

Project Title

Integrated Riparian Stewardship in the Stillaguamish and Snohomish basins.

Short Description (500)

Snohomish Conservation District will collaborate with NOAA, Ecology, Snohomish County, Forterra and Adopt-a-Stream Foundation to develop a model riparian stewardship strategy for priority sub-basins and floodplains in the Stillaguamish and Snohomish watersheds. This effort will integrate assessment work already completed with additional riparian prioritization tools to identify parcel-specific targets for riparian protection and restoration.

Long Description (4000)

Our team will develop a basis for sustained riparian zone management in agricultural landscapes in high priority areas of the Stillaguamish and Snohomish basins. We will be following and integrating assessments of habitat structure, geomorphology, temperature and development pressure in the following Priority Basins (Figure 1) to develop Riparian Stewardship Plans that prioritize riparian protection and restoration work.

Stillaguamish Confluence Priority Basin: Lower North Fork, Lower South Fork, Upper Mainstem, Jim Creek, and Pilchuck Creek subbasins in the Stillaguamish River watershed.

Pilchuck River/French Creek: Lower and Middle Pilchuck River and French Creek subbasins in the Snohomish River watershed.

These basins represent the overlap of salmon recovery priorities, ongoing TMDL actions, and agricultural landscapes threatened by ongoing development.

This project will consist of three main tasks: development of Riparian Stewardship Plans for the above Priority Basins, research and development of a proposal for streamlined easement valuation, and initial outreach efforts to priority parcels.

The goal of this initial planning phase will be to line both the project partners and Ecology up for successful implementation of riparian easements and restoration. Our approach will be targeted toward identifying riparian projects at the parcel or reach scale that 1) protect existing high quality habitat from subdivision and development, 2) enable floodplain and in-channel restoration, and 3) support revegetation, stormwater interception, and buffering within the riparian zone to enhance water resources. In this way, easement acquisition will be integrated as part of a comprehensive riparian zone management approach.

Our analysis will build on extensive TMDL and salmon recovery analysis, yield parcel-specific targets, and direct immediate action. Easement acquisitions funded by NEP will complement restoration and protection actions using Salmon Recovery, Farm Bill, and water quality funding mechanisms.

Development of Riparian Stewardship Plans will largely build on existing water quality, habitat, and geomorphic assessments already completed for these two Priority Basins. Incorporating minimal additional analyses will yield comprehensive Riparian Stewardship Plans that prioritize reaches and parcels for restoration and protection. These additional analyses include land cover of riparian zone and contributing basins, development risk, concentrated flow pathways, and an evaluation of parcel size, land-use and likelihood of success.

The Snohomish Conservation District has the best community outreach network for working in agricultural and rural residential landscapes, is fluent in additional incentive programs available to landowners, and is administering an early action area for the new NRCS Regional Conservation Partnership Program (RCPP). Forterra is a sophisticated and effective land trust, and will be our acquisition specialist while continuing to advance its work in Transfer of Development Rights. NOAA brings technical expertise, federal regulatory compliance assistance, and will insure consistency with salmon recovery and tribal trust objectives. The County is the lead for capital project work in floodplains, has the best quality local data including high resolution land cover data, and the ability to integrate riparian zone management with land use policy. This team of partners, plus tribal support from the Tulalip Tribes and the Stillaguamish Tribe, make this an appropriate and effective team for both prioritizing and implementing riparian enhancement work.

Overall Goal (1000)

The Conservation District and partners will develop Riparian Stewardship Plans that prioritize riparian zone management in two Priority Basins in the Stillaguamish and Snohomish River watersheds: Stillaguamish Confluence and Pilchuck River/French Creek. Forterra will work with Ecology and Terra Valuations to develop a streamlined and effective approach to riparian zone easement valuation. And the Conservation District and Adopt-a-Stream Foundation will develop and begin implementation of a targeted outreach strategy to agricultural landowners.

Planning Area Focus – 40pt (10000)

OVERVIEW

The Stillaguamish and Snohomish Lowlands (excluding the Snoqualmie Valley) are located within Snohomish County. The Snohomish Conservation District provides community-based stewardship of these systems integrating salmon recovery, farm management, and water quality intervention. These two watersheds have had historically large populations of Pacific salmonids, including threatened Puget Sound Chinook, steelhead trout, and commercially important coho salmon, with the potential for recovery of large harvestable fisheries. The Snohomish watershed currently produces 25-50% of coho spawning in Puget Sound. Whidbey Basin Chinook populations, including the Snohomish and Stillaguamish, are the cornerstone for recovery of Puget Sound wild salmon production. The Snohomish was identified as a national “Resilient Lands and Waters” pilot area, and thus is a focus for federal collaboration.

In this landscape, the upper watersheds are located in national state and private forestlands, the floodplains are largely developed for agriculture, and the lowland glacial plateau is increasingly subject to rural residential development. The lower watersheds are facing population growth, forest clearing, and ex-urban development pressure. For example, in the Stillaguamish, watersheds used by anadromous fisheries are 61% forestry, 22% rural, 15% agriculture, and 2% urban. Our focus will be on developing a riparian zone business plan the 37% of the landscape that is rural and agricultural, and within those sub-basins prioritized for salmon recovery.

