to facilitate project tracking, and to provide a point of contact for the PNS. The Coordinator ensures regular meetings of the full PNS and Initiative subcommittees and the execution of the PNS Partnership Communication Plan, which includes maintaining the PNS contact list, distributing outreach materials to Partners and Technical Members, and managing shared documents and data. The Coordinator is responsible for keeping Partners and Technical Members informed about activities of the PNS, opportunities (e.g., funding, stakeholder engagement, partnerships, monitoring etc.), potential new projects, and reports and other information related to water resources issues in the North Santiam Basin. Additionally, the PNS Coordinator is responsible for guiding implementation of the PNS project prioritization process, stakeholder engagement strategy, fundraising plan, and monitoring framework. This role may be staffed by a partner organization or contracted out to independent consultants, at the discretion of the PNS.

² Arnold, J. 2023. Partnership Learning Project Part 2. Oregon Watershed Enhancement Board. <https://www.oregon.gov/oweb/Documents/Partnership-Learning-Project-Part-3.pdf>

1.3 Meeting Schedule and Objectives

The PNS will establish a meeting schedule consistent with the partnership needs and grant cycle timelines. Meetings will proceed under the direction of the PNS Coordinator with a written agenda, and summary notes will follow each meeting. The Coordinator will also keep a list of action items from meetings, as well as follow-up action items for Partners and Technical Members, and will ensure accountability by following up with all Partners and Technical Members with action items.

At a minimum, the PNS will meet quarterly and will accomplish the following tasks in those quarterly meetings:

- Winter meeting: identify/reinforce steering committee members; review priority projects for the grant cycles in the next year. The PNS should also recommend changes needed in the governance of the partnership in addition to any other needs of Partners and Technical Members.
- Spring meeting: decide through consensus which restoration project(s) will be showcased in a summer meeting and field tour in addition to any other needs of the Partners. The PNS will also identify volunteer needs and opportunities for collaboration with project implementation during the instream work window at this meeting. The PNS will discuss potential projects for grant writing for fall submissions and will coordinate submissions to primary funders among Partners and Technical Members.
- Summer meeting: full-day field tour to a priority restoration project of Partners and Technical Members' and will showcase lessons learned by implementers.
- Fall meeting: focused on restoration grant proposals; the PNS will provide feedback on grant proposals by Partners and Technical Members and will discuss priority project submissions for the following year's fall and spring grant cycles.

1.4 Decision-making Process

1.4.1 Consensus Approach

The PNS strives to operate by consensus. Partners agree to do their best to consider the interests of all members. Consensus means that all Partners had the opportunity to express their point of view in a group decision-making process and no more than one Partner who participates in the vote is unable to agree. When a decision is made, Partners all agree to support the decision for the best interest of the whole.

If consensus is not clear on a particular issue, Partners will be asked to show their level of support using a green, yellow, and red card system. A green card represents full support, a yellow card represents support but with minor concerns or questions, and a red card represents not in support. Partners can express the color of their card by holding up a physical card of that color, holding up the color word written on paper, writing the color word in a meeting chat or in an email, or stating the color by phone. In the event that more than one Partner expresses a red card for a particular issue, a subcommittee made up of a small group of the core facilitators and three of the Partners will be formed to resolve the concerns. When consensus is not possible, the group will decide by a supermajority of 70% (one vote from each participating organization) how to proceed. Partners may abstain from voting if they do not wish to vote on a particular issue. If a Partner is not present at the time of a Partner vote that Partner will be requested to submit a vote by email and/or phone. Each Partner will be given up to 10 business days to vote unless the PNS is up against a deadline and the vote is needed sooner.

1.4.2 Types of Decisions and Decision-making Authority

- PNS Administration (e.g., Meetings, data and document storage)
 - PNS Coordinator decides full PNS meeting dates and agendas, considering input from the Steering Committee
 - PNS Coordinator decides Initiative subcommittee meeting dates and agendas, considering input from Initiative Leads and Co-Leads
 - PNS Coordinator decides how to manage data and document storage, considering input from the Steering Committee
- PNS Documents (e.g. plans, reports, widely distributed outreach materials)
 - PNS Coordinator decides when draft documents are ready for full PNS review, considering input from the Steering Committee or Initiative Leads, and decides when to request consensus votes on finalizing documents
 - Partners finalize documents based on consensus
- Grant Applications for the PNS
 - Partners decide when to apply for grants as the PNS based on consensus
 - Partners decide which projects to include a grant application based on consensus
 - Partners and Technical Members are provided the opportunity to review grant applications that will be submitted by the PNS
 - PNS Coordinator decides when the grant application is finalized, utilizing input from the Steering Committee, Initiative Lead and Co-Lead, and Partners
- Partner, Technical Member, or Other Organization Grant Applications
 - Steering Committee decides when to provide a letter of support on behalf of the PNS, considering input from the Initiative Lead, the recommendations of the Prioritization Process, and the PNS Coordinator

1.5 Partnership Signatures

Partnering organizations have endorsed the PNS partnership in the Partnership Statement (template in Appendix A).

Section 2: Theory of Change and Initiatives

The PNS developed a theory of change framework specifically for the North Santiam Basin. The theory of change framework describes the theories and assumptions for how particular restoration strategies are predicted to yield desired ecological outcomes that contribute to the PNS's long-term watershed restoration vision. The theory of change framework can help broaden understanding and agreement about anticipated ecological outcomes of restoration strategies, identify knowledge gaps and uncertainties, and create the foundation for tracking progress and adaptive management. For background, Bonneville Environmental Foundation developed the theory of change framework and associated conceptual model for Oregon Watershed Enhancement Board's Focused Investment Partnership Program. This approach was inspired by the Conservation Measures Partnership's Open Standards for the Practice of Conservation.

Bonneville Environmental Foundation helped the PNS develop the framework using the Theory of Change conceptual model. The following inputs went into the model:

- PNS **strategies**
- **Implementation actions** under the strategies
- Predicted **ecological outcomes** related to the strategies and limitation actions
- **Ecological priorities** related to the ecological outcomes
- **Social priorities and human well-being priorities**

The PNS collaboratively identified expected connections between those inputs. The output of the model is a results chain that graphically represents the theory of change framework.

In the process of developing a theory of change framework, the PNS determined that certain strategies could be grouped together based on similarities in the watershed restoration approach. These groupings became the three PNS initiatives: the Riparian and Aquatic Habitat Enhancement Initiative, Flow Restoration and Source Water Protection Initiative, and the Oak Woodland and Prairie Restoration Initiative. The PNS used the Theory of Change conceptual model to develop a theory of change framework for each initiative, which produced a results chain for each initiative. These results chains are presented in Appendices B through D.

Exhibit 2-1 presents the PNS initiatives, strategies, and implementation actions shown in the results chains. The results chains define a strategy as a group of related actions designed to reduce stressors/limiting factors and improve attributes associated with ecological or social priorities. It defines implementation actions as immediate, measurable, on-the-ground results associated with implementing an action or series of related actions. Not shown in Exhibit 2-1 but included in the results chains are ecological outcomes, defined as specific results predicted to develop as a result of action implementation, and the overarching priorities of watershed restoration: ecological priorities (aquatic habitats, riparian systems; oak woodland and prairie habitat) and social priorities and human well-being (clean and ample supply of water, productive working lands, outdoor recreational opportunities, resilient and diverse economy, and strong social systems-engaged communities).

The PNS is using these three initiatives to focus its efforts in the basin and to maximize effectiveness of PNS efforts. The PNS subsequently developed a project prioritization process, monitoring framework, stakeholder engagement strategy, and fundraising plan that integrate these initiatives to put page numbers accomplish those goals. The PNS also maintains a Partners Projects List that contains all Partner and Technical Member projects in some stage of development, including completion, categorized by initiative.

Exhibit 2-1. Initiatives, Strategies, and Implementation Actions

Initiative	Strategy	Implementation Action
Riparian and Aquatic Habitat Enhancement	Restore fish passage	Fish passage projects associated with water diversion structures
		Fish passage projects associated with road crossings
	Beaver restoration	Beaver habitat and beaver dam capacity projects; beaver mimicry or beaver reintroduction projects
	Enhance stream channel habitat	Instream structure installation (e.g., large woody debris) or other beneficial channel modification projects
	Reconnect floodplains and side channels	Floodplain and side channel reconnection projects
	Enhance riparian areas	Riparian reforestation
		Invasive species management
	Improve wildfire resilience of riparian forests	Fuels reduction
		Prescribed fire
		Defensible space projects
Protect priority habitats	Priority habitat acquisition or conservation easement establishment	
Flow Restoration and Source Water Protection	Improve water quality in reservoirs	Detroit Dam and Big Cliff Dam reservoir water quality improvement projects
	Promote agricultural BMPs	Agricultural BMPs projects
	Improves stormwater management	Urban and rural stormwater practices projects
	Upgrade septic systems	Septic system upgrade projects
	Improve water management infrastructure	Irrigation and municipal water management efficiency and conservation projects
		Dam management alternatives
	Improve hydrology and sediment dynamics	Drainage issues improvements
		Road decommissioning
		Bridges/culverts replacement
	Enhance forest health, diversity, and wildfire resilience	Improve tree stand diversity
		Fuels reduction
		Enhance unique habitats and species
		Prescribed fire
	Protect priority habitats	Defensible space projects
Priority habitat acquisition or conservation easement establishment		

Initiative	Strategy	Implementation Action
Oak Woodland and Prairie Restoration	Cooperative incentive programs	Cooperative incentive programs for private landowners
		Oak Woodland habitat is protected from conversion for agriculture and other uses
	Prescribed fire	Prescribed burning treatments applied in potential open forest habitat sites
	Protect existing complex mature forest	Identification and protection of existing and future legacy trees
	Strategic thinning and other fuels reduction	Identification of existing and potential open forest habitat sites and thinning and planting of native species at these sites
	Invasive species control	Invasive species treatment at priority habitats with highest risk
	Protect priority habitats	Priority habitat acquisition or easement establishment

This page intentionally left blank.

Section 3: Project Prioritization Process

The PNS encompasses a variety of organizations developing and implementing a wide range of projects affecting instream, riparian, and upland conditions and habitats. As a result, the PNS needs a process to prioritize projects to advance PNS Initiatives and particular strategies, as well as to focus PNS efforts for grant opportunities. Consequently, the PNS has developed a project prioritization process that collaboratively assesses projects based on prioritization criteria. In addition, the process provides a mechanism for supporting new Partner or other organization projects with next steps.

3.1 Project Prioritization Approach

The PNS is using a decision support system approach, also known as a “scoresheet” approach. This approach assigns scores to important values, or criteria, which can be weighted if desired, and then utilizes the sum of the individual criteria scores to prioritize projects. This is a common approach used by local groups to prioritize restoration projects. Advantages of this approach are that the process is transparent, relatively simple, and flexible enough to incorporate objective and subjective criteria related to an individual organization’s environmental and socioeconomic goals (Beechie et al., 2008). Other approaches considered either did not account for as many factors as the PNS wanted or required extensive amounts of additional data and analyses that precluded easy use.

The PNS is utilizing the decision support system approach for prioritizing three types of projects that can occur under each PNS Initiative: implementation, planning/stakeholder engagement, and monitoring. The PNS determined that it made the most sense to focus on comparing and prioritizing projects that are similar given that an implementation project is very different from a monitoring project, for example. Furthermore, the type of project had a major influence on the desired scoring criteria. In contrast, the desired scoring criteria showed considerable overlap between the Riparian and Aquatic Habitat Enhancement Initiative and the Flow Restoration and Source Water Protection Initiative, particularly due to the two initiatives having projects (i.e., implementation actions) that produce many of the same ecological outcomes (e.g., improved water quality and habitat improvements). As a result, the PNS developed an Evaluation Criteria and Scoring Matrix (i.e., scoresheet) that works for both initiatives for each project type, which are presented in Appendices E through G. These are living documents that may be updated by the PNS in response to changing conditions and needs.

The PNS plans to collaborate with the Willamette Valley Oak and Prairie Cooperative (WVOPC) on a prioritization approach for oak and prairie projects, such as PNS projects that fall under the Oak Woodland and Prairie Restoration Initiative. Consequently, the PNS has not developed an Evaluation Criteria and Scoring Matrix for this initiative yet. The PNS will share how it has used the decision support system approach for the other two initiatives with the WVOPC.

3.2 Project Prioritization Process Steps

The PNS will evaluate and prioritize projects when a project proponent (i.e., project manager) approaches the PNS for project support, such as for an individual or PNS grant application, or to make the PNS aware of the effort. Over time, this will result in all projects on the PNS Project List having scores that can readily be used for strategic planning and pursuing funding, such as identifying which projects to include in a grant application.

The project prioritization process steps are as follows:

- **Submitting a Project Form.** The Project Proponent fills out and submits a Project Form to the PNS that aligns with the project type.
- **Meeting Scheduling.** The PNS Lead and relevant Initiative Lead and/or Co-Lead identify project reviewers and then schedule a meeting with the Project Proponent to discuss the project.
- **Meeting.** The Project Proponent presents the project to the PNS project reviewers and answers questions during the meeting. The PNS project reviewers determine how to support the project (e.g., indicate a willingness to provide a letter of support, suggest partnerships or funding sources, or recommend further development of the project) and share the Project Feedback Worksheet with the Project Proponent. The PNS Lead records the Evaluation Criteria and Scoring Matrix total project score in a database of evaluated projects for strategic planning and saves the completed forms in a file for reference.
- **Smartsheet Data Entry.** The Project Proponent enters project information into the Smartsheet database for projects in the North Santiam Basin.

3.2.1 Evaluation Criteria and Scoring Matrix Forms

Each Evaluation Criteria and Scoring Matrix Form (see Appendices D through F) provides instructions, describes the project evaluation process and scoring details, and contains an Evaluation Criteria and Scoring Matrix. The Evaluation Criteria and Scoring Matrix identifies project evaluation criteria under three categories (Riparian and Aquatic Habitat Enhancement Specific Information, Flow Restoration and Source Water Protection Specific Information, and Additional Information) and scoring descriptions for each project evaluation criteria. The Evaluation Criteria and Scoring Matrix also provides space for comments from project proponents (i.e., the project managers), scoring by the project proponents, and scoring by the project reviewers. The PNS has already weighted the scores in the scoring descriptions through assigning values ranging from 1 through 5. At the end of each Evaluation Criteria Scoring Matrix is a Project Feedback Worksheet the project reviewers fill out to assist project proponents with their projects. The reviewers provide comments and recommendations for next steps, such as the PNS providing a letter of support, exploring certain funding sources, considering certain partnerships, and further developing particular aspects of the project.

3.3 References

Beechie, T., G. Pess, P. Roni, and G. Giannico. 2008. "Setting River Restoration Priorities: a Review of Approaches and a General Protocol for Identifying and Prioritizing Actions." *North American Journal of Fisheries Management* 28:891-905.

