WASHINGTON STATE DEPARTMENT OF ECOLOGY

Application for a 2015-2017 Floodplains by Design Project Grant

Submitted applications will be rated to create a ranked list in support of Ecology's FY 2015-2017 Floodplains by Design budget request.

Applications must be submitted electronically via email to Ecology by 5:00 pm, **September 8**, 2014. Send applications to:
Adam Sant at Adam.Sant@ecy.wa.gov
With the Subject line: **2015-2017 Floodplains by Design Project Grant Application**
You will receive confirmation that your application has been received by close of business on September 15.
Applicants must use this form as provided. No alterations will be accepted.

Project Title Lower Dungeness River Floodplain Restoration

Organization/Jurisdiction Name Clallam County
Contact Name Cathy Lear, Habitat Biologist
Address 223 East 4th Street, Suite 5
City, State, Zip Code Port Angeles, WA 98362

Phone 360.417.2361
Email clear@co.clallam.wa.us

Legislative District(s) 24
County Clallam
WRIA(s) 18, Elwha-Dungeness
Congressional District(s) 6
Specific Project Location
Section 36, 44 Township 31 Range 04 River Mile 1.0 – 1.8
Latitude 48N Longitude 123W
Major Watershed Project is in **Dungeness**

Full project (or phase proposed herein) should be completed in 3-4 years.
Project Narrative and Budget are limited to 20 pages.

Scope of Work, Schedule, Maps and Photos can be in addition to those 20 pages.

1. **Short Description of Project (500 words or less)**
   Please describe the overall goals for this floodplain area that is the focus of your proposal. Include in the description all major components of the project or activity such as breaching a levee, constructing a new levee, restoring a specific number of acres of floodplain, wetland creation or fill, restoration planting, project design planning, public process, or any other appropriate major component. Please indicate if funding is being requested for a phase of a larger multi-year project.

   Clallam County is requesting $9,501,600 to reconnect the lower Dungeness River with its floodplain; reduce flood risk; and improve habitat conditions by setting back the east bank levee of the river from RM 0.9 to 1.7. Specifically, the County and its partners will construct a setback levee, deconstruct the existing levee, reconfigure Towne Road, and build habitat features to reconnect the floodplain for a portion of the levee known as the Middle Corps Planning Unit. The total construction cost is estimated at $11,877,000. Design for the levee setback and floodplain reconnection was funded by the State Legislature through Floodplains by Design. Setback and final reconnection design will be conducted in 2014 – 2015.

   This large-scale ecosystem restoration reconnects 0.8 miles of mainstem channel with 112 acres of its floodplain on the east bank. The expanded floodplain and reconnected habitat will reduce flood risk, improve river sinuosity, reduce peak water velocities, and increase the volume of woody debris recruitment. Pools, riffles, boulders, logjams, side channels, wetlands and other features will be reconnected with the floodplain and the river. Much of the 112-acre project site has been reforested.

   Setting back the levee and reconnecting the river to 112 acres of its floodplain improves river processes and reduces flood risk by:
   • Reducing the current risk of floodwaters overtopping and potentially breaching the levee. Recent (August 2014) hydraulic modeling by the Army Corps of Engineers indicates that the existing levee will overtop at a 100-year event, sending floodwaters into the community of Dungeness.
   • Reducing harmfully high river flow velocities that degrade fish habitat and damage infrastructure.
   • Providing floodplain storage for river-borne sediment. With the loss of Dungeness River floodplains, Dungeness Bay has received fine sediment that would otherwise be retained in the riverine ecosystem. This has contributed to the in-filling of Dungeness Bay.
   • Providing a channel migration zone for the development of meanders and high quality fish habitat.
   • Providing critical floodplain, wetland, and productive side channel habitat for salmon spawning and rearing for ESA-listed Puget Sound Chinook and other salmon species.

   The Design Phase provides construction plans for the setback of the levee which is owned by the Army Corps of Engineers and managed by Clallam County. Permitting will be completed for the setback, for any associated side channel design, and restoration work included with project design.

On the phased project illustration, the area is identified as the Middle Reach. Setting back the levee is the final phase in the Middle Reach.

The setback levee construction project builds on existing setback planning efforts and studies that have occurred over the past decade, including acquisition/decommission and revegetation accomplishments in the lower river corridor. Land has been purchased by Clallam County, WDFW, and WSDOT in the project area to enable setback levee construction.