PARTNERSHIP MODEL

The Conservation District and its local, state, tribal and federal partners propose an integrated approach to riparian zone management to protect and recover water resources, fisheries, and preserve rural working lands. Our goal is to create rural communities that are resilient to the worsening floods, landslides, and droughts anticipated under climate change. This will require a creative mixture of regulatory protection, easement acquisition, fee simple acquisition, stewardship, and capital projects, in collaboration with private landowners and diverse interest groups, to develop a durable and resilient land use pattern.

BIG PICTURE PLAN

A 15-year progression of salmon recovery and water quality planning in the Stillaguamish and Snohomish has defined focus areas for protecting and restoring riparian systems, and strong strategies for implementation. In brief:

- The greatest riparian degradation and need for restoration occurs in the lowlands, where salmon habitat overlaps with rural development and agriculture.
- For Chinook, recovery efforts are focused on mainstem and side channel habitat in rivers floodplains critical for spawning and rearing.
- For economically important coho, we protect and restore watershed hydrology, and instream structure in large lowland tributaries.
- Temperature TMDL analysis provides a natural linkage between hydrologic processes, salmon habitat, and water quality concerns.

We propose a two tiered approach to planning through this funding source. In the first tier, we will pull together the myriad of studies, assessments, and collections of data in a larger area of the Stillaguamish and Snohomish River watersheds (Figure 1: Priority Basins and Floodplain combined) that have already been identified as high priorities through salmon recovery and water quality prioritization processes. In doing this, we will identify the data gaps necessary for riparian stewardship prioritization into the future. In the second tier, we will develop reach and parcel specific riparian restoration and protection plans for two Priority Basins (Figure 1). In the Stillaguamish the Priority Basin encompasses the Lower North and South Forks Stillaguamish, a portion of the Lower Stillaguamish, and Lower Jim and Pilchuck Creeks. In the Snohomish River, the Priority Basin includes the Middle and Lower Pilchuck River and tributaries and the

French Creek subbasin. This large planning area was chosen for two reasons: 1) to ensure success in securing wide riparian buffer easements as per EPA and Ecology's goal for this program and 2) as a starting point from which to use prioritization tools described below to identify target reaches and parcels for outreach.

Following is a description of these two Priority Basins and justification for selection.

STILLAGUAMISH WATERSHED

In the Stillaguamish, prioritization for both salmon recovery and water quality are described by 15 years of assessment work including the *Stillaguamish River Chinook Salmon Recovery Plan* (2005) and followed by several additional studies attempting to prioritize restoration and protection work given the limited nature of funding. These include the *Temperature TMDL Implementation Plan* (2006), *Puget Sound Watershed Characterization* (2011), *Temperature TMDL Adaptive Assessment and Implementation Project* (2015), and *Acquisition Strategy for the Stillaguamish Chinook Recovery Plan* (2015). These studies identify and prioritize river and floodplain rearing habitat, which includes cold-water refuges along river edges, in side-channels and tributary streams – providing a nexus for salmon recovery and water quality focused agencies and funding sources.

The Priority Basin represented in Figure 1 was selected primarily using recent analysis by Snohomish County in the *Temperature TMDL Adaptive Assessment and Implementation Project* (Leonetti, 2015). In this study, Leonetti used near infrared imagery, river thermal profiling, seepage studies, and watershed characterization to identify cold water refuge habitat for salmonids and prioritize restoration efforts (Figure 2). High priority riparian planting and in-stream habitat work was identified in several regions of the Mainstem, Lower North Fork, Lower South Fork, Pilchuck Creek and Jim Creek – hence the selection of our focus area for riparian restoration and protection prioritization that we are calling the Stillaguamish Confluence area. In order to be successful, riparian stewardship is a high priority in this focus area.

To compliment this water quality based approach, Griffith et al (2015) used an analysis of floodplain units to identify locations where acquisition of valley bottom near the river would most likely support habitat protection and restoration opportunities in the *Acquisition Strategy for the Stillaguamish Chinook Recovery Plan* (2015). The integration of these two analyses provides a strong basis for a floodplain riparian zone intervention strategy in the Stillaguamish.

This area comprises a mix of commercial agricultural enterprises in the floodplains that transition into the rural uplands where hobby farms, commercial agriculture and rural residential properties share the landscape. A mixed approach combining easements with restoration work through a variety of outreach methods is prescribed to improve riparian habitat.