Section 4: Monitoring Framework

The PNS developed a Theory of Change and Results Chains for its three initiatives (Riparian and Aquatic Habitat Enhancement, Flow Restoration and Source Water Protection, and Oak Woodland and Prairie Restoration) that identifies implementation actions for watershed restoration strategies (see Section 2 for more information) and the anticipated ecological outcomes of those actions. Monitoring restoration actions in the North Santiam Basin provides an opportunity to increase knowledge of the effects of restoration actions and to inform future actions. To become more informed and enhance decision-making, the PNS has developed this monitoring framework.

The objective of this monitoring framework is to answer the following questions for selected restoration strategies:

- Are restoration actions producing the desired ecological outcomes?
- Are near-term ecological outcomes leading to longer-term ecological outcomes and reaching restoration goals?
- Are the Theory of Change and Results Chains developed for the North Santiam Basin initiatives accurate or do they need changes?

The approach that the PNS will take to answer those questions is described in this monitoring framework. In addition, this monitoring framework is a structure to guide the development of detailed monitoring plans for projects rather than a detailed monitoring plan itself. Finally, the term “restoration” is used to encompass both conditions that can be restored, such as fish passage at a given location, and those that can be enhanced by an action but not necessarily returned to the state preceding changes such as land conversion, large-scale tree harvesting, urbanization, wildfire, and climate change.

4.1 Monitoring Overview and Considerations

Monitoring involves collecting and analyzing data to increase knowledge, and it can take on several forms depending on the monitoring goals. Implementation monitoring, effectiveness monitoring, and tracking status and trends are types of monitoring that provide valuable information and address monitoring questions. Implementation monitoring tracks implementation of actions under restoration strategies. Effectiveness monitoring assesses whether the implementation actions are helping reach desired ecological outcomes. Monitoring status and trends helps provide information about the extent to which restoration actions are reaching restoration goals over the long-term, as well as enhance understanding of ecosystem restoration needs. Exhibit 4-1 presents the types of monitoring. Metrics, or indicators, are selected to help answer the monitoring questions.

Exhibit 4-1. Types of Monitoring

Monitoring Type	Question Monitoring Answers
Implementation	<p>Is the restoration strategy being implemented?</p> <p>-For tracking the degree to which actions or treatments are carried out as planned</p>
Effectiveness	<p>Is the restoration action helping achieve the desired ecological outcome?</p> <p>-For tracking the degree to which expected ecological responses are observed as a result of implementing restoration actions.</p>
Status and Trends	<p>Is the restoration action helping achieve the long-term restoration goal?</p> <p>-For tracking the degree to which the cumulative effect of ecological outcomes contribute to long-term restoration goals.</p>

Source: Bonneville Environmental Foundation, 2021

4.1.1 Implementation Monitoring Approach

The PNS has identified implementation monitoring metrics that convey the activities and accomplishments of restoration implementation actions. The PNS has developed a Smartsheet database for collective tracking of implementation monitoring metrics identified under the three initiatives. The database enables project managers to enter project information and data related to particular monitoring metrics for implementation actions.

4.1.2 Effectiveness Monitoring Approach

The overarching goal of the PNS is to improve aquatic habitats and riparian systems for the benefit of fish and wildlife and human well-being. The PNS has identified an array of strategies under three initiatives to achieve that goal and has identified metrics for effectiveness monitoring to determine whether the strategies are achieving its overarching goal.

4.1.3 Key Ecological Outcomes

Restoration strategies can pursue numerous ecological outcomes, and some actions under the strategies can be more easily attributed to producing ecological outcomes than others. Consequently, ecological outcomes and monitoring metrics to assess whether those ecological outcomes are being met must be carefully chosen. Factors to consider when choosing ecological outcomes to monitor include capacity, expertise, and resources available; the extent to which change can be measured in the useful timeframe; reliability of methods available for monitoring; whether the outcome can be linked to long-term restoration goals; and general consensus that selected restoration actions will produce the desired outcome (Bonneville Environmental Foundation, 2021). Metrics should be chosen that minimize the likelihood of being affected by other factors, such as ocean conditions and climate variability, and are most likely to indicate an improvement or decline in watershed conditions. With all this in mind, the PNS selected key ecological outcomes out of the array identified in the Results Chains of its initiatives and has identified metrics for implementation monitoring and effectiveness monitoring related to those key ecological outcomes. The PNS could choose to focus on other ecological outcomes and those associated strategies in the future and could utilize the current approach as an example.

4.1.4 Monitoring Framework Approach

To produce a manageable monitoring framework, the PNS has decided to focus on strategies related to three ecological outcomes under the Riparian and Aquatic Habitat Enhancement Initiative and the Flow Restoration and Source Water Protection Initiative:

- Aquatic habitat access is expanded
- Riparian and floodplain habitats are restored, and
- Erosion and sedimentation are reduced.

The first two key ecological outcomes above encompass several specific Results Chain ecological outcomes that can be logically grouped under the key ecological outcome, which are shown in Exhibit 4-2. These ecological outcomes aim to improve watershed conditions for fish while also providing benefits to other wildlife and people that depend on resources in the North Santiam Basin.

Exhibit 4-2. Specific Ecological Outcomes Encompassed in Key Ecological Outcomes

Key Ecological Outcome	Specific Results Chain Ecological Outcomes
Aquatic habitat access is expanded	Floodplain connectivity is restored
	Fish migration corridors are passable
	Spatial distribution of fish and access to spawning and rearing habitat expands
	Stream habitat complexity and connectivity (longitudinal) increase
Riparian and floodplain habitats are restored	Abundance of non-native invasive plant species is reduced
	Quantity, quality, and connectivity of riparian and floodplain habitats improve
Erosion and sedimentation are reduced	Erosion and sedimentation are reduced ¹

¹ This is the same, because multiple ecological outcomes were not identified that fall under erosion and sedimentation reduction.

Of the numerous strategies identified as having the potential to produce those ecological outcomes, this monitoring framework focuses on eight strategies and 14 implementation actions associated with the strategies (with some actions repeated due to utilization under multiple strategies), which are presented in Exhibit 4-3. In addition, only the ecological outcomes of focus are identified.

Exhibit 4-3. Initiatives and Strategies Associated with the Selected Implementation Actions

Initiative	Strategy	Implementation Action	Ecological Outcomes
<p>Riparian and Aquatic Habitat Enhancement</p>	<p>Restore fish passage</p>	<p>Fish passage projects associated with water diversion structures</p>	<p>Fish migration corridors are passable</p> <p>Spatial distribution of fish access to spawning and rearing habitat expands</p> <p>Quantity, quality, and connectivity of riparian and floodplain habitats improve</p>
		<p>Fish passage projects associated with road crossings</p>	<p>Fish migration corridors are passable</p> <p>Spatial distribution efficient access to spawning and rearing habitat expands</p> <p>Stream habitat complexity and connectivity increase</p> <p>Quantity, quality, and connectivity of riparian and floodplain habitats improve</p>
	<p>Beaver restoration</p>	<p>Beaver projects (i.e., Beaver habitat and beaver dam capacity projects; beaver mimicry; or beaver reintroduction projects)</p>	<p>Floodplain connectivity is restored</p> <p>Stream habitat complexity and connectivity increase</p> <p>Quantity, quality, and connectivity of riparian and floodplain habitats improve</p>
	<p>Enhance stream channel habitat</p>	<p>Large woody debris projects</p> <p>Beaver projects</p>	<p>Abundance of non-native invasive plant species is reduced</p>

Initiative	Strategy	Implementation Action	Ecological Outcomes
			<p>Stream habitat complexity and connectivity increase</p> <p>Quantity, quality, and connectivity of riparian and floodplain habitats improve</p>
	Reconnect floodplains and side channels	<p>Stream and floodplain reconnection projects</p> <p>Beaver projects</p>	<p>Floodplain connectivity is restored</p> <p>Stream habitat complexity and connectivity increase</p> <p>Quantity, quality, and connectivity of riparian and floodplain habitats improve</p>
	Enhance riparian areas	Riparian planting	<p>Abundance of non-native invasive plant species is reduced</p> <p>Quantity, quality, and connectivity of riparian and floodplain habitats improve</p> <p>Erosion and sedimentation are reduced</p>
		Invasive species management	<p>Abundance of non-native and invasive plant species is reduced</p> <p>Quantity, quality, and connectivity of riparian and floodplain habitats improve</p>
Flow Restoration and Source Water Protection	Promote agricultural BMPs	Agricultural BMPs projects	Erosion and sedimentation are reduced
	Improve water management infrastructure	Irrigation and municipal water management efficiency and conservation projects	Fish migration corridors are passable

Initiative	Strategy	Implementation Action	Ecological Outcomes
	Improve hydrology and sediment dynamics		Spatial distribution of fish and access to spawning and rearing habitat expands
		Drainage issues improvements	Erosion and sedimentation are reduced
		Road decommissioning	Erosion and sedimentation are reduced
		Bridge/culvert replacement	Erosion and sedimentation are reduced

The PNS has identified potential metrics for implementation monitoring and effectiveness monitoring for the key ecological outcomes. Exhibit 4-4 presents the potential implementation monitoring metrics and example objectives or targets. Exhibit 4-5 presents the potential effectiveness monitoring metrics and example objectives or targets. These exhibits can be further refined once specific projects are identified for implementation.

Exhibit 4-4. Implementation Monitoring Metrics and Example Objectives/Targets

Implementation Actions	Example Objectives/Targets	Metric/Indicator
Fish passage projects associated with water diversion structures are implemented	By 20XX, X water diversion structures affecting fish passage are addressed, creating X miles of additional stream habitat.	Miles of stream made accessible to fish Number of water diversion structures affecting fish passage addressed
Fish passage projects associated with road crossings are implemented	By 20XX, X road crossings affecting fish passage are addressed, creating X miles of additional stream habitat.	Miles of stream made accessible to fish Number of road crossings affecting fish passage addressed
Beaver habitat and beaver dam capacity are improved; beaver mimicry or beaver	By 20XX, X beaver mimicry structures are installed	Number of new beaver dams Number of beaver mimicry structures installed

Implementation Actions	Example Objectives/Targets	Metric/Indicator
reintroduction projects are completed		Number of beaver reintroduction projects completed
Instream structures are installed (e.g., large woody debris) or other beneficial channel modifications are implemented	By 20XX, X large woody debris structures are installed	Number of large woody debris structures installed Number of channel modifications implemented Stream miles of habitat restored
Floodplain and side channel reconnection projects are implemented	By 20XX, X acres of floodplain are reconnected	Acres of floodplain area reconnected
Riparian restoration is implemented	By 20XX, X stream miles of riparian planting is completed	Stream miles of riparian planting Acres of newly planted riparian/floodplain areas
Invasive species are controlled	By 20XX, X acres of aquatic invasive species are treated	Acres of aquatic invasive species treatment
Agricultural BMPs are implemented	By 20XX, X miles of streamside livestock fencing is built	Miles of streamside livestock fencing Stream miles of riparian planting Acres of newly planted riparian/floodplain areas Acres of sedimentation and hydrological improvements Stream miles of sedimentation and hydrological improvements
Irrigation and municipal water management efficiency and conservation projects are implemented	By 20XX, irrigation efficiency and conservation projects protect X cfs instream. By 20XX, municipal efficiency and conservation projects conserve X cfs	Rate (cfs) of water protected instream Rate (cfs) of water conserved by addressing municipal water management/infrastructure

Implementation Actions	Example Objectives/Targets	Metric/Indicator
Drainage issues were improved	By 20XX, X stream miles with drainage issues are addressed, resulting in X stream miles of sedimentation and hydrological improvements	Acres of sedimentation and hydrological improvements Stream miles of sedimentation and hydrological improvements
Roads are decommissioned	By 20XX, X miles of roads are decommissioned, resulting in X acres of sedimentation and hydrological improvements	Miles of road decommissioned Acres of sedimentation and hydrological improvements Stream miles of sedimentation and hydrological improvements
Bridges/culverts are replaced	By 20XX, X bridges/culverts replaced, resulting in X acres of sedimentation and hydrological improvements	Number of bridges/culverts replaced Acres of sedimentation and hydrological improvements Stream miles of sedimentation and hydrological improvements

Exhibit 4-5. Effectiveness Monitoring Metrics and Example Objectives/Targets

Ecological Outcome	Example Objectives/Targets	Metric/Indicator
Floodplain connectivity is restored	Extent of flooding and duration match reference conditions/sites	Extent of additional flooding and duration (measured in winter and at low flow)
Fish migration corridors are passable	Fish are present in stream miles that were previously inaccessible	Fish presence in corridors that are now passable
Spatial distribution of fish and access to spawning and rearing habitat expands	Fish are present in habitats that were previously inaccessible	Fish presence in restored habitat
Stream habitat complexity and connectivity increase	Habitat exhibits complexity is similar to reference sites/conditions	Floodplain inundation: Extent of additional flooding and duration (measured in winter and at low flow)

Ecological Outcome	Example Objectives/Targets	Metric/Indicator
		<p>Changes in streambed elevation</p> <p>Fish habitat quality/quantity trends</p> <p>Habitat complexity (habitat units per mile, large woody debris volume, number of key wood pieces, residual pool depth, etc.)</p> <p>Primary and secondary channel length</p>
Abundance of non-native invasive plant species is reduced	Extent of stream surface covered by aquatic invasive species is diminished	Aquatic invasive species (emergent and floating) plant cover
Quantity, quality, and connectivity of riparian, and floodplain habitats improve	Plant species diversity etc. is similar to reference sites	Plant species diversity, structural diversity, stem density, native and non-native cover representative of reference conditions
Erosion and sedimentation are reduced	<p>Vegetation cover is similar to reference sites.</p> <p>Turbidity is similar to reference sites.</p>	<p>Active streambank erosion</p> <p>Changes in turbidity</p> <p>Changes in total suspended solids</p> <p>Vegetation cover reestablishment based on surveys or mapping</p>

To provide another way of looking at the monitoring metrics and additional monitoring details, Exhibit 4-6 presents the implementation and effectiveness monitoring metrics for the key ecological outcomes, as well as the general method and potential monitoring lead. This exhibit can be further refined once specific projects are identified for implementation, including the metrics, methods, and leads. Citations of specific protocols or monitoring plans could also be added at that point. Reporting for each ecological outcome will at least consist of a project monitoring report and data entry into the Smartsheet database for North Santiam watershed projects, which will be incorporated into an annual report developed by the PNS summarizing North Santiam watershed restoration efforts for the year.