SNOHOMISH WATERSHED

Our focus area in the Snohomish system is similarly supported by 15 years of planning efforts including the *Snohomish River Basin Salmon Conservation Plan* (2005) and supplemented by numerous studies in sub-basins and within the floodplain culminating in the more recent *Snohomish River Geomorphic Reach Assessment* (2015) and the *Snohomish Basin Protection Plan* (2015). These efforts have consistently pointed to the Pilchuck River as an extremely high priority river to protect salmon abundance and spatial diversity. As such, numerous studies have been completed in the Pilchuck to prioritize restoration efforts given limited funding. These include the *Habitat and Salmon Use in the Pilchuck River* (Hook and Savery, 2003), *Pilchuck Watershed Protection Project* (Tulalip Tribes, 2012), the *Middle Pilchuck River Assessment Synthesis* (Nelson and Rustay, 2012) and the ongoing *Pilchuck River-French Creek Temperature and Dissolved Oxygen TMDL* plan. These plans provide critical information for prioritizing restoration efforts yet stop short of identifying priorities for riparian restoration and protection.

The Priority Basin represented in Figure 1, Middle and Lower Pilchuck River and French Creek, was selected primarily through consideration of the importance of these sub-basins for salmon recovery and the plethora of existing data and prioritization efforts, but also through consultation and urging from Ecology's TMDL lead for the region, Ralph Svrjcek. Svrjcek recognizes the historical importance French Creek played in salmon habitat and the fact that these two areas are combined in an ongoing temperature and dissolved oxygen TMDL effort, allowing for close collaboration and data sharing between the two projects.

Land-use in the Pilchuck River is largely rural residential properties and small hobby farms with commercial agricultural in places along the mainstem of the river. The Upper Pilchuck River subbasin is entirely in public and private forestland and as such, it not included in our planning effort. The *Middle Pilchuck River Habitat Assessment* (Leonetti and Rustay 2012) summarizes conditions along eight river miles of Chinook salmon spawning areas where riparian vegetation is severely degraded, floodplain side channels have been cut off and large wood removed from the river creating a wide, shallow channel with high water temperatures that affect juvenile rearing in summer months (Figure 3). At the same time, the agricultural community living along this highly erodible and frequently flooded river is losing farmland to channel erosion, yet is reluctant to set aside wide riparian buffers. Easements, therefore, are expected to be a key tool in support of project implementation in the floodplain and restoration of hydrologic processes above the floodplain.

Planning Approach – 40pt (10000)

PARTNERSHIPS

The Snohomish Conservation District, Forterra, NOAA, and the Adopt-a-Stream Foundation are the primary partners on this project with technical assistance from Snohomish County and the Stillaguamish Tribe and support from the Tulalip Tribes. The partners participate in the

Sustainable Lands Strategy talks and represent the various interests collaborating to create a sustainable and balanced approach to natural resource restoration and protection in the Snohomish and Stillaguamish River watersheds.

ANALYSIS AND PRIORITIZATION APPROACH

The emphasis of this initial planning phase is to prioritize riparian stewardship in the Priority Basins identified. This will occur in two steps:

- Step one: In the larger target area, including both the floodplains and Priority Basins depicted in Figure 1, bring together all of the plans and prioritization efforts that currently exist and creating a spatial representation of these priorities through GIS mapping.
- Step two: Narrowing from the larger area, create Riparian Stewardship Plans in the two Priority Basins: Stillaguamish Confluence and Pilchuck River/French Creek.

The Riparian Stewardship Plans will meet the criteria for Reach-Scale Plans as outlined in the grant Request for Proposals. They will largely build off existing data and assessment resources, with little additional data collection and analysis, making this a cost-effective approach to prioritization. The plans will include the following outcomes:

- Identification of priority reaches within the selected basins that would benefit the greatest from both riparian enhancement and riparian protection through easements.
- Goals for riparian planting acreage targets within priority reaches.
- Identification of priority parcels to target with outreach efforts where likelihood of success, defined as landowner willingness and ecological benefit, are high.

A key part of this process will be re-defining the riparian zone beyond traditional mapped streamlines, work that NOAA will contribute as match to this effort. NOAA proposes to conduct a concentrated flow analysis of the priority basins to identify areas where flow accumulates, picks up pollutants or increases in temperature, before reaching a mapped stream (Figure 4). We propose to use this information to identify key parcels where flow is accumulated and riparian restoration would provide a higher benefit, as well as identifying larger areas that might be considered for riparian easements (Figure 5).

Stillaguamish Confluence Priority Basin

The *Stillaguamish Temperature TMDL Adaptive Assessment and Implementation Project* (2015) and the *Acquisition Strategy for the Stillaguamish Chinook Recovery Plan* (2015) will largely guide the prioritization efforts in the Stillaguamish Confluence Priority area. The TMDL project was funded by Ecology and included watershed characterization, base flow analysis, thermal infrared mapping of cold-water refuges, river thermal profiling, continuous water temperature monitoring among >100 locations, a groundwater seepage study, and data synthesis. The report identified 50 priority planting projects to the parcel scale, yet it did not develop a full riparian stewardship plan. Additional analysis we propose to include in development of this plan includes:

- Land-cover analysis = A high-resolution land cover classification (2013) from Snohomish County using multi-spectral, high resolution satellite imagery will be used to assess the

condition of riparian areas along the mainstem and floodplain tributaries as well as contributing areas.

- Development risk = Forterra will use GIS to analyze the risk of development where easements may be prioritized.
- Concentrated flow pathways = NOAA will complete an analysis of concentrated flow pathways using LiDAR DEM data to identify areas where riparian enhancement might be prioritized to improve infiltration before waters reach mapped streams.
- Parcel size, land-use, likelihood of success = Success is defined both by willingness of landowners to restore wide riparian buffers and the ecological impact of these actions given flow, water temperature, and channel size.

Pilchuck River/French Creek Priority Basin

Three recent assessment projects will be the basis for developing the Riparian Stewardship Plan in the Pilchuck River and French Creek priority basin. The *Pilchuck Watershed Protection Project* (Tulalip Tribes, 2012), the *Middle Pilchuck River Assessment* (Nelson and Rustay, 2012) and the ongoing *Pilchuck River-French Creek Temperature and Dissolved Oxygen TMDL* plan will provide a strong data set that prioritizes habitat and protection projects in this area. At the request of Ecology, we selected to include French Creek in the priority basin. Adopt-a-Stream Foundation recently completed a DOE 319 funded project to canvass landowners in the Pilchuck River and collected riparian condition data. These efforts combined, however, fall short of prescribing a full Riparian Stewardship Plan in that they don't identify priority reaches for riparian restoration and protection or acreage goals for enhancement work. Additional analysis we propose to include is the same as above.

EASEMENT VALUATION

Forterra will take the lead development of a streamlined easement appraisal methodology. Forterra will work specifically with Terra Valuations, LLC, to explore various methods for assessing the value impact of riparian conservation easements on a reach scale as a preliminary exercise to conducting individual property appraisals. We understand Ecology's need to adhere to strict appraisal guidelines and hope that through this task, we can work together with Ecology and RCO to develop a cost-effective and efficient methodology. Our goal is to develop a way to include more than development potential in valuation so as to be able to offer landowners compelling easement rates.

OUTREACH

There are two main components to the outreach approach which will be led by the Snohomish Conservation District. The first is achieving general buy-in from both the salmon recovery and agricultural community and the second is incentivizing high priority landowners to participate in the restoration and easement program.

To achieve buy-in, the Conservation District will work through existing networks to engage stakeholders in the process of planning and then outreach to the community. Networks include the extensive relationships built with the agricultural community over the last 75 years in addition to participation in the Sustainable Lands Strategy, salmon recovery meetings, Agriculture Advisory Board, local Farm Bureau, and local flood and drainage districts. There has been some concern from the agriculture industry already as to how much agricultural land this

easement program would take out of production. The Conservation District will work with partners to ensure that this program is done in a way that benefits farmers by providing additional income for farmland that was marginal or not viable; a way of providing for the ecosystem services that are benefiting the public without overly burdening private landowners.

Outreach materials and messages will be created that describe conservation options from the perspective of the landowner, emphasizing the impact and benefit to them. The full suite of conservation packages offered to them will include the riparian easement option but also the CREP program, grant programs, and cost-share for agricultural BMPs.

The second component of the outreach strategy, conducting targeted outreach to priority parcels, will be done through a number of action including workshops, mailers, letters, phone calls and door-knocking. Over the past five years the Conservation District has moved from a more opportunistic approach to a more targeted approach. An example of what this approach looks like can be illustrated through our recent work in Woods Creek with funding from Ecology's Centennial Clean Water program. The District combined a habitat assessment with additional water quality and land-cover analysis work to develop a Riparian Stewardship Plan, the *Woods Creek Action Plan*. We launched the "45 acres of Green: Planting a Future Along Woods Creek" campaign that targeted high priority parcels along the mainstem for planting. Through workshops, letters, phone calls and door-knocking, this effort taught us that a multi-pronged approach to outreach was essential. Alone, not one of these actions was successful, but we were able to bring on board one to two landowners with each and are well on our way to reaching our acreage goal.

We have built strong relationships with our partners and intend to work with them to coordinate outreach efforts. Adopt-a-Stream Foundation recently completed an Ecology funded project to canvass landowners in the Pilchuck River. The District will focus outreach in the Stillaguamish Confluence and French Creek priority basins and Adopt-a-Stream will focus on the Pilchuck River priority basin.

OUTPUTS AND OUTCOMES

The following outputs and outcomes will result from this initial planning and outreach work (not including riparian planting and easement implementation):

Outcome: Prioritization of riparian enhancement efforts in Stillaguamish and Snohomish River watersheds.

Output: Riparian Stewardship Plan for both Priority Basins

Output: Build a technical team of partners that collaborates on prioritization efforts

Outcome: Develop a streamlined easement valuation process for priority reaches.

Output: Build partnerships with Ecology and RCO to develop a valuation approach

Outcome: Build community support for riparian enhancement and riparian easements in the Stillaguamish and Snohomish River watersheds.