Exhibit 4-6. Implementation and Effectiveness Monitoring Metrics for Ecological Outcomes and Potential Methods and Leads

Ecological Outcome	Strategy	Implementation Monitoring Metric (Is the strategy being implemented?)	Effectiveness Monitoring Metric (Are implementation actions helping reach ecological outcomes?)	Potential Methods	Potential Lead
Floodplain connectivity is restored	Beaver restoration Reconnect floodplains and side channels	Number of new beaver dams Number of beaver reintroduction projects completed Number of beaver mimicry structures installed Acres of floodplain area reconnected Miles of side channel reconnected	Floodplain inundation: Extent of additional flooding and duration (Measured in winter and at low flow)	Field and UAV flood mapping and USGS flood stage data UAV mapping for side channel reconnection Measure floodplain vegetation response at low flow, before, and after project implementation (vegetation will be greener at low flow if the project did increase floodplain connectivity) Water-surface elevation at a specified flow Duration of water surface above a threshold discharge Range of depths at a specific flow	NSWC Confederated Tribes of Grand Ronde (CTGR)
Fish migration corridors are passable	Restore fish passage Improve water management infrastructure	Miles of stream made accessible to fish Number of road crossings affecting fish passage addressed Number of water diversion structures affecting fish passage addressed	Fish presence in corridors that are now passable	Field mapping and observations	NSWC USFS ODFW

Ecological Outcome	Strategy	Implementation Monitoring Metric (Is the strategy being implemented?)	Effectiveness Monitoring Metric (Are implementation actions helping reach ecological outcomes?)	Potential Methods	Potential Lead
<p>Spatial distribution of fish and access to spawning and rearing habitat expands</p>	<p>Restore fish passage</p> <p>Improve water management infrastructure</p>	<p>Miles of stream made accessible to fish</p> <p>Number of road crossings affecting fish passage addressed</p> <p>Number of water diversion structures affecting fish passage addressed</p> <p>Rate (cfs) of water protected instream</p> <p>Rate (cfs) of water conserved by addressing municipal water management/infrastructure</p>	<p>Fish presence in restored habitat</p>	<p>Snorkel and/or spawning surveys (redd count) above addressed barrier if spawning habitat exists above the barrier</p> <p>Temperature assessment (using data loggers)</p> <p>Field and UAV based inundation mapping</p> <p>Measure floodplain vegetation response at low flow, before, and after project implementation (vegetation will be greener at low flow if the project did increase floodplain connectivity)</p> <p>Water-surface elevation at a specified flow</p> <p>Duration of water surface above a threshold discharge</p> <p>Range of depths at a specific flow</p>	<p>USFS</p> <p>ODFW</p> <p>Mid-Willamette Beaver Partnership (MWBP)</p>

Ecological Outcome	Strategy	Implementation Monitoring Metric (Is the strategy being implemented?)	Effectiveness Monitoring Metric (Are implementation actions helping reach ecological outcomes?)	Potential Methods	Potential Lead
<p>Stream habitat complexity and connectivity increase</p>	<p>Restore fish passage</p> <p>Beaver restoration</p> <p>Enhance stream channel habitat</p> <p>Reconnect floodplains and side channels</p>	<p>Number of large woody debris structures installed</p> <p>Number of channel modifications implemented</p> <p>Number of new beaver dams</p> <p>Number of beaver reintroduction projects completed</p> <p>Number of beaver mimicry structures installed</p> <p>Acres of floodplain area reconnected</p> <p>Miles of stream made accessible to fish</p> <p>Miles of side channel reconnected</p> <p>Number of road crossings affecting fish passage addressed</p> <p>Number of water diversion structures affecting fish passage addressed</p>	<p>Floodplain inundation: Extent of additional flooding and duration (measure in winter and at low flow)</p> <p>Changes in stream bed elevation</p> <p>Fish habitat quality/quantity trends</p> <p>Habitat complexity (e.g., habitat units per mile, large woody debris volume, number of key with pieces, residual pool depth, etc.)</p> <p>Primary and secondary channel length</p>	<p>Field and UAV based inundation mapping</p> <p>UAV mapping for side channel reconnection</p> <p>Annual cross-section depth measurements at log structure sites and above and below beaver dams/BDAs (provides a narrow view of habitat complexity, so best done with the above method to incorporate additional habitat features that could be important, such as wood density, undercut banks)</p>	<p>NSWC</p> <p>MWBP</p>
<p>Abundance of non-native invasive plant species is reduced</p>	<p>Enhance riparian areas</p>	<p>Acres of aquatic invasive species treatment</p> <p>Stream miles of riparian planting</p>	<p>Aquatic invasive species (emergent and floating) plant cover</p>	<p>Aquatic survey/mapping</p>	<p>NSWC</p>

Ecological Outcome	Strategy	Implementation Monitoring Metric (Is the strategy being implemented?)	Effectiveness Monitoring Metric (Are implementation actions helping reach ecological outcomes?)	Potential Methods	Potential Lead
<p>Quantity, quality, and connectivity of riparian, and floodplain habitats improve</p>	<p>Restore fish passage</p> <p>Beaver restoration</p> <p>Enhance stream channel habitat</p> <p>Reconnect floodplains and side channels</p> <p>Enhance riparian areas</p>	<p>Number of new beaver dams</p> <p>Number of beaver mimicry structures installed</p> <p>Number of beaver reintroduction projects completed</p> <p>Acres of newly planted floodplain</p> <p>Stream miles of riparian planting</p> <p>Miles of stream made accessible to fish</p> <p>Acres of floodplain area reconnected</p> <p>Miles of side channel reconnected</p>	<p>Plant species diversity, structural diversity, stem density, native and non-native cover representative of reference conditions</p> <p>Floodplain inundation: Extent of additional flooding and duration (measure in winter and at low flow)</p> <p>Habitat complexity (e.g., habitat units per mile, large woody debris volume, number of key with pieces, residual pool depth, etc.)</p> <p>Fish habitat quality/quantity trends</p>	<p>Vegetation plots</p> <p>Field and UAV-based mapping</p>	<p>NSWC</p> <p>CTGR</p> <p>MWBP</p>
<p>Erosion and sedimentation are reduced</p>	<p>Restore fish passage</p> <p>Enhance stream channel habitat</p> <p>Reconnect floodplains and side channels</p> <p>Enhance riparian areas</p> <p>Promote agricultural BMPs</p> <p>Improve hydrology and sediment dynamics</p>	<p>Acres of sedimentation and hydrological improvements</p> <p>Stream miles of sedimentation and hydrological improvements</p> <p>Miles of road decommissioned</p> <p>Number of bridges/culverts replaced</p> <p>Stream miles of riparian planting</p> <p>Acres of newly planted floodplain</p> <p>Acres of fire recovery planting</p> <p>Miles of streamside livestock fencing</p>	<p>Active streambank erosion</p> <p>Changes in turbidity</p> <p>Changes in total suspended solids</p> <p>Vegetation cover reestablishment based on surveys or mapping</p>	<p>Field and UAV-based mapping</p> <p>Vegetation plots or surveys</p> <p>Miles of road hydrologically disconnected from the stream network</p> <p>% active eroding streambanks</p> <p>Turbidity water sampling (to be determined; e.g., continuous monitoring, Sampling before/after and/or above/below projects) (Note: USGS has four Water Quality stations in the basin with turbidity sensors that measure every 15 minutes. Drinking water intakes also monitor turbidity. These could be helpful if a project occurs right above the station or intake. City of Salem has aerials and cameras to see sedimentation within Detroit Reservoir.)</p> <p>Total Suspended Solids sampling (to be determined; before/after and/or above/below project)</p>	<p>USFS</p> <p>NSWC</p> <p>MWBP</p>

4.1.5 Data

This monitoring framework describes important considerations when collecting data. Monitoring plans developed for specific projects should incorporate these elements and provide more specific details.

4.1.5.1 Collection

Well-defined protocols help ensure that data collection is consistent over time and across different reaches of the study area (USGS, 2022). The PNS has identified some potential methods for data collection in Exhibit 4-6, but the exact methods of data collection will be identified as projects are brought to the PNS. That said, the PNS will develop a guide with recommendations for data collection methods and quality assurance and quality control (QA/QC) measures that should be put in place to ensure data accuracy and consistency. Collection of baseline monitoring data before project implementation is recommended if possible. For example, the guide could describe study designs, such as Before-After or a Before-After Control-Impact (BACI). The PNS will help coordinate monitoring methods to increase consistency when conducting implementation and effectiveness monitoring. The guide could include a framework by type of monitoring, such as ecological and water quality. The PNS will establish a Monitoring Committee to oversee the coordination of monitoring methods and the PNS will seek funding to support a monitoring coordinator. Monitoring Plans will be shared with the Monitoring Committee during project development. The Monitoring Committee will meet more regularly during initial project development, such as bimonthly and transition to meeting less frequently, such as bi-annually, once implementation is successfully underway.

There is a potential for overlap of monitoring across multiple projects. In order to increase efficiency, PNS will facilitate cross-collaboration and monitoring coordination among projects. This would include, but is not limited to:

- PNS will help connect Project Leads that are collecting the same data in the same area.
- PNS will help Project Leads decide which monitoring metrics would be attributed to a project within the Smartsheet database if overlap exists.
- Create and maintain a map to help Partners identify where projects are occurring, and potentially include a code or other identifier to describe the type of project. This could prevent duplicative projects, initiatives, and/or monitoring metric data collection.
- PNS could aid Project Leads with inter-agency communication and requirements/guidelines, particularly if requirements/guidelines would apply to multiple projects.

The guide and PNS support are intended to help the PNS ensure that its collecting consistent information to enable data analyses across similar projects in the North Santiam basin and proper comparison between projects. Grant support for a monitoring coordinator will be important for fully building and maintaining a comprehensive, unified monitoring program (including and beyond data collection).

4.1.5.2 Monitoring Data Management

The PNS will create a database for storing field data sheets, UAV imagery, lab results, and other types of data. The monitoring data will be added by PNS organizations with assistance from the monitoring coordinator and will be managed by the monitoring coordinator with oversight from the Monitoring Committee. The raw data will be available for different PNS organizations to access. Project Leads will initially maintain their raw data internally, with a goal to shift to a centralized database managed by PNS when funding is available. If data is not available on a centralized database, PNS will share contact information if parties are interested in reaching out to Project Leads regarding past or current data.

4.1.5.3 Implementation Data Management

While each individual organization has its own management system in place, the PNS uses a multi-organizational approach (i.e., Smartsheet database) to record, manage, and update data for each project. The Smartsheet database includes information about the type of project and allows entry of quantifiable metrics (e.g., number of trees planted). The Smartsheet database can help highlight data gaps and offers an opportunity for the PNS to address those collaboratively. Individual organizations will also need to implement their own QA/QC measures for their internal data management beyond Smartsheet.

4.1.5.4 Data Analysis

Data analysis for each initiative project is conducted by the respective organization who collected the data. Analyses are shared in the form of project reports and include an interpretation of the monitoring data. Each year the respective organization and the PNS will coordinate to summarize and interpret findings housed in the Smartsheet database and to place findings within the broader context of ecological outcomes. In addition, analyses will help the PNS identify data gaps that should be addressed. Summarizing key findings of the Smartsheet database would likely be a task of the monitoring coordinator.

4.1.5.5 Adaptive Management

The knowledge gained from these results will be used to help the PNS adaptively manage its watershed restoration efforts. The PNS annually will review the monitoring results for indications that an aspect of a project is not helping achieve ecological outcomes and assess whether any monitoring metrics, monitoring methods, implementation actions, strategies, or Results Chains assumptions need to be revisited. The PNS will adjust these elements as determined appropriate and consider additional studies or monitoring efforts that could help fill data gaps. However, multiple years of monitoring may be necessary before the extent to which an implementation action is helping achieve ecological outcome can be determined. In addition, a more unified, comprehensive monitoring program

4.1.5.6 Communication

The PNS will communicate data, analyses, results, and adaptive management on a project-level basis through PNS meetings. Once complete, project reports will be circulated and reviewed by members. The PNS and/or North Santiam Watershed Council will also develop and distribute a summary-level annual report based on PNS member reports and analyses updated in the Smartsheet database. This report will summarize key findings discovered by the PNS and will describe adaptive management measures based on monitoring results. Key findings likely to be reported regularly are implementation metrics while effectiveness monitoring metrics will be reported periodically after enough data has been collected and time has passed to appropriately report on them.

4.1.5.7 Sustaining Monitoring

The PNS will sustain monitoring through partnerships and their fundraising plan, stakeholder engagement strategy, and governance structure (see Sections 1, 5, and 6). North Santiam partnerships enable information sharing that help with identifying monitoring needs and monitoring costs. In addition to partnerships, other important activities include maintaining communications with funders and other regional restoration groups, developing and maintaining skilled volunteers, and continuing to look ahead at funding opportunities. The fundraising plan describes activities that can enhance fundraising success and outlines specific funding opportunities, their due dates, and the initiatives they might support. Stakeholder engagement is a fundamental part of the process to develop, fund, and sustain watershed enhancement projects. The stakeholder engagement strategy details the ways the PNS can engage with different stakeholder types, including aligning with projects and monitoring efforts by stakeholders not involved in the

PNS. The Governance Structure clarifies the roles and responsibilities of PNS members so that a structure is in place to ensure that monitoring is sustained and that the PNS addressing the core questions of the monitoring framework.

4.2 References

Bonneville Environmental Foundation. 2021. *Monitoring Restoration Initiatives: A Guide Prepared for Oregon Watershed Enhancement Board's Focused Investment Partnership Program*.

Siuslaw Coho Partnership. 2018. *Strategic Action Plan for Coho Salmon Recovery, the Siuslaw River*.

U.S. Geological Survey, The Nature Conservancy, and U.S. Army Corps of Engineers. 2022. *Monitoring Framework to Evaluate Effectiveness of Aquatic and Floodplain Habitat Restoration Activities for Native Fish among the Willamette River, Northwest Oregon*. Open-file Report 2022-1037.

This page intentionally left blank.

Section 5: Stakeholder Engagement Strategy

Stakeholder engagement is a fundamental part of the process to develop and fund watershed enhancement projects. It enables the formation of partnerships and encourages participation that facilitate project implementation. In addition, collaboration with stakeholders creates the ability to work across property boundary lines, increases the scale of planned restoration, and helps in effectively prioritizing work. Comprehensive stakeholder engagement requires an array of approaches that recognize the different types of stakeholders, the various PNS initiatives and associated projects, and the opportunities for alignment of stakeholder engagement efforts with existing efforts of other organizations. With that in mind, the PNS has crafted the following stakeholder engagement strategy that provides a consistent approach across PNS efforts while supporting more personalized engagement within each PNS effort.

5.1 Stakeholder Types

As the first steps to develop the stakeholder engagement strategy, the PNS identified the types of stakeholders that could help advance PNS efforts and outline the mechanism for communication between the PNS and stakeholders. Identifying key stakeholders will help to maximize support and success of PNS initiatives and individual projects endeavors, as well as provide an organizational framework for outreach and coordination. Clear communication between the PNS and various stakeholders will ensure that engagement is successful, and that work is being done to move projects forward; communication will differ based on the stakeholder type.

The PNS categorized stakeholders into four types or levels: project, organizational, regional, and governmental/political, each with different engagement descriptions. At the project level, engagement occurs amongst two or more Partners about specific projects, such as the U.S. Forest Service (USFS) and North Santiam Watershed Council on culvert replacement projects to enhance fish passage. Engagement at the organizational level occurs between the Partners and other organizations in the watershed, like City Councils and Marion Soil and Water Conservation District (SWCD), about PNS initiatives. Regional-level engagement occurs with groups addressing similar issues in different geographic regions, such as other watershed councils and the Willamette Partnership. Governmental/political engagement occurs with State and Federal elected officials, such as when two congressional delegations visited the basin. These stakeholder types are presented in Exhibit 5-1. Inherent across all stakeholder types is the notion that local communities will also be engaged, thereby increasing awareness of ongoing projects, efforts, and initiatives.