Output: Network with stakeholders through existing groups

Output: Conduct outreach to target parcels identified in planning process

Output: Secure landowners willing to participate in riparian easement program

Scope of Work – 20pt (10000)

1. Project Management

Mandatory language for QAPP, reporting

2. Strategy Development (SCD, Snohomish County, NOAA, Forterra)

Description (3500)

The emphasis of this initial planning phase is to prioritize riparian stewardship in the priority basins identified. This will occur in two steps:

- Step one: In the larger target area, including both the floodplains depicted in Figure 1 and the Priority Basins, bringing together all of the plans and prioritization efforts that currently exist and creating a spatial representation of these priorities through GIS mapping. We know that areas within this larger target area would greatly benefit from riparian easements and restoration, but at this stage, the goal is to identify data resource relationships and potential next steps before being able to create a detailed riparian stewardship plan to the parcel level. Information used for this step include river and floodplain geomorphic assessments, spawning data, watershed protection plans, floodplain acquisition strategies, and salmon plans.
- Step two: Narrowing from the larger target area, create Riparian Stewardship Plans in the two priority basins: Stillaguamish Confluence and Pilchuck River/French Creek.

The Riparian Stewardship Plans will meet the criteria for Reach-Scale Plans as outlined in the grant Request for Proposals. They will largely build off existing data and assessment resources, with little additional data collection and analysis, making this a cost-effective approach to prioritization. The plans will include the following outcomes:

- Identification of priority reaches within the selected basins that would benefit the greatest from both riparian enhancement and riparian protection through easements.
- Goals for riparian planting acreage targets within priority reaches.
- Identification of priority parcels to target with outreach efforts where likelihood of success, defined as landowner willingness and ecological benefit, are high.

A separate Riparian Stewardship Plan will be created for each of the two priority basins (as outlined in more detail in the Planning Approach section above). Additional data that will be analyzed and combined with existing plans includes:

- Land-cover analysis = Land cover data (2013) compiled and analyzed by Snohomish County using multi-spectral, high resolution satellite imagery will be used to assess the condition of riparian areas along the mainstem and major tributaries as well as contributing areas. Land cover is classified into the following categories: grass/pasture/lawn, shrubs and small trees, forest, wetlands, bare earth/dormant, impervious surface, and open water/gravel bar.
- Development risk = Forterra will use GIS to analyze the risk of development where easements may be prioritized.

- Concentrated flow pathways = NOAA will complete an analysis of concentrated flow pathways using LiDAR DEM data to identify areas where riparian enhancement might be prioritized to improve infiltration before waters reach mapped streams.
- Parcel size, land-use, likelihood of success = Additional factors will be incorporated into the prioritization of specific parcels to target for outreach. Success is defined both by willingness of landowners to restore wide riparian buffers and the ecological impact of these actions given flow, water temperature, and channel size.

Goal (1500)

Building on a significant body of analysis that already exists, develop Riparian Stewardship Plans for two high priority subbasins (Stillaguamish Confluence and Pilchuck River/French Creek). Plans will prioritize riparian restoration and protection efforts and guide targeted outreach efforts to the parcel level.

Outcomes (1500)

A comprehensive plan for riparian work will not only guide outreach for the implementation of riparian easements through this program, it will enable watershed partners to better coordinate their restoration and outreach work and progress.

Deliverables: (Description, Due date)

GIS data set

Riparian Stewardship Plan for Stillaguamish Confluence

Riparian Stewardship Plan for Pilchuck River/French Creek

3. Easement Valuation (Forterra and SCD)

Description (3500)

Forterra will take the lead on an effort to develop efficient and appropriate easement appraisal methods. The short timeline for Phase II: Implementation of this easement program (complete by March, 2019) necessitates development of a streamlined process for valuation to ensure funds will be spent on time. The traditional appraisal and acquisition process can take years. Forterra will work specifically with Terra Valuations, LLC, to explore various methods for assessing the value impact of riparian conservation easements on a reach scale in priority areas as a preliminary exercise to conducting individual property appraisals. We understand Ecology's need to adhere to strict appraisal guidelines and hope that through this task, we can work together with Ecology to develop a cost-effective and efficient methodology as well as a way to include more than development potential in valuation so as to be able to offer landowners compelling easement rates.

This effort will include:

- Analyzing conservation easement transactions in Snohomish County and the appraisals made in conjunction with them in respect to:
 - o price/value per extinguished density unit

- o price/value per acre under easement
- o discernable patterns in encumbered value and diminution ratios.
- Query land trusts, state, county, and municipal agencies for programs which have adopted valuation schemes other than individual property appraisals (e.g. acquisition programs based on formulas or other metrics)
- Calculate the assessed value to market value ratios for agricultural sales throughout Snohomish County
- Compile transactional data and identify variables for possible development of a multiple regression model

All work conducted and any reporting of the results will be made in conformance with the Appraisal Foundation's *Uniform Standards of Professional Appraisal Practice* (USPAP). It should be understood at the outset that there is no guarantee that this further research and analyses will result in a model for estimating the value of the easements with the requisite degree of accuracy. While the goal is to develop a metric which can be employed to obtain reasonably consistent and reliable easement values for purposes of preliminary negotiations with landowners and grant applications, the efficacy of any such model ultimately depends on the relative homogeneity of the properties and easement impacts, as well as any number of site-specific circumstances. It is not intended to replace or necessarily provide a more accurate estimate of easement value than a traditional market value appraisal of a property performed under the "before and after" construct. Value discrepancies between the two methods may be particularly evident in bargain and sale transactions where the appraisal must be conducted under the Federal Treasury guidelines.