Exhibit 5-1. Types of Stakeholders

Type/Level	Engagement Description	Examples
Project	Engagement among the Partners about specific projects	USFS, NSWC, and City of Salem addressing undersized culverts on Short Creek
Organizational	Engagement with other organizations in the watershed about PNS efforts/initiatives	City Councils, SWCD, Farm Bureau, Council of Water Leaders, North Santiam Basin Summit
Regional	Engagement with groups addressing similar issues in different geographic ranges	Other watershed councils, Willamette Partnership, Willamette Valley Oak and Prairie Cooperative, Meyer Memorial Trust
Governmental/political	Engagement with State and Federal elected officials	Two congressional delegations that visited the basin

5.2 Stakeholder Engagement Alignment

Once the PNS clarified stakeholder types, the PNS compiled the missions of specific stakeholders to determine how the missions of other stakeholders intersect with PNS initiatives. Identifying how PNS initiatives align with stakeholder missions will assist the PNS with understanding how to engage stakeholders of various types in PNS efforts. This alignment of missions will make PNS outreach efforts more informed and effective, and can simultaneously advance the efforts of stakeholders. Alignment can also will at the organizational level (e.g., riparian planting efforts of the Marion SWCD). Exhibit 5-3 presents stakeholders and their missions, as well as which PNS initiatives align with those missions.

In addition, the PNS identified stakeholder engagement programs that other stakeholders are implementing in the North Santiam Basin in an effort to align with existing programs. This alignment builds cooperation with other organizations, leverages existing relationships, and improves efficiency by utilizing existing outreach methods rather than creating redundant or potentially conflicting outreach methods, which will enhance the likelihood of success for all involved. For example, if a stakeholder was already conducting outreach to another group that the PNS wanted to engage, the PNS would ask that stakeholder to communicate a particular message to the group instead of creating an entirely new outreach platform. Likewise, if a stakeholder wanted to communicate with a group that the PNS was engaging, the stakeholder could communicate a message through the PNS.

The following are specific examples of stakeholder engagement alignment:

- Project level
 - Bear Branch Restoration Project – engages with USFWS program, Linn County SWCD, FSA Conservation Reserve Enhancement Program (CREP), Natural Resources Conservation Service (NRCS), and private landowners

- Organizational level:
 - Integrating outreach into the Council of Water Leaders meetings and the North Santiam Basin Summit
- Regional level
 - Relationships among the partners enable BEF to let the Arbor Day Foundation know of NSWC’s need for funding for trees after the wildfire.
- Governmental/political
 - PNS outreach to government agencies and officials for fire recovery efforts in emergency planning

The PNS has three initiatives (Exhibit 5-2) and is in alignment with some stakeholders with all three of its initiatives, two of its initiatives, or one of its initiatives (Exhibit 5-3). The PNS identified which specific strategies within those initiatives could be promoted through the stakeholder’s engagement initiatives and developed outreach materials to continue engagement.

Exhibit 5-2. Shows the PNS’s Initiatives and Respective Strategies

Initiative	Strategies
<p>1: Riparian and Aquatic Habitat Enhancement</p>	<p>Restore Fish Passage; Beaver Restoration; Enhance Stream Channel Habitat; Reconnect Floodplains and Side Channels; Enhance Riparian Areas; Improve Wildfire Resilience of Riparian Forests; Protect Priority Habitats</p>
<p>2: Flow Restoration and Source Water Protection</p>	<p>Improve Water Quality in Reservoirs; Promote Agricultural BMPs; Improve Storm Water Management; Improve Hydrology and Sediment Dynamics; Upgrade Septic Systems; Improve Water Management Infrastructure; Enhance Forest Health, Diversity, and Wildfire Resilience; Protect Priority Habitats;</p>
<p>3: Oak Woodland and Prairie</p>	<p>Cooperative Incentive Programs Prescribed Fire Protect Existing Complex Mature Forest Strategic Thinning and Other Fuels Reduction Invasive Species Control Protect Priority Habitats</p>

5.3 Stakeholder Engagement Implementation

5.3.1 Methods for Implementation

Stakeholders can be engaged through a variety of ways, but some ways will be more effective than others. Therefore, identifying the *most effective* means of reaching stakeholders is critical. Methods of engagement include presentations/PowerPoints, newsletter articles, handouts, press releases, grant applications, and news interviews. The PNS will target stakeholders with materials that make the most sense. In addition, participation in conferences provides opportunities to engage stakeholders through conversations and networking. Examples of conferences include the Connect conference for watershed councils and soil and water conservation districts and the Within Our Reach conference hosted by Nesika Wilamut.

In recent years, the PNS has engaged stakeholders and stakeholder groups at the Council of Water Leaders (CWL) meetings through various outreach efforts in September and October 2021 and gave a presentation to the CWL in March 2022. The PNS also provided congressional delegations with tours of areas needing resources post-fire. PNS information will be shared at future CWL quarterly meetings. The PNS could present on PNS efforts at future North Santiam Basin Summits, Partner or other organization meetings, and conferences.

5.3.2 Stakeholder Engagement Outreach Materials

The PNS created Initiative-specific outreach materials that highlight particular strategies within that initiative, as well as other outreach materials that cover all initiatives. Outreach materials will be distributed by the PNS to the appropriate stakeholder from Exhibit 5-3 or other as deemed appropriate by the PNS.

Appendix H contains an outreach material example.

5.4 Stakeholder Engagement within the North Santiam Basin

Opportunities to strengthen relationships within the North Santiam Basin can be pinpointed with this engagement strategy. In essence, this document can be used as a pre-cursor to stakeholder engagement and can be used to determine how to best engage stakeholders throughout the basin, whether that occurs through PNS or individual Partner presentations at various stakeholders' meetings, or circulating specific outreach materials related to PNS initiatives to stakeholder organizations.

Exhibit 5-3. Entities, Entity Missions and Stakeholder Engagement Initiatives, and the PNS’ Plan for Alignment and Ideas for Where Alignment Could Be Strengthened

Entity	Entity Mission	Stakeholder Engagement Initiatives	Plan for Alignment	Where Alignment Could Be Strengthened
<p>North Santiam Watershed Council</p>	<p>...facilitates the restoration of habitat important to fish and wildlife and to support the economy and quality of life of our communities.</p>	<p><u>Land Planning Services</u>: helps landowners identify projects, get financial assistance, and design habitat restoration projects</p> <p>Facilitates the PNS, encouraging collaborations on various projects</p> <p>Grant application support & management (email Council@NorthSantiam.org)</p>	<p>Explore collaboration across all initiatives and their strategies.</p>	
<p>Natural Resources Conservation Service (NRCS)/USDA</p>	<p>...provide resources to farmers and landowners to aid them with conservation. Ensuring productive lands in harmony with a healthy environment is our priority.</p>	<p><u>Oregon’s Strategic Approach to Conservation</u> includes outreach efforts such as <u>Local Work Group</u> meetings to identify and prioritize natural resource concerns in the community. Other resources include the <u>Oregon Technical Advisory Committee (OATAC)</u> and the <u>Oregon Tribal Advisory Council</u>. In addition, NRCS offers many financial assistance and volunteer programs such as their <u>Environmental Quality Incentive Program (EQIP)</u>.</p>	<p>Explore collaboration regarding Initiative 2.</p> <p>Initiative 2 Strategies: Improve Water Quality, Promote Agricultural BMPs, Improve Hydrology and Sediment Dynamics, Improve Water Management Infrastructure</p>	
<p>Linn County SWCD</p>	<p>To promote environment stewardship, good land and water management and conservation practices on both rural and urban landscapes through leadership, service and community education and involvement.</p>	<p><u>Linn Soil & Water Conservation District Rural Living Handbook: A Resource for Rural Living and Land Stewardship</u>. This handbook provides guidance to current and prospective property owners about land management as well as water and wildlife issues, and references more educational resources.</p> <p>Drought and water conservation messaging.</p>	<p>Explore collaboration regarding Initiative 2.</p> <p>Initiative 2 Strategies: Improve Water Quality, Promote Agricultural BMPs, Improve Hydrology and Sediment Dynamics, Improve Water Management Infrastructure, Stakeholder Engagement, Stewardship</p>	
<p>Marion County SWCD</p>	<p>Working with Marion County residents to protect, conserve, and improve soil and water resources</p>	<p>Offers a variety of <u>resources</u>, plans and programs to engage stakeholders in watershed restoration and other conservation efforts. Examples include their <u>Conservation Planning</u> initiative and <u>community education</u> events.</p> <p>Drought and water conservation messaging.</p>	<p>Explore collaboration regarding Initiative 2.</p> <p>Initiative 2 Strategies: Improve Water Quality, Promote Agricultural BMPs, Improve Hydrology and Sediment Dynamics, Improve Water Management Infrastructure, Stakeholder Engagement, Stewardship</p>	
<p>Greenbelt Land Trust</p>	<p>...protects the places that are most important to you today, before they are lost tomorrow...</p>	<p>The Greenbelt Land Trust acquires land through conservation easements, purchases, and donations in order to protect and restore habitats in different ecosystems. Landowners can fill out their <u>Landowner Contact Form</u> to plan a protection strategy for their property.</p>	<p>Explore collaboration across all initiatives.</p> <p>Initiative 1 Strategies: Reconnect Floodplains and Side Channels, Enhance Stream Channel Habitat, Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Enhance Forest Health, Diversity, and Wildfire Resilience</p> <p>Initiative 3 Strategy: Habitat Enhancement</p>	

Entity	Entity Mission	Stakeholder Engagement Initiatives	Plan for Alignment	Where Alignment Could Be Strengthened
<p>Marion County (Public Works Department)</p>	<p>We serve the public to protect, promote, and enhance a positive quality of life in Marion County</p>	<p>Education and outreach efforts involving water quality protection include their Stream Tree Program, volunteer programs, and Stormwater Management Program.</p>	<p>Explore collaboration regarding Initiatives 1 and 2.</p> <p>Initiative 1 Strategies:</p> <p>Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Promote Agricultural BMPs, Improve Storm Water Management, Improve Hydrology and Sediment Dynamics, Upgrade Septic Systems, Stakeholder Engagement, Stewardship</p>	<p>Land use compatibility statement /permits – would be helpful to know the process for this, who to communicate with, etc. (streamlining process) Partners could work with the county to streamline process...</p>
<p>City of Salem</p>	<p>The City of Salem provides fiscally sustainable and quality services to enrich the lives of present and future residents, the quality of our environment and neighborhoods, and the vitality of our economy.</p>	<p>Salem has many ways to get involved with overall watershed health, environmental management and work on habitat and stream restoration. Their outreach efforts include the Clean Streams, Clear Choices Initiative as well as grants and education opportunities. Salem also generally supports projects that improve and/or maintain water quality and quantity upstream of their drinking water treatment facility in Stayton. Supporting documents include DEQ’s Source Water Assessment.</p>	<p>Explore collaboration regarding initiative 1 and Initiative 2.</p> <p>Initiative 1 Strategies: Enhance Stream Channel Habitat, Enhance Riparian Areas, Stakeholder Engagement</p> <p>Initiative 2 Strategies: Improve Storm Water Management, Improve Water Management Infrastructure, Stewardship</p>	
<p>Oregon Department of Fish and Wildlife</p>	<p>...to protect and enhance Oregon’s fish and wildlife and their habitats for use and enjoyment by present and future generations</p>	<p>Fish Programs: ODFW has many plans and programs that support conservation and restoration of fish habitat, such as their Fish Passage Program and the Western Oregon Stream Restoration Program.</p> <p>Wildlife Programs: more programs that work with stakeholders to promote conservation of wildlife habitats, including the Habitat Resources Program and the Conservation Program.</p> <p>The Habitat Division has more resources, including water programs and their Land Resources Program, which provides guidance for land-use activities that affect fish and wildlife habitats.</p>	<p>Explore collaboration across all initiatives.</p> <p>Initiative 1 Strategies: Restore fish passage, Beaver Restoration, Reconnect Floodplains and Side Channels, Enhance Stream Channel Habitat, Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Promote Agricultural BMPs, Improve Hydrology and Sediment Dynamics</p> <p>Initiative 3 Strategy: Habitat Enhancement</p>	
<p>Oregon Department of Environmental Quality</p>	<p>...to be a leader in restoring, maintaining and enhancing the quality of Oregon’s air, land and water</p>	<p>DEQ has many efforts to protect surface and drinking water quality under their Water Quality Program. They have resources for Water Quality Permitting, as well as Pesticide Stewardship Partnerships.</p>	<p>Explore collaboration regarding Initiative 2.</p> <p>Initiative 2 Strategies: Promote Agricultural BMPs, Improve Storm Water Management, Improve Hydrology and Sediment Dynamics</p>	<p>Coordinating with other state and federal agencies on actions to promote Agricultural BMPs</p>
<p>Bureau of Land Management</p>	<p>... to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations</p>	<p>Connecting with Communities – BLM Recreation Strategy</p> <p>Engaging with Communities in Public Land Stewardship</p> <p>Collaborative Stakeholder Engagement and Appropriate Dispute Resolution and Negotiation</p> <p>Public involvement – people with an interest in the public lands can participate in land use planning online</p>	<p>Explore collaboration regarding Initiative 2.</p> <p>Initiative 2 Strategies:</p> <p>Stewardship</p>	