Goal (1500)

Work with Ecology to develop a proposal for a streamlined valuation process that takes into account associated values beyond development potential.

Outcomes (1500)

A valuation process is developed that incentivizes landowners to participate in the riparian easement program and ensures success within the grant timeline.

Deliverables: (Description, Due date)

Easement valuation report

4. Landowner Outreach (SCD)

Description (3500)

There are two main components to the outreach approach which will be led by the Snohomish Conservation District. The first is achieving general buy-in from both the salmon recovery and agricultural community and the second is incentivizing high priority landowners to participate in the restoration and easement program.

To achieve buy-in, the Conservation District will work through existing networks to engage stakeholders in the process of planning and then outreach to the community. Networks include

the extensive relationships built with the agricultural community over the last 75 years in addition to participation in the Sustainable Lands Strategy, salmon recovery meetings, Agriculture Advisory Board, local Farm Bureau, and local flood and drainage districts.

Outreach materials and messages will be created that describe conservation options from the perspective of the landowner, emphasizing the impact and benefit to them. The full suite of conservation packages offered to them will include the riparian easement option but also the CREP program, grant programs, and cost-share for agricultural BMPs.

The second component of the outreach strategy, conducting targeted outreach to priority parcels, will be done in partnership with the Adopt-a-Stream Foundation in the priority subbasins, targeting parcels identified in the Riparian Stewardship Plans. Adopt-a-Stream Foundation recently completed an Ecology 319 funded project to canvass landowners along the two main tributaries to the Pilchuck River: Little Pilchuck and Dubuque Creeks. Through this effort, they have built relationships with numerous property owners and are excited about the opportunity this new riparian easement program may bring to the area. Our two organizations will work together to create outreach materials and messages as well as develop a targeted outreach plan. Adopt-a-Stream Foundation will then focus their targeted outreach within the Pilchuck River priority basin and the Conservation District will focus on the Stillaguamish Confluence and French Creek priority basins. Additional partners, Sound Salmon Solutions, Snohomish County, and the Stillaguamish Tribe have significant outreach programs and have worked in these basins before. We will work with them to ensure cooperation between efforts and would encourage them to promote the riparian easement program as well, with access to the District's implementation phase of this grant.

Targeted outreach will include:

- Workshops – The District will host information workshops for landowners interested in learning about incentive programs available to them.
- Mailers – Mailers advertising upcoming workshops, incentive programs available, and Conservation District services will be sent to priority parcels.
- Letters – Personalized letters announcing upcoming door-knocking efforts often draw more attention from landowners and help to facilitate the door-knocking effort.
- Phone calls – Where target parcels overlap with landowners we or partners have previously worked with, phone calls will initiate a conversation about potential riparian opportunities.
- Door-knocking – Where the above methods don't succeed in getting in touch with priority landowners, the District and Adopt-a-Stream will canvass neighborhoods.

Goal (1500)

Engage the community in the priority basins as well as target priority parcels identified in the Riparian Stewardship Plans in a multi-faceted outreach campaign aimed at incentivizing landowners to improve riparian habitat through a variety of programs.

Outcomes (1500)

Landowners in priority basins are made aware of the benefits to their properties and the health of the watershed that riparian enhancement can provide. Agricultural landowners are willing to restore or protect their riparian zone.

Deliverables

Public Involvement Education and Outreach Plan submitted to Ecology upon completion of Riparian Stewardship Plan

Additional outreach deliverables (e.g. # workshops, # landowners contacted) will be developed after identification of priority parcels.

Partnering – 50 (10000)

This proposal was created in collaboration with a coalition of partners and supporters, all of whom have provided letters of support. These include the Snohomish Conservation District, Forterra, NOAA, Snohomish County, Adopt-a-Stream Foundation, Stillaguamish Tribe and the Tulalip Tribes. Partners will provide the following:

Snohomish Conservation District: The District is the appropriate project lead as their mission is to promote agricultural viability, sustainable use of natural resources, and habitat restoration. The District has built a strong relationship with the agricultural community over the past 75 years. In particular, the District has had significant on-the-ground success with riparian restoration in agricultural landscapes through the Conservation Reserve Enhancement Program and other grant funds. The District also has experience developing and coordinating implementation of Riparian Stewardship Plans through our work in Woods Creek. Through participation in salmon recovery meetings, the Pollution Identification and Correction program in the Lower Stillaguamish (downstream), the LIO, and the Sustainable Lands Strategy, the District will collaborate with watershed stakeholders to ensure success of the proposed project.

Forterra will lead the easement valuation work proposed in Task 3, assist with landowner outreach where there is interest in easements or other protection programs, and take on a more prominent role securing easements in the implementation phase of this project.