Entity	Entity Mission	Stakeholder Engagement Initiatives	Plan for Alignment	Where Alignment Could Be Strengthened
City of Albany	... dedicated to maximizing the potential of our greatest asset – our employees			
Confederated Tribes of Grand Ronde	...committed to the responsible stewardship of human and natural resources while striving to be a community willing to act with courage in preserving tribal cultures and traditions for future generations.	<p>The fish and wildlife department conducts surveys for Threatened and Endangered species that may occur on the Reservation and any other tribal trust properties. Always looking at ways to improve fish habitat and populations in Reservation streams.</p> <p>The Silviculture and Protection Program’s mission is to promote the Tribal tradition of being good stewards of all natural resources by protecting and maintaining forest health and productivity for future use.</p>	<p>Explore collaboration across all initiatives.</p> <p>Initiative 1 Strategies: Restore fish passage, Reconnect Floodplains and Side Channels, Enhance Stream Channel Habitat, Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Enhance Forest Health, Diversity, and Wildfire Resilience, Stewardship</p> <p>Initiative 3 Strategy: Habitat Enhancement</p>	
Confederated Tribes of Siletz	It is the mission of the Siletz Tribal Natural Resources Department to care for, protect, enhance and provide for the wise use of all of the Tribe’s natural resources in a manner which will ensure that all generations to come will benefit from these resources. This philosophy applies to all lands to which the Tribe is historically tied, including its ancient, aboriginal, ancestral lands, its Coast Reservation, and its current and future land holdings.	Natural Resources Committee meets monthly to discuss tribal matters, including a report from the natural resources manager (aquatics, wildlife, hunting and fishing, environmental protection, forestry, realty) – possible that stakeholders are engaged though such programs	<p>Explore collaboration across all initiatives.</p> <p>Initiative 1 Strategies: Restore fish passage, Beaver Restoration, Reconnect Floodplains and Side Channels, Enhance Stream Channel Habitat, Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Enhance Forest Health, Diversity, and Wildfire Resilience, Stewardship</p> <p>Initiative 3 Strategy: Habitat Enhancement</p>	
Federal Lakes Recreation Committee for Detroit Lake	Working together to maintain sustainable recreation and economic stability in the Detroit Lake Area			
Linn County				
North Santiam Drought Task Force	To build long-term resiliency to droughts in order to minimize impacts to communities, local economies, and the critical natural resources in the watershed	Drought Contingency Plan actions, such as drought mitigation actions related to water system infrastructure, are implemented by various partners	<p>Explore collaboration regarding Initiatives 1 and 2.</p> <p>Initiative 1 Strategies:</p> <p>Reconnect Floodplains and Side Channels, Enhance Riparian Areas</p> <p>Initiative 2 Strategies:</p> <p>Promote Agricultural BMPs, Improve Water Management Infrastructure</p>	

Entity	Entity Mission	Stakeholder Engagement Initiatives	Plan for Alignment	Where Alignment Could Be Strengthened
Oregon Department of Agriculture	... remains able to serve the changing needs of Oregon’s diverse agricultural and food sectors to maintain and enhance a healthy natural resource base and strong economy in rural and urban communities across the state	ODA assists local SWCDs as they help landowners properly manage Oregon’s natural resources	Explore collaboration across initiative 2. Initiative 2 Strategies: Promote Agricultural BMPs, Improve Storm Water Management, Improve Hydrology and Sediment Dynamics, Improve Water Management Infrastructure	
Oregon Department of Forestry	...to serve the people of Oregon by protecting, managing, and promoting stewardship of Oregon’s forests to enhance environmental, economic, and community sustainability	<p>ODF programs include fire protection, forest resources, state forests, partnership and planning, urban and community forestry that each involve their own components of stakeholder engagement.</p> <p>The Partnership and planning program houses the Federal Forest Restoration Program which supports forest collaboratives and works in partnership to increase the pace, scale and quality of forest restoration on federal forests. This program also identifies, coordinates and administers federal grant programs that provide funding and incentives for family forest landowners.</p> <p>The urban and community forestry program helps Oregon communities plant, care for and manage urban forests, and works to foster public awareness of the contribution of urban forest ecosystems to quality of life, environmental and economic well-being in Oregon cities.</p>	Explore collaboration across initiatives 2 and 3. Initiative 2 Strategies: Improve Hydrology and Sediment Dynamics, Enhance Forest Health, Diversity, and Wildfire Resilience, Stewardship Initiative 3 Strategy: Habitat Enhancement	
Oregon Department of Transportation	We provide a safe and reliable multimodal transportation system that connects people and helps Oregon’s communities and economy thrive.	<p>Oregon Transportation Commission – public comment opportunities</p> <p>Strategy: Engage the public, other state agencies, local governments, business and community leaders in solving transportation problems and planning for the future.</p> <p>Strategic Action Plan</p>	Explore collaboration regarding Initiative 2 and 3. Initiative 2 Strategies: Improve Hydrology and Sediment Dynamics, Stewardship Initiative 3 Strategy: Habitat Enhancement	
Santiam Water Control District	The District delivers water to hydroelectric plants, municipal water to the City of Stayton, cooling water to Norpac Foods, irrigation water for over 17,000 acres and other various uses such as fish propagation, wildlife habitat and wetland maintenance.	<p>Water system infrastructure improvements</p> <p>Collaboration with the North Santiam Watershed Council, Marion SWCD, and other groups</p>	Explore collaboration regarding Initiative 2. Initiative 2 Strategies: Promote Agricultural BMPs, Improve Storm Water Management, Improve Hydrology and Sediment Dynamics, Improve Water Management Infrastructure	NRCS Plan—going through NEPA, there will be an effort for public comment; working with Marion County

Entity	Entity Mission	Stakeholder Engagement Initiatives	Plan for Alignment	Where Alignment Could Be Strengthened
<p>South Santiam Watershed Council</p>	<p>To involve local people in the enhancement and protection of the South Santiam watershed for the social and economic benefit of its landowners, managers, and users.</p>	<p>We obtain funding to carry out our own projects upstream and downstream or partner with other agencies on projects.</p> <p>We work with landowners to find funding and help them make improvements to riparian areas of their land.</p> <p>We run educational programs to help our communities understand what happens in our watershed and how it affects all of us.</p>	<p>Explore collaboration across all initiatives.</p> <p>Initiative 1 Strategies: Restore fish passage, Reconnect Floodplains and Side Channels, Enhance Stream Channel Habitat, Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Promote Agricultural BMPs, Improve Hydrology and Sediment Dynamics, Enhance Forest Health, Diversity, and Wildfire Resilience, Stewardship</p> <p>Initiative 3 Strategy: Habitat Enhancement</p>	
<p>US Army Corps of Engineers</p>	<p>Deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce disaster risk.</p>	<p>USACE works in partnership with other federal and state agencies, non-governmental organizations and academic institutions to find innovative solutions to challenges that affect everyone – sustainability, climate change, endangered species, environmental cleanup, ecosystem restoration and more.</p>	<p>Explore Collaboration across Initiatives 1 and 2.</p> <p>Initiative 1 Strategies: Restore fish passage, Reconnect Floodplains and Side Channels, Enhance Stream Channel Habitat, Enhance Riparian Areas</p> <p>Initiative 2 Strategies:</p> <p>Improve Water Quality in Reservoirs, Improve Water Management, Improve Hydrology and Sediment Dynamics, Improve Water Management Infrastructure</p>	
<p>US Fish and Wildlife Service Partners Program</p>	<p>The Partners for Fish and Wildlife Program aims to make it easier for private landowners to conserve wildlife habitat. Winning them over to conservation is important because private landowners manage more than two-thirds of the country’s land.</p> <p>Partners staff focus efforts on areas of conservation concern, such wetlands and native prairies, and projects to likely benefit federal trust species including migratory birds, endangered, threatened and at-risk species.</p>	<p>National Priorities: species conservation, habitat connectivity, resilient ecosystems</p> <p>Opportunities for landowners</p>	<p>Explore collaboration across all initiatives.</p> <p>Initiative 1 Strategies: Restore fish passage, Beaver Restoration, Enhance Stream Channel Habitat, Reconnect Floodplains and Side Channels, Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Enhance Forest Health, Diversity, and Wildfire Resilience, Stewardship</p> <p>Initiative 3 Strategy: Habitat Enhancement</p>	

Entity	Entity Mission	Stakeholder Engagement Initiatives	Plan for Alignment	Where Alignment Could Be Strengthened
<p>US Forest Service</p>	<p>To sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.</p>	<p>Through <u>Shared Stewardship</u>, the Forest Service is coming together with tribal governments, states, and other partners to address these challenges and explore opportunities to improve forest health and resiliency across management jurisdictions. This collaborative approach to land management builds on a long history of partnerships to manage the nation’s forests and grasslands.</p> <p>Participates in the Drinking Water Providers Partnership grant program.</p>	<p>Explore collaboration across all initiatives.</p> <p>Initiative 1 Strategies: Restore fish passage, Reconnect Floodplains and Side Channels, Enhance Stream Channel Habitat, Enhance Riparian Areas</p> <p>Initiative 2 Strategies: Improve Hydrology and Sediment Dynamics, Enhance Forest Health, Diversity, and Wildfire Resilience, Stakeholder Engagement Stewardship</p> <p>Initiative 3 Strategy: Habitat Enhancement</p>	
<p>US Geological Survey</p>	<p>The USGS monitors, analyzes, and predicts current and evolving Earth-system interactions and delivers actionable information at scales and timeframes relevant to decision makers. The USGS provides science about natural hazards, natural resources, ecosystems and environmental health, and the effects of climate and land-use change.</p>		<p>Explore collaboration under Initiatives 1 and 2</p>	
<p>Mid-Willamette Beaver Partnership</p>	<p>MWBP is a regional resource for promoting healthy landscapes and communities that include beaver in ecologically and socially appropriate ways.</p>	<p>The MWBP engages with private landowners, private timber and agricultural stakeholders and municipalities in the Mid-Willamette to promote co-existence with beavers and beaver habitats through social research and direct conversations both at the regional and local level</p> <p>The MWBP also engages with local, state, and federal agencies, non-profits and tribal nations across the PNW to develop key funding and technical strategies for implementing beaver-based restoration and co-existence.</p>	<p>Explore collaboration under Initiative 1.</p> <p>Initiative 1 Strategies:</p> <p>Beaver Restoration, Reconnect Floodplains and Side Channels, Enhance Riparian Areas, Improve Wildfire Resilience in Riparian Forests.</p>	<p>Anticipate working with ODA, ODF, individual landowners to discuss crosswalk of interests</p>

Entity	Entity Mission	Stakeholder Engagement Initiatives	Plan for Alignment	Where Alignment Could Be Strengthened
<p>Bonneville Environmental Foundation</p>	<p>BEF Watersheds Mission: To build, support and sustain inclusive partnerships that empower grassroots organizations, Tribal Nations, businesses, utilities and communities to create a future with a stable climate; healthy watershed ecosystems that provide abundant, clean freshwater; and a growing reliance on renewable energy sources.</p>	<p>BEF facilitates regional partnerships and leverages funding to provide uplift for on the groups and towards and collectively towards landscape scale restoration. Below are some examples of initiatives:</p> <p>BEF’s Collaborative Contract Grow program – works with a variety of partners to supply restoration and wildfire recovery efforts. BEF applies for funding each year so that we can offer these plants at a heavily discounted price and sometimes cost free.</p> <p>Mid-Willamette Beaver Partnership – BEF has played a central role in facilitating this partnership and obtaining funds for restoration planning and stakeholder engagement.</p> <p>Wildfire Recovery and Resilience – BEF is coordinating with watershed councils and other local small non-profits with work areas in western Cascade watersheds to provide support for wildfire recovery and resilience efforts.</p>		
<p>DOGAMI</p>		<p>North Santiam Post-Fire Debris Flow Risk Reduction Project</p>		

This page intentionally left blank.

Section 6: Fundraising Plan

Effective fundraising is a critical component of a robust watershed enhancement effort. Elements of effective fundraising include awareness of opportunities, sufficient planning, established and strategic partnerships, and innovative solutions, among others. This fundraising plan describes key considerations of the PNS that incorporate those elements of effective fundraising to maximize fundraising success.

6.1 Fundraising Approaches Applicable to All PNS Initiatives

Fundraising approaches that will be considered within the PNS and among its members (internal approaches) and outside the PNS (external approaches) to improve the likelihood of success when fundraising are described below.

6.1.1 Internal Approaches

6.1.1.1 Establishing Partner Expectations

To maximize the success of PNS efforts, the PNS will regularly emphasize expectations that the planning documents developed by the PNS are actively utilized by PNS Partners and Technical Members when developing and implementing projects. The PNS planning documents will help with stakeholder engagement, prioritizing projects, fundraising, and monitoring. In doing so, the PNS Partners and Technical Members advance PNS efforts in a more coordinated and efficient manner, as well as one that allows a more systematic collection of information against which change can be measured, an integral step for monitoring that the PNS is moving towards its watershed restoration goals.

6.1.1.2 Maintaining a Projects List

The PNS has created a Projects List in Smartsheet that allows PNS Partners, Technical Members, and others to catalog and track projects in the North Santiam Basin to assist with monitoring projects, as well as support stakeholder engagement and fundraising efforts. This list of past, current, and planned (i.e., in development) projects in the North Santiam Basin is a resource that will facilitate fundraising by enabling PNS Partners and Technical Members to find information about watershed enhancement actions under development by other PNS Partners and Technical Members that may be complementary, such that funding could potentially be pursued jointly. The Projects List is a living document that the PNS will maintain and update on an ongoing basis. The Project List provides a level of coordination between the PNS and other entities that helps reduce duplication of efforts and prevents reinventing the wheel.

6.1.1.3 Identifying Complementary Project Characteristics and Considering Cost-share Agreements

A funding application that includes multiple projects may be viewed as having a larger impact, making it more competitive. PNS Partners and Technical Members will use the projects list to identify project characteristics that could link to other projects on the list, such as the project location and type, and explore the potential of partnering on grant applications as deemed appropriate. In this sense, efforts by the PNS can help multiple projects move forward.

The PNS will also investigate establishing cost sharing agreements with agencies that have an interest in or mandate to collect data that meets the needs of the PNS. This can help expand monitoring capacity and provide in-kind match for monitoring grants.

6.1.1.4 Identifying Project Stages

PNS will use the Projects List to help track the stages of different projects in the North Santiam Basin and consider how future stages of certain projects could align with other projects in process or underdevelopment. Conducting this analysis and planning in advance could result in project partnerships and joint funding strategies.

6.1.1.5 Considering Project Prioritization

The PNS has a project prioritization process that assesses projects based on an array of evaluation criteria to assist PNS Partners, Technical Members, or others with the development of the projects and to determine strengths of projects that may assist them with determining a funding strategy. For example, several projects may score high under similar evaluation criteria, such as “protects or improves water quality” and “streamflow regime,” and the PNS could pursue funding for that group of projects.

6.1.1.6 Pursuing Sudden Funding Opportunities

Funding opportunities that may suddenly arise for certain project types (e.g., wildfire recovery funds) will be pursued by PNS Partners and Technical Members as needed. Groups of projects, as outlined in the PNS project prioritization, will be developed by taking advantage of funding opportunities that unexpectedly become available.

6.1.1.7 Sharing Project Stories

PNS Partners and Technical Members will share project stories to encourage others to seek funding for similar projects and to keep one another up-to-date on successful fundraising efforts. This approach will help PNS Partners and Technical Members determine what type of funding is available to move their projects forward and strengthen relationships with funders, especially if PNS endeavors are mentioned in multiple grant applications (see below).

6.1.1.8 Discussing the PNS in Grant Applications

Funders look for signs of collaboration when reviewing funding applications, such that including information about participation in partnerships, like the PNS, strengthens applications. In addition, describing the PNS in grant applications informs funders about the objectives and activities of the PNS, helping them to see the positive impacts of the PNS and to imagine the potential for the PNS to do more. Funders may even recommend certain funding opportunities or approaches after learning about the PNS or seeing a number of PNS projects. Given these potential outcomes, PNS Partners and Technical Members will discuss the PNS and/or their involvement in the PNS to strengthen grant applications and to promote PNS efforts; the effort of partnership is stronger than individual entities.

6.1.2 External Approaches

6.1.2.1 Communicating with Organizations in other Regions

Communicating with organizations in other regions with similar objectives (e.g., Willamette Partnership, EWEB, Willamette Valley Oak and Prairie Cooperative) enables the PNS to stay informed about their activities and plans, to identify any strategic partnerships that could improve funding opportunities, to learn about new funding sources. This communication fosters collaboration and builds a shared understanding of projects and innovative approaches. PNS Partners and Technical Members will communicate with organizations in other regions on an ongoing basis.

6.1.2.2 Attending Regional Practitioner Conferences

PNS Partners and Technical Members will attend regional practitioner conferences (e.g., Connect, Within Our Reach, and Restoration Northwest) to continue to build relationships, to learn from other organizations, and to inform others of PNS work, each of which supports the pursuit of funding opportunities

6.1.2.3 Establishing and Maintaining Relationships with Funders

Establishing and maintaining relationships with funders, such as the Oregon Watershed Enhancement Board (OWEB) will help with successful fundraising. Creating an opportunity for funders to learn about ongoing projects is key – such as organizing a field trip for representatives from OWEB or another funding agency, so they can get a first-hand experience of the projects that are taking place or the work that needs to be done, and the dollars necessary to support those projects. Sharing accomplishments securing funding from multiple sources, potential additional funding sources conveys that the PNS is capable of sustaining capacity, including institutional knowledge, and providing continuity with funding. In addition, discussing areas of program funding needs, such as monitoring, may encourage funders to share knowledge of other funding sources and to develop new funding opportunities.

6.2 Funding Pursuit Considerations

The PNS has a project prioritization process aimed at helping PNS Partners and Technical Members and others strengthen projects to improve their chances of receiving funding, which is detailed in Section 3. After assessing projects based on evaluation criteria in the project prioritization process, a project manager will be more prepared to address questions in a grant application.

6.3 Fundraising Approaches Specific to PNS Initiatives

The following identifies specific groups and events that could assist with fundraising for each initiative. Exhibit 6-1 identifies funding sources that could be appropriate for each initiative.

- Riparian and Aquatic Habitat Enhancement
 - North Santiam Basin groups: PNS Partners and Technical Members, Council of Water Leaders
 - Regional groups: Willamette Partnership, Nesika Wilamut
 - Conferences: Connect, Within Our Reach, Restoration Northwest
- Flow Restoration and Source Water Protection
 - North Santiam Basin groups: PNS Partners and Technical Members
 - Regional groups: Willamette Partnership, Nesika Wilamut
 - Conferences: Connect, Within Our Reach, Restoration Northwest
- Oak Woodland and Prairie Restoration
 - North Santiam Basin groups: PNS Partners and Technical Members
 - Regional groups: Willamette Valley Oak and Prairie Cooperative, Nesika Wilamut
 - Conferences: Within Our Reach

6.4 Funding Sources

The PNS has compiled an updated list of funding opportunities to support fundraising efforts, which also identifies funding sources may be appropriate for the different PNS Initiatives. Exhibit 6-1 showcases funding source, type of funding, areas of interest, grant amounts, grant deadlines, and the applicable initiative.

Exhibit 6-1. Funding Sources, Types, Areas of Interests, Amounts, Deadlines, and Associated Initiatives

Source	Type of Funding	Areas of Interest	Amount	Deadline	Initiative 1	Initiative 2	Initiative 3
US Department of Agriculture (USDA) Forest Service (USFS) – Knutson Vandenberg (KV) Funds	Federal	Funds available for specific USFS Projects on Federal Land	--	--	✓	✓	✓
USFS - Stewardship Contract Funds	Federal	Stewardship contract retained receipts can be used on projects that will benefit Federal land resources	--	--	✓	✓	✓
US Bureau of Reclamation (BOR) WaterSMART – Environmental Water Resources Projects grants	Federal	Projects focused on environmental benefits, increased reliability of water resources. E.g., conservation, infrastructure improvements, restoration	Up to \$2M in 3 years, 25% or more non-Federal cost share requirement		✓	✓	✓
BOR WaterSMART – Drought Response Program: Contingency Planning grants	Federal	Financial assistance for developing or updating a drought contingency plan	Up to \$200,000 in 2022, 50% non-Federal cost share required	June		✓	
BOR WaterSMART - Drought Response Program: Resiliency Projects grants	Federal	Funding for projects that help communities prepare and respond to drought. E.g., increasing reliability of water resources, providing benefits to environment	Up to \$300,000, 50% non-Federal cost share required	June		✓	
USDA Farm Service Agency - Conservation Reserve Enhancement Program (CREP)-Cost Share Funding	Federal	Cost share program for agricultural lands taken out of production and set aside for riparian or wet prairie habitat improvement projects	Any cost share payments from USDA or other sources combined cannot exceed 100% of the cost of the project	Continuous	✓	✓	✓
USDA National Resources Conservation Service (NRCS) - Conservation Innovation Grants	Federal	Agriculture Related Innovation, natural resource conservation and improving agricultural operations	1:1 cost match requirement	--		✓	
US Bureau of Land Management - (BLM) Title II Grants	Federal funding (the Western Oregon Resources Advisory Council (RAC) recommends how funds are spent)	Funding for natural resource projects designed to benefit the land and resources of the Bureau of Land Management (BLM)—specifically applicable to Linn and Marion counties	\$5,000 to \$250,000 in the past	May	✓	✓	✓
Drinking Water Provider Partnership Grants – Numerous Partners (DEQ, USFS, US EPA, BLM, USDA, The Freshwater Trust, GEOS Institute, Wild Earth Guardians, Washington State Department of Health)	Federal, State, Foundations, more	Watershed restoration – source water protection, providing benefits to aquatic ecosystems and native fish populations	Between \$10,000 and \$50,000	January	✓	✓	
National Fish & Wildlife Foundation (NFWF) – Environmental Solutions for Communities	Foundation	Funds projects that sustain, restore, and enhance our nation's fish, wildlife, and plants and their habitats.	Between \$25,000 and \$100,000 (1:1 match required)	--	✓	✓	
Meyer Memorial Trust	Foundation	Organizational Capacity & Restoration Funding	Varies	--	✓	✓	✓

Source	Type of Funding	Areas of Interest	Amount	Deadline	Initiative 1	Initiative 2	Initiative 3
Oregon Parks Foundation Fund	Foundation (State)	Supports acquisition, preservation, and restoration of public parks	Generally \$1,000 to \$5,000	March	✓	✓	✓
The Oregon Community Foundation / Community Grant Program	Foundation (State)	Funds projects that promote community engagement, stewardship of outdoor spaces	\$20,000 on average	–	✓	✓	✓
Oregon Watershed Enhancement Board (OWEB) Grants	State	Restoration, Technical Assistance, Council & SWCD Capacity	OWEB grants have a match requirement	Fall, Spring	✓	✓	
OWEB Small Grants	State	Small scale agricultural/riparian restoration projects focused on projects that will improve soil and water resource management	Up to \$15,000		✓	✓	
OWEB Focus Investment Partnership Grant	State				✓		✓
Oregon Health Authority (OHA) - Drinking Water Source Protection Fund	State	Riparian restoration, source water assessment and protection, watershed planning, community outreach	Grants up to \$30,000, loans up to \$100,000 per project	March	✓	✓	
Oregon Dept. of Env. Quality (DEQ) - 319 Nonpoint Source Implementation Grants	State	Water Quality for DEQ Watershed-Based Plan projects. Technical and financial assistance, education, monitoring	Up to \$30,000 (requires a 40% non-Federal match)	May	✓	✓	
DEQ Revolving Loan Fund	State						
Oregon Water Resource Dept. (OWRD) – Water Project Grants and Loans	State	Water Quantity Management, streamflow protection or restoration; provides economic, environmental and social/cultural benefits	Up to 75% of total project cost (requires a 25% of total project cost match)	April	✓	✓	
ODFW - Salmon and Trout Enhancement Program Mini-Grants	State	Funds habitat restoration, education, monitoring and evaluation, fish culture	Up to \$2,000	Quarterly	✓	✓	
ODFW Access & Habitat Grants	State	Funds projects that improve wildlife habitat, increase public hunting access to private land or solve a wildlife damage issue. E.g., developing wetland habitat, weed control, seeding after wildfire	Preference given to projects on private lands	Quarterly	✓		✓
City of Salem Plant Material Donation	Local Government	Funds provided to the NSWC to cover plant material costs for riparian restoration projects located above Geren Island	–	–	✓		
City of Salem Watershed Grant	Local Government	Organizational Capacity & Watershed Improvement Funding	Up to \$7,500 (minimum 10% match required volunteer labor included)	Continuous	✓	✓	✓

Source	Type of Funding	Areas of Interest	Amount	Deadline	Initiative 1	Initiative 2	Initiative 3
Spirit Mountain Community Fund	Foundation (County)	Funding for environmental preservation projects in Linn & Marion County	--	--	✓	✓	✓
Marion County Tree Shading Program	County	Funding for plant material to be planted along riparian areas located on the Marion County side of the NSW.	--	--	✓	✓	
Marion Soil and Water Conservation District (SWCD) - Landowner Assistance Program Grants/ Cost Share Grants	SWCD (County) Grant - Tax Base	Agriculture land management improvement activities, riparian restoration activities, weed management	50% of project cost, up to \$7,500	--	✓		✓
One Tree Planted LLC	Nonprofit Donation	Funding for plant material	--	--	✓		✓
Santiam Basin Fund	Creation of Endowment and/or Sponsorship Program	Under development: Would fund implementation projects in Santiam Basin	--	--	✓	✓	✓
NOAA Community Restoration Grant	Federal	Looking for opportunities in the Willamette—good opportunity for funding if partners can get organized			✓	✓	✓
BEF Promise the Pod Tree Credit Program	Nonprofit Donation	Funding for plant material	--	--	✓		✓
BEF Wildlife Recovery and Resilience Program	Federal/Nonprofit	Projects that support wildfire recovery and resiliency on primarily private and tribal lands including activities such as reforestation, prescribed fire fuels reduction, ignition assessments and creating defensible space	tbd	tbd	✓	✓	✓
Private Forest Accord Grant Program	State	Projects that support fish and aquatic wildlife species and habitats covered by the anticipated Habitat Conservation Plan	--	--	✓	✓	

APPENDIX A

Partnership Statement Template

Partners of the North Santiam

Statement of Partnership

The Partners of the North Santiam (PNS) was formed with the following overarching vision:
To make the North Santiam River Watershed more resilient by implementing coordinated actions to restore ecological processes that maintain habitat for species while supporting and improving social and economic interests in local communities.

[Organization Name]

[Organization Mission]

The [organization/field office] hereby agrees to join with other signatories in this Statement of Partnership.

Signature: _____

Name: _____

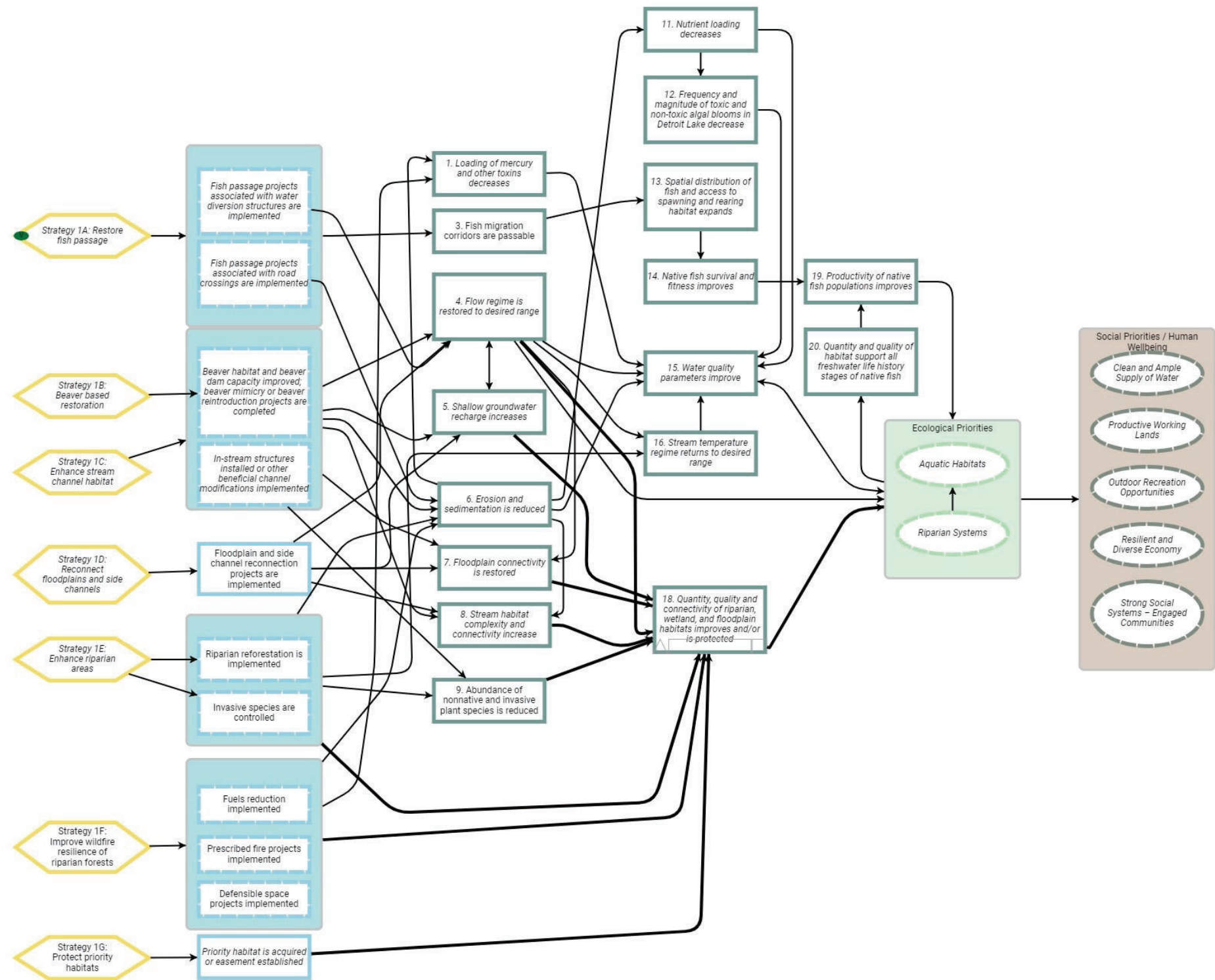
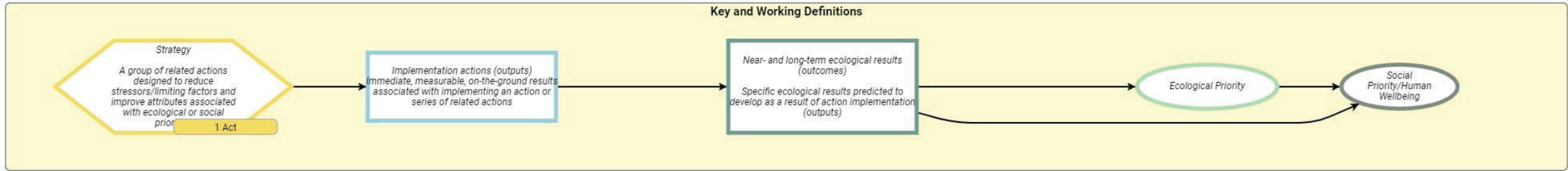
Title: _____