NOAA, through their Coordinated Investment program and involvement in the Sustainable Lands Strategy, will help facilitate cooperation between partners as well as provide technical assistance with concentrated flow analysis and GIS mapping.

Snohomish County will serve as a technical advisor to the project as well as provide assistance with GIS analysis and priority basin prioritization. The assessments and data that the Riparian Stewardship Plans will be built from have largely been completed by the County so their cooperation with data interpretation is critical.

Adopt-a-Stream Foundation has developed strong relationships with landowners throughout the county and, in particular, in the Pilchuck River watershed through their recent Ecology 319 grant. They have built a strong outreach program predicated on door-to-door canvassing to engage landowners and will work with the Snohomish Conservation District to develop a successful outreach approach and engage with landowners.

The Stillaguamish Tribe has built a strong presence in the Stillaguamish River, implementing restoration projects and acquiring easements and land. The tribe will provide technical assistance as it relates to their recently released *Acquisition Strategy (2015)* as well as coordinate outreach efforts with the District.

The Tulalip Tribes is a key player in salmon recovery in both the Stillaguamish and Snohomish watershed as well as a participant in the Sustainable Lands Strategy and LIO. The Tulalip Tribes supports this project and will provide technical assistance where needed.

The proposed project will lead to implementation of salmon recovery goals supported by the Lead Entities (Snohomish County and Stillaguamish Tribe, partners). In addition, water quality benefits achieved through riparian enhancement will benefit PIC efforts in the Lower Stillaguamish, just downstream. Riparian restoration and protection are in the local LIO Recovery Plan and the Puget Sound Action Agenda. The release date of the RFP, however, did not allow for sufficient time to secure letters of support from the salmon recovery groups or the LIO although the partner list and letters of support show broad support from many of the participants in these groups.

Programmatic Capabilities – 20 (10000)

EXPERIENCE AND QUALIFICATIONS

The **Snohomish Conservation District** has excellent relationships with the agricultural community, extensive experience conducting outreach and riparian restoration work, and is fluent in the diverse set of incentive programs available to landowners. In addition, the District has the technical and project management capabilities necessary to lead the initial planning and prioritization phase of this project.

Cindy Dittbrenner, Natural Resources Program, has an MS in Forest Ecology and Soils from the University of Washington and a BA in Environmental Science from Willamette University. She has 13 years of experience managing restoration and research projects and 11 years working with and outreaching to rural and agricultural landowners. Cindy was the technical lead on the Woods Creek Habitat Conditions Report (2012) and the Woods Creek Action Plan (2012). Her experience with this project as well as implementing the riparian and in-stream recommendations in the plan as the chair of the Woods Creek Working Group make her an excellent fit for project manager.

Forterra is a local land trust organization that will be the lead on easement valuation and appraisal as well as serve as the eligible easement holder for this project. A letter of

commitment is included in the attachment. For the past 25 years, Forterra has successfully led efforts to conserve more than 238,000 acres of forests, farms, shorelines, urban parks and natural areas, as well as restore and steward critical landscapes across the region. Forterra's areas of expertise include land transactions and real estate, convening diverse communities and regional stakeholders, policy development and implementation, and land restoration and stewardship. Forterra carries out its work on four levels: the iconic natural landscapes that make our region beautiful and resilient; the working forests, farms and fisheries that provide the natural resources we need to live; the small towns and rural lands that give the region its historic identity; and the cities where most of us work, play and live. Recent accomplishments include the purchase of 1,076 acres and 1.5 miles of forested shoreline on Port Gamble Bay; 140 acres of agricultural lands in Arlington along the Stillaguamish River, and the acquisition of an 80-acre parcel on Keechelus Ridge to protect habitat essential to the ecological health of the Cascades--this included key connective habitat for bears, cougars, deer and owls. Forterra is responsible for the monitoring and management of approximately 7,800 acres of fee-owned land and 7,500 acres of conservation easements in 12 Washington Counties.

Through this partnership, the District and Forterra will build upon existing plans to further prioritize riparian agricultural lands that have high conservation and restoration potential. The District will manage landowner outreach and restoration work and Forterra will manage easement acquisitions.

Forterra will contract with Victoria Adams, **Terra Valuations**, to implement Task 3: Easement Valuation. Victoria (Vicki) Adams has 25 years of experience in real estate appraisal, valuation consultation, market research and analysis. She has extensive experience valuing rural lands targeted for conservation purchase in fee or partial interest, as well as environmentally impaired property appraisal and analysis. Her assignments have involved properties featuring world-renowned wildlife or sensitive species habitat, river corridors and prized trout streams, wetlands, archaeological sites, coastal beaches and islands, geomorphic features and dinosaur fossil quarries. Vicki works with landowners, non-profit organizations and representatives of local, state and federal agencies and funding sources to determine the value of conservation easements and fee simple interests, and is a frequent speaker on conservation property valuation issues.