Date: _____

APPENDIX B

Theory of Change Results Chain: Riparian and Aquatic Habitat Enhancement Initiative

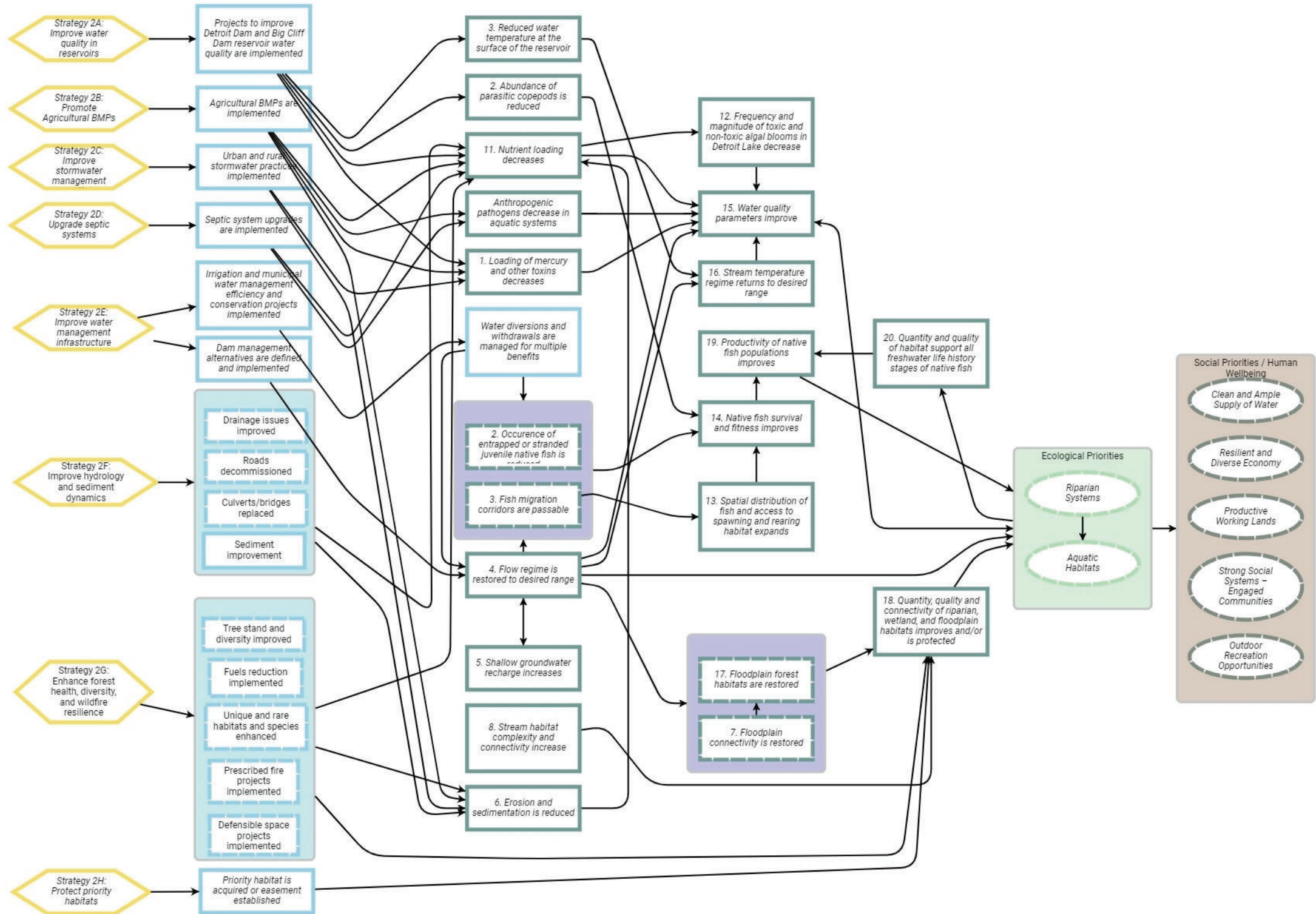
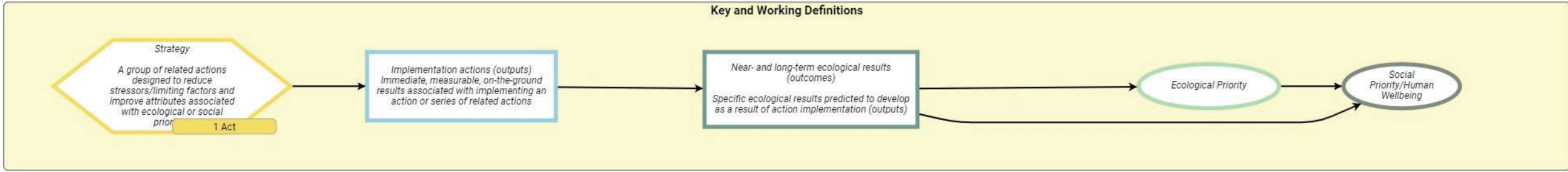
Initiative 1. Riparian and Aquatic Habitat Enhancement



APPENDIX C

Theory of Change Results Chain: Flow Restoration and Source Water Protection Initiative

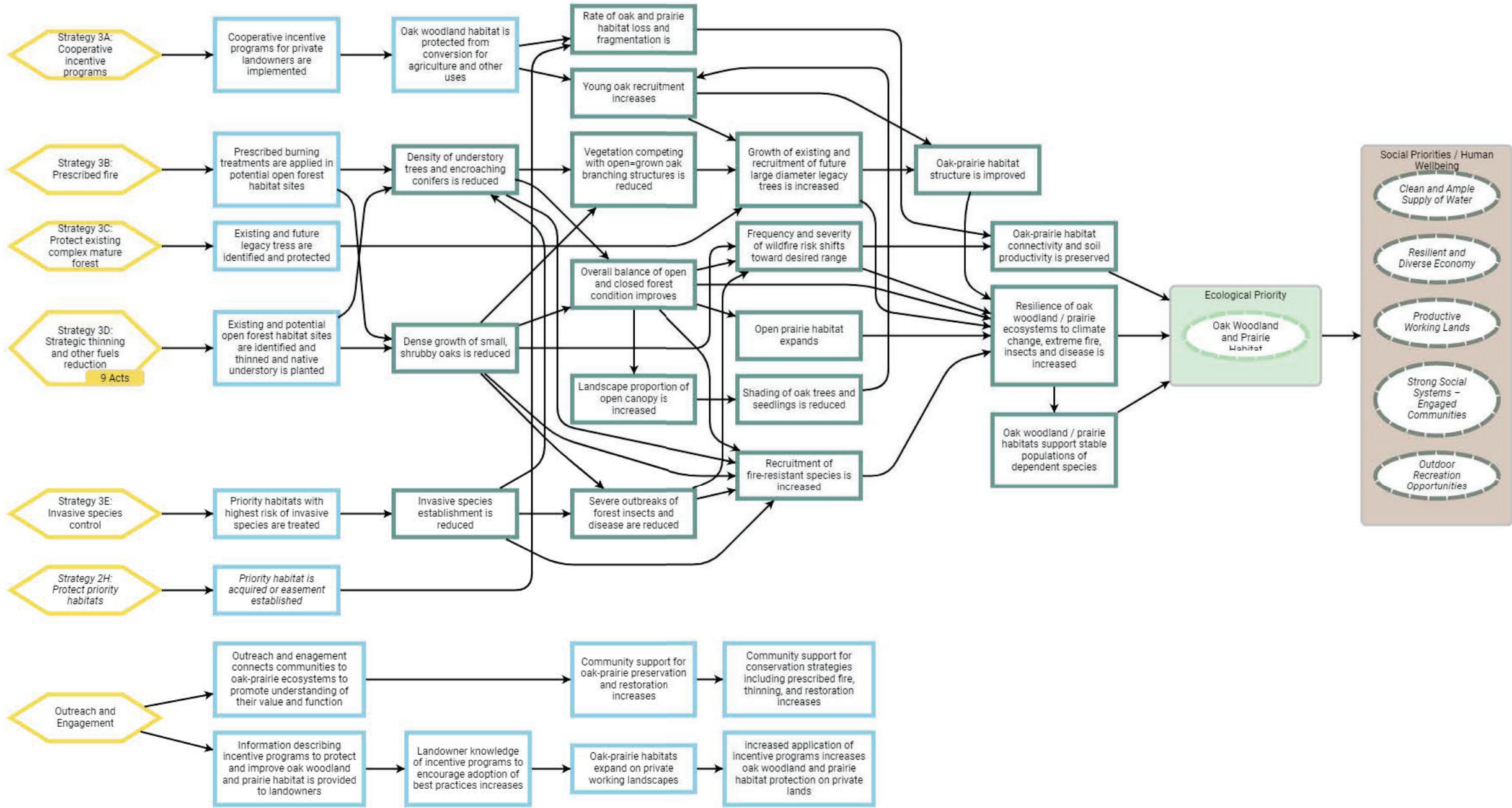
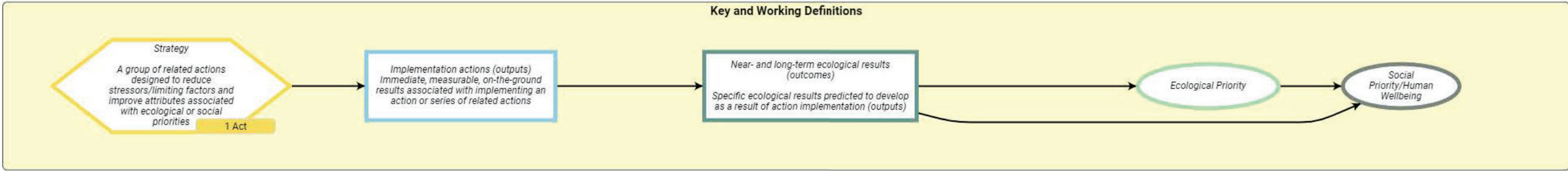
Initiative 2. Flow Restoration and Source Water Protection



APPENDIX D

Theory of Change Results Chain: Oak Woodland and Prairie
Restoration Initiative

3. Oak Woodland and Prairie



APPENDIX E

Evaluation Criteria and Scoring Matrix: Implementation Project Form

Draft Evaluation Criteria and Scoring Matrix: Implementation Project Form

Project Name:

Category (Tier 1 or Urgent):

Name of Project Proponent and Organization:

Date:

Project Proponents are requested to fill out this form to provide information to the Partners of the North Santiam (PNS) about the project, which will be the first step in helping the PNS determine how to support it. After submitting this form, the Project Proponent will be invited to participate in a meeting with PNS Partners to further discuss the project and to determine next steps.

Project Evaluation Process

- **Submitting a Project Form.** Project Proponent fills out and submits a Project Form to the PNS that aligns with the project type.
 - Choose from the Implementation Project Form, Planning/Stakeholder Engagement Project Form, or Monitoring Project Form.
 - Submit forms to:
- **Meeting Scheduling.** PNS schedules a meeting with the Project Proponent to discuss the project.
- **Meeting.** Project Proponent presents the project to the PNS project reviewers and answers questions during the meeting. The PNS project reviewers determine how to support the project (e.g., indicate a willingness to provide a letter of support, suggest partnerships or funding sources, or recommend further development of the project).
- **SmartSheets Data Entry.** Project Proponent enters project information into the SmartSheets database for projects in the North Santiam Basin.

Scoring Details

- Project Proponents conduct a self-evaluation of the project by providing a score for each of the different project evaluation criteria under “Project Proponent Score.”
- This matrix is set up such that the higher the score, the more beneficial. Enter a score of zero if the evaluation criteria is not applicable to the project. In some cases, only one score option is offered intentionally.
- Brief comments on the score entered by the Project Proponent can be provided under “Project Proponent Scoring Comments.” The Project Proponent can provide more details and scoring explanations during the meeting with the PNS project reviewers. The Project Form page limit is 6 pages, excluding this page and the Project Feedback Worksheet page, and concise comments are encouraged.

Project Evaluation Criteria	Scoring Description	Project Proponent Scoring Comments	Project Proponent Score	Project Reviewer Score
Riparian and Aquatic Habitat Enhancement Specific Information				
Increases the quantity or diversity of habitat	<p>1 = Increases the quantity or diversity of habitat to a small extent (e.g., fish passage: up to 0.5 miles; instream improvement length: up to 1,000 feet; riparian/floodplain/upland habitat restoration: up to 2 acres)</p> <p>2 = Increases the quantity or diversity of habitat to a moderate extent (e.g., fish passage: 0.6-1.0 miles; instream improvement length: up to 0.5 miles; riparian/floodplain/upland habitat restoration: up to 10 acres)</p> <p>3 = Project increases the quantity or diversity of habitat to a large extent (e.g., fish passage: 1.1-1.5 miles; instream improvement length: up to 1.0 mile; riparian/floodplain/upland habitat restoration: up to 20 acres)</p> <p>4 = Project increases the quantity or diversity of habitat to a very large extent (e.g., fish passage: 1.6 miles or more; instream improvement length: more than 1.0 mile; riparian/floodplain/upland habitat restoration: more than 20 acres)</p>			

Habitat quality	<p>1 = Project increases access to or enhances habitat currently in poor condition (i.e., low potential to support Strategy Species identified in the Oregon Conservation Strategy)</p> <p>2 = Project increases access to or enhances habitat currently in fair condition (i.e., medium potential to support Strategy Species identified in the Oregon Conservation Strategy)</p> <p>3 = Project increases access to or enhances habitat currently in good condition (i.e., high potential to support Strategy Species identified in the Oregon Conservation Strategy)</p>			
Temporal improvement	<p>1 = Project will result in habitat improvements that are seasonal or address a single life-stage of one or more Strategy Species identified in the Oregon Conservation Strategy</p> <p>2 = Project will result in habitat improvements year-round; addresses multiple life-stages of one or more Strategy Species identified in the Oregon Conservation Strategy; or addresses one or more critical life-stages of one or more Strategy Species</p>			
Biologically-significant location	1 = Project location identified as a high priority area or a sensitive area by an agency or a watershed assessment/plan			
Habitat connectivity	3 = Project connects high-quality habitats areas or biologically-significant locations			
Species	1 = Project occurs in an area with Strategy Species identified in the Oregon Conservation Strategy			