Paul Cereghino, Restoration Ecologist, **NOAA Restoration Center**, brings both practical experience in landscape construction and revegetation and technical experience doing spatial analysis. He led spatial analysis of Puget Sound nearshore geodata and multi-variate analysis in support of the PSNERP Strategies report, and is currently the lead planner for NOAA's Coordinated Investment Initiative. He will be working with the Conservation District to manage Task 2: Strategy Development, and aligning proposed work with Snohomish County pilot efforts to increase interagency coordination for ecosystem management in Puget Sound as part of the "Resilient Lands and Waters" designation.

TIMELINE

Although the time allotted for this phase of the grant is short, the partners have committed to completing the prioritization, plan development, easement valuation, and initial outreach efforts by the end of this grant cycle. Additional outreach efforts will be incorporated into the second phase of this project along with easement and restoration implementation.

April, 2016 – Project team refines additional analysis needed for creation of Riparian Stewardship Plans

August, 2016 – Additional data analysis and GIS work complete

December, 2016 – Draft Riparian Stewardship Plans complete for both priority basins

December, 2016 – Easement valuation task completed

February, 2017 – Final Riparian Stewardship Plans complete

December, 2016 – May, 2017 – Outreach to agricultural community

Feasibility and Likelihood of Success – 20pt (10000)

RESULTS OF PAST OUTREACH

The Conservation District and Adopt-a-Stream Foundation have had great success implementing riparian restoration projects on private property. Achieving riparian targets at the reach scale, however, has been challenging. For example, the partners have a goal of planting 45 acres along the mainstem of Woods Creek to achieve 80% riparian cover. A targeted outreach approach as described above, has yielded approximately 25 acres of plantings completed or planned in the last 4 years toward this goal. The partners have been able to achieve this through utilization of several programs including CREP, Ecology Centennial and 319 funds (35ft buffer minimum), SRFB funding, and NRCS funding. We see this new easement program as integrating with these existing programs to help achieve reach-scale riparian goals by appealing to the motivations and needs of a variety of landowners.

The programs that are currently available do not incentivize all landowners to participate. Now with a new buffer standard (NMFS buffer table), we are faced with even greater barriers to achieving full participation. An easement program that offers sufficient financial incentive to agricultural and other private landowners may be effective at overcoming barriers, however, only if the financial incentive is sufficient.

For this reason, the partners will work with Forterra and Terra Valuations to develop an effective streamlined valuation process in cooperation with Ecology. We are committed to helping make this opportunity a successful and effective tool in natural resource protection.

POTENTIAL OPPORTUNITIES AND CHALLENGES

We have considered social, economic and technical risks in designing our overall effort. NEP funding is a critical component but is alone insufficient. The partnership assembled for this grant is working on additional efforts to better enable ecosystem recovery. We are starting from a strong planning basis, and current work in salmon recovery and water resource management has identified a large number of early targets, some of which may have willing landowners. The NEP program will be applied where easement acquisition is the best tool for achieving conservation outcomes.

We have been anticipating the following significant risks to our success:

Landowners do not trust that government agents will be fair in administering an interest in their land.

The Conservation District is the best candidate for community engagement in rural and agricultural areas. The District is exceptionally positioned to integrate salmon recovery funding, Farm Bill programs, and water resource management resources into parcel by parcel implementation.

Fair market value is insufficient compensation to motivate participation in conservation.

This project will explore options for easement valuation with the goal of incentivizing landowners to participate in larger riparian buffers. Easement payments will be developed and presented as part of a packaged conservation product that meets the interests of individual landowners. If outreach efforts do not yield landowners interested in easements, other programs may be able to achieve beneficial outcomes.

Intervention strategies target the wrong actions

Tracking effectiveness of conservation measures is necessary for course correction, and also has community engagement value. However, our most urgent challenge is to improve the efficiency and pace of interventions that we know improve stream conditions.

NOAA is completing some initial investigation of how to better integrate existing monitoring efforts into a set of observations that allows us to detect changes in stream health. The County, State Health, State Ecology, State Fish and Wildlife, and a variety of permit conditions each require monitoring of aquatic ecosystems. As these discussions develop, we may identify a role for modest NEP funding that leverages improved watershed monitoring capabilities.

Degradation from economic activity outpaces restoration and protection efforts

A more spatially explicit analysis of riparian zone management using land cover data provides an initial snapshot of riparian condition, and a definition of a specific footprint wherein riparian zone management needs to occur. By describing that landscape in terms of a complete drainage network we develop a more accurate description of the riparian landscape.

Budget Narrative – 10pt (4000)

See attached detailed budget. Overhead is calculated at 25% of Snohomish Conservation District salary and benefits only.

This budget was developed in consultation with project partners. We feel this is a competitive budget given the proposed scope and the end product of two Riparian Stewardship Plans, a proposed easement valuation approach, and initial outreach work. If savings are realized throughout this phase, it is our hope to roll over any remaining funds to the implementation phase.

Snohomish Conservation District has completed riparian prioritization work similar to this in other basins as well as extensive outreach efforts over the past 75 years. The budget estimates are based on costs experienced for past projects.

Forterra developed costs for the easement valuation task through discussions with Terra Valuations, using past prioritization and GIS work as a guide.

Match is provided through staff time from NOAA and Snohomish County.