Protects or improves water quality	<p>1 = Project protects or improves water quality parameters that are not Category 4 (TMDL) and Category 5 (303(d) listed) impaired water bodies</p> <p>2 = Project improves a Category 4 (TMDL) and/or Category 5 (303(d) listed) water quality limited parameter or addresses a parameter/contaminant of elevated concern</p> <p>3 = Project improves water quality under both 1 and 2</p>			
Flow Restoration and Source Water Protection Specific Information				
Drinking water quality	<p>3 = Project is located upstream of a drinking water intake and is predicted to improve water quantity and/or quality or aesthetics for that drinking water supply, but the improvement is too difficult or costly to measure</p> <p>4 = Project is located upstream of a drinking water intake and will measurably improve water quantity and/or quality or aesthetics for that drinking water supply</p>			
Water quality for other beneficial uses	1 = Project is predicted to improve water quantity and/or quality or aesthetics for beneficial uses other than or in addition to drinking water (e.g., livestock and recreation)			
Assists water treatment	2 = Project reduces the frequency or magnitude of one or more water quality issues that are more costly for a water treatment plant to treat given the type of treatment process			

Additional Information				
Streamflow regime	<p>4 = Project is predicted to benefit the desired streamflow regime, but measuring that benefit will be too difficult or costly</p> <p>5 = Project is predicted to benefit the desired streamflow regime to a measurable degree</p>			
Climate change resiliency	4 = Project enhances climate change resiliency of ecosystem processes			
Process-based approach	<p>3 = Project restores an ecosystem process and/or a root cause of degradation</p> <p>4 = Project restores multiple ecosystem processes and/or addresses multiple root causes of degradation</p>			
Funding opportunities	<p>1= Funding is available but the project is not located in an area prioritized for funding by funders</p> <p>2= Funding is available for the project, matching funding is available (monetary or in-kind), and/or the project is located in an area prioritized for funding by funders</p> <p>3= Funding is available for the project, matching funding is available (monetary or in-kind), and the project is located in an area prioritized for funding by funders (all three apply)</p>			
Collaboration	<p>1 = Project involves the partnership/collaboration with one entity/stakeholder</p> <p>2 = Project involves partnership/collaboration with two or more entities/stakeholders</p> <p>3 = Project involves partnerships/collaborations that include a broad and inclusive coalition of interests and/or involve underrepresented populations</p>			
Building capacity	1 = Project involves strategic actions to build the capacity of project partners for implementing future projects			
Stakeholder engagement	1 = Project provides opportunities for stakeholder/public involvement or education			

	2 = Project provides opportunities for stakeholder/public involvement or education that are ongoing and/or reach out to underrepresented populations			
Economic impact	2 = Project provides an opportunity to benefit the local economy through planned expenditures on goods/materials and services			
Total				

Below is for Project Reviewers to fill out only.

Project Feedback Worksheet

Project Name:

Category (Tier 1 or Urgent):

Name of Project Proponent and Organization:

Evaluation Meeting Date:

PNS Project Reviewers	
Reviewer Comments (Strengths, Weaknesses, and Suggestions)	
Reviewer Recommendations:	
Provide a Letter of Support	
Suggested Funding Sources	
Suggested Partnerships	
Suggested Areas of Further Development	

APPENDIX F

Evaluation Criteria and Scoring Matrix: Monitoring Project Form

Draft Evaluation Criteria and Scoring Matrix: Monitoring Project Form

Project Name:

Category (Tier 1 or Urgent):

Name of Project Proponent and Organization:

Date:

Monitoring Project Type:

- **Status and Trend**
- **Project Effectiveness**
- **Rapid Bio-assessment**
- **Landscape effectiveness**

Project Proponents are requested to fill out this form to provide information to the Partners of the North Santiam (PNS) about the project, which will be the first step in helping the PNS determine how to support it. After submitting this form, the Project Proponent will be invited to participate in a meeting with PNS Partners to further discuss the project and to determine next steps.

Project Evaluation Process

- **Submitting a Project Form.** Project Proponent fills out and submits a Project Form to the PNS that aligns with the project type.
 - Choose from the Implementation Project Form, Planning/Stakeholder Engagement Project Form, or Monitoring Project Form.
 - Submit forms to:
- **Meeting Scheduling.** PNS schedules a meeting with the Project Proponent to discuss the project.
- **Meeting.** Project Proponent presents the project to the PNS project reviewers and answers questions during the meeting. The PNS project reviewers determine how to support the project (e.g., indicate a willingness to provide a letter of support, suggest partnerships or funding sources, or recommend further development of the project).
- **SmartSheets Data Entry.** Project Proponent enters project information into the SmartSheets database for projects in the North Santiam Basin.

Scoring Details

- Project Proponents conduct a self-evaluation of the project by providing a score for each of the different project evaluation criteria under “Project Proponent Score.”
- This matrix is set up such that the higher the score, the more beneficial. Enter a score of zero if the evaluation criteria is not applicable to the project. In some cases, only one score option is offered intentionally.

Brief comments on the score entered by the Project Proponent can be provided under “Project Proponent Scoring Comments.” The Project Proponent can provide more details and scoring explanations during the meeting with the PNS project reviewers. The Project Form page limit is 6 pages, excluding this page and the Project Feedback Worksheet page, and concise comments are encouraged.

Project Evaluation Criteria	Scoring Description	Project Proponent Scoring Comments	Project Proponent Score	Project Reviewer Score
Describing current watershed conditions	1 = Data gathered and analyzed will describe current watershed conditions			
Tracking trends in watershed conditions	1 = Data gathered and analyzed will enable the tracking of trends in watershed conditions			
Evaluating specific effects of projects	1 = Project will evaluate the specific effects of a restoration or acquisition project or program by comparing similar watershed components before and after implementation of the project or program			
Monitoring variables	<p>1 = Project clearly identifies the specific habitat, plant species, fish and wildlife species, geomorphology, water quality parameters, and/or water quantity variables to be monitored</p> <p>2 = Above plus the project will monitor:</p> <ul style="list-style-type: none"> • one or more Strategy Species identified in the Oregon Conservation Strategy, • water quality parameters that are Category 4 (TMDL) and/or Category 5 (303(d) listed) impaired water bodies, and/or • parameters relevant to drinking water quality and water treatment systems, and/or • parameters relevant to water quantity and/or quality or aesthetics for beneficial uses other than or in addition to drinking water (e.g., livestock and recreation) 			
Monitoring methods	1 = Methods are clearly described for data gathering and utilize sound and/or established practices			
Monitoring question	<p>1 = Monitoring question clearly stated</p> <p>2 = Monitoring question clearly stated and supported by information and other local assessments or plans relevant to the project</p>			

Broader impact	1 = Project contributes to and is complementary to other monitoring efforts in the North Santiam watershed			
Monitoring location	1 = Monitoring will occur at a restoration or acquisition project or program site 2 = Monitoring location has been identified as a high priority area or a sensitive area by an agency or a watershed assessment/plan			
Monitoring results sharing	1 = Monitoring results will be made publicly available through a governmental or private data storage site			
Funding opportunities	1= Funding is available but the project is not located in an area prioritized for funding by funders 2= Funding is available for the project, matching funding is available (monetary or in-kind), and/or the project is located in an area prioritized for funding by funders 3= Funding is available for the project, matching funding is available (monetary or in-kind), and the project is located in an area prioritized for funding by funders (all three apply)			
Monitoring timeframe and interval	1 = Monitoring will occur for a length of time (number of years) and at a frequency appropriate for the variables to be monitored			

Project Feedback Worksheet

Project Name:

Category (Tier 1 or Urgent):

Name of Project Proponent and Organization:

Evaluation Meeting Date:

PNS Project Reviewers	
Reviewer Comments (Strengths, Weaknesses, and Suggestions)	
Reviewer Recommendations:	
Provide a Letter of Support	
Suggested Funding Sources	
Suggested Partnerships	
Suggested Areas of Further Development	

APPENDIX G

Evaluation Criteria and Scoring Matrix: Planning/Stakeholder Engagement Form

Draft Evaluation Criteria and Scoring Matrix: Planning/Stakeholder Engagement Form

Project Name:

Category (Tier 1 or Urgent):

Name of Project Proponent and Organization:

Date:

Project Type:

- **Planning**
 - **Technical Design and Engineering**
 - **Resource Assessment and Planning (e.g., conducting habitat restoration scoping and/or feasibility studies; developing restoration action plans; assessments and surveys)**
- **Stakeholder Engagement**

Project Proponents are requested to fill out this form to provide information to the Partners of the North Santiam (PNS) about the project, which will be the first step in helping the PNS determine how to support it. After submitting this form, the Project Proponent will be invited to participate in a meeting with PNS Partners to further discuss the project and to determine next steps.

Project Evaluation Process

- **Submitting a Project Form.** Project Proponent fills out and submits a Project Form to the PNS that aligns with the project type.
 - Choose from the Implementation Project Form, Planning/Stakeholder Engagement Project Form, or Monitoring Project Form.
 - Submit forms to:
- **Meeting Scheduling.** PNS schedules a meeting with the Project Proponent to discuss the project.
- **Meeting.** Project Proponent presents the project to the PNS project reviewers and answers questions during the meeting. The PNS project reviewers determine how to support the project (e.g., indicate a willingness to provide a letter of support, suggest partnerships or funding sources, or recommend further development of the project).
- **SmartSheets Data Entry.** Project Proponent enters project information into the SmartSheets database for projects in the North Santiam Basin.

Scoring Details

- Project Proponents conduct a self-evaluation of the project by providing a score for each of the different project evaluation criteria under “Project Proponent Score.”
- This matrix is set up such that the higher the score, the more beneficial. Enter a score of zero if the evaluation criteria is not applicable to the project. In some cases, only one score option is offered intentionally.

Brief comments on the score entered by the Project Proponent can be provided under “Project Proponent Scoring Comments.” The Project Proponent can provide more details and scoring explanations during the meeting with the PNS project reviewers. The Project Form page limit is 6 pages, excluding this page and the Project Feedback Worksheet page, and concise comments are encouraged.

Project Evaluation Criteria	Scoring Description	Project Proponent Scoring Comments	Project Proponent Score	Project Reviewer Score
Geography	1 = The project is tied to a specific geography			
Clear goals	1 = The project clearly states the habitat or ecosystem function goals for the specific geography			
Stakeholders	1 = The stakeholders to whom the stakeholder engagement is targeting are identified and reasonable for the restoration/acquisition/assessment/planning project that is the subject of the stakeholder engagement			
Activities	1 = The planning/stakeholder engagement activities are clearly described <ul style="list-style-type: none"> • Stakeholder engagement activities are described and will help convey the need for a specific restoration/acquisition/assessment/planning project, as well as the feasibility and benefits of the project • Planning activities that are technical design and engineering projects, articulate the level 			

	<p>of design (e.g., conceptual, preliminary, or final), as well as the amount of land area and/or stream miles encompassed by the technical design</p> <ul style="list-style-type: none"> • Planning activities that are assessments or plan development describe the information to be gathered and analyzed 			
Outcomes	1 = Outcomes of planning/stakeholder engagement projects are identified and reasonable			
Timeframe	1 = The project has a reasonable specified timeframe for implementing the planning/stakeholder engagement			
Funding opportunities	<p>1= Funding is available but the project is not located in an area prioritized for funding by funders</p> <p>2= Funding is available for the project, matching funding is available (monetary or in-kind), and/or the project is located in an area prioritized for funding by funders</p> <p>3= Funding is available for the project, matching funding is available (monetary or in-kind), and the project is located in an area prioritized for funding by funders (all three apply)</p>			
Collaboration	<p>1 = Project involves the partnership/collaboration with one entity/stakeholder</p> <p>2 = Project involves partnership/collaboration with two or more entities/stakeholders</p> <p>3 = Project involves partnerships/collaborations that include a broad and inclusive coalition of interests and/or involve underrepresented populations</p>			
Multiple project benefits	1 = The project is anticipated to benefit other watershed enhancement projects in a different or expanded geography, or additional watershed enhancement projects in early planning stages in the geography			

Project Feedback Worksheet

Project Name:

Category (Tier 1 or Urgent):

Name of Project Proponent and Organization:

Evaluation Meeting Date:

PNS Project Reviewers	
Reviewer Comments (Strengths, Weaknesses, and Suggestions)	
Reviewer Recommendations:	
Provide a Letter of Support	
Suggested Funding Sources	
Suggested Partnerships	
Suggested Areas of Further Development	

APPENDIX H

Outreach Materials Example



Partners of the North Santiam

The Partners of the North Santiam (PNS) is a group of committed stakeholders that play an active role in the continued health and vitality of the North Santiam River watershed. By collaborating together, the PNS can share learnings, expertise, and resources to provide better strategic conservation planning and implementation in the watershed. The PNS is focusing on three initiatives: riparian and aquatic habitat enhancement, flow restoration and source water protection, and oak woodland and prairie restoration. The PNS has created a Resiliency Action Plan with supplemental information to guide its efforts.

Vision: The North Santiam River Watershed is made more resilient by partners implementing coordinated actions to restore ecological processes that maintain habitat for species while supporting and improving social and economic interests in local communities

**The Partners of the North Santiam want to collaborate with you!
We encourage you to reach out to us to learn more and to discuss potential projects.**

Questions?

Contact Suzanne de Szoeko
at sdeszoeko@gsiws.com



NORTH SANTIAM
WATERSHED COUNCIL



Do you have projects that align with these initiatives? Let's work together!



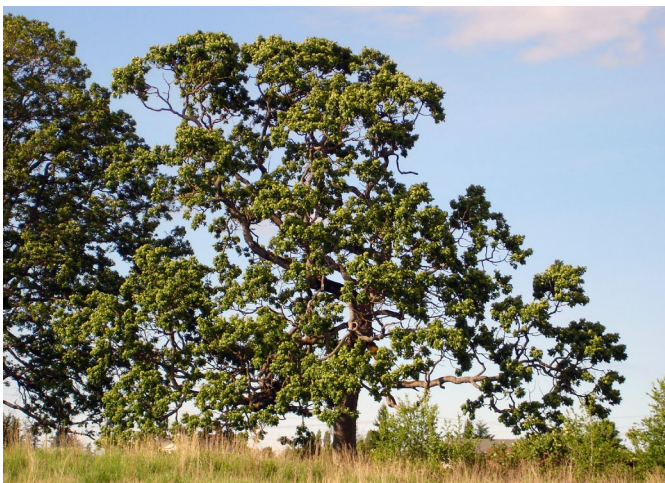
Riparian and Aquatic Habitat Enhancement

- Restore fish passage
- Beaver restoration and reintroduction projects
- Enhance stream channel habitat
- Reconnect floodplains and side channels
- Enhance riparian areas with reforestation
- Improve wildfire resilience of riparian forests
- Protect priority habitats



Flow Restoration and Source Water Protection

- Improve water quality in reservoirs
- Promote agricultural best management practices
- Improve stormwater management
- Improve hydrology and sediment dynamics
- Upgrade septic systems
- Improve water management infrastructure
- Enhance forest health, diversity, and wildfire resilience
- Protect priority habitats



Oak Woodland and Prairie Restoration

- Provide cooperative incentive programs
- Prescribe fires
- Protect existing complex mature forest
- Strategically thin forested areas and reduce other fuels
- Control invasive species
- Protect priority habitats