2. Flood hazard / risk reduction (*60 points*)

Describe your project and how it will reduce the magnitude or frequency of flood damages to people, structures or infrastructure. Projects will be evaluated on the significance of the flood hazard and the ability of the solution to address the hazard. Evidence of flood hazard reduction can be demonstrated via flood storage added (acre-feet), flood stage reduction [reduced BFE (base flood elevation)], conveyance increased (cubic ft/sec), sediment storage added or inputs reduced, number or value of structures and/or development rights removed from hazard area (# or areal extent), critical facilities removed from high hazard area, transportation and infrastructure facilities removed from high hazard areas, and other project-specific goals. Describe both upstream and downstream effects of your project.

Answer question 2 here:

Clallam County and its partners will construct a setback levee, deconstruct the existing levee, reconfigure Towne Road (a County road), and build habitat features to reconnect the floodplain for a portion of the levee known as the Middle Corps Planning Unit. The risk of levee overtop and erosion will be greatly reduced, and the river will be reconnected to 112 acres of its floodplain.

Flooding in the lower Dungeness has been a community concern since at least the 1940's. To address the flood threat, in 1963 the Army Corps of Engineers constructed the levee on the Dungeness River's east bank from the mouth to river mile 2.6. The levee increased flooding on the west side of the river. In response, a private levee was built in that location (from river mile 1.5 to 2.6). These two levees have substantially altered the channel and floodplain conditions of the lower Dungeness River. As physical processes have adapted to the levees, flood risk has increased (*Numerical Modeling Study of Levee Setback Alternatives for Lower Dungeness River*, 2007). In-river and floodplain habitat quality and quantity have decreased.

At this time, the main channel is disconnected from side channels and unable to develop meanders. Flood flow velocities are increased and associated bed scour is increased. Coarse sediments are distributed on the channel bed and fine sediments carried to Dungeness Bay, impairing water quality. Further, the levee precludes the ability of high flows to access the historic floodplain to reduce stream energy and to store sediment. Cross sections have revealed aggradation up to eight feet in places (*Physical Processes, Human Impacts and Restoration Issues of the Lower Dungeness River*, BOR, 2002).

As the levee constricts the river (particular constriction points on the Dungeness River include: RM 0.88, 1.20, 1.65 and 1.99), it creates backwater conditions and, in turn, forces water depths to increase. Flow velocity and ability to carry sediment decrease in the backwater area. In this reach, it is important to note that the channel bottom has aggraded so severely that it perches above the surrounding landscape, in essence flowing at an elevation that is higher than the surrounding landscape (BOR, 2002 and 2007). Issues associated with channel aggradation and strategies for resolving the issues are addressed in a lower river channel and side

channel design (*Dungeness River Channel Design Project*, Cardno Entrix, 2013) which would be funded and constructed as part of this project.

Climate change planning conducted by the Jamestown S'Klallam Tribe has identified key vulnerabilities in the Dungeness River. The projected increases in winter flows may increase dramatically the risk of dike failure and risks to the communities downstream, while anticipated decreases in summer streamflow could negatively affect salmon habitat (*Climate Vulnerability Assessment Adaptation Plan*, 2013). The upper watershed will also likely be affected by increased wildfire risk and changes in sediment delivery in response to increasing temperatures and heavy rainfall events – both could affect flood risk and water quality in the lower Dungeness basin and estuary. Clallam County and its partners expect to work with NOAA and the Climate Impacts Group to quantify and evaluate climate change impacts in the project area, and how these may affect project design and implementation.

Reconnecting the river to 112 acres of its floodplain and providing area to reduce flow velocity and store water and sediment will help to offset future flood effects. Within the project area, four dwellings, two barns, two businesses, and several outbuildings were already purchased and decommissioned in preparation for the levee setback. Previous analysis indicated that these structures would be at risk of flooding should the current levee overtop (*Numerical Modeling Study of Levee Setback Alternatives, BOR, 2007*).
Specifically, this project will further reduce the magnitude or frequency of flood damages to the local Dungeness community -which includes small businesses, residences, and agricultural land - by:

- Adding/reconnecting 112 acres of floodplain storage for sediment and floodwaters.
- Adding 1,070 linear feet of high-flow return channel.
- Adding/reconnecting 1,100 linear feet of relic, currently disconnected side channel habitat.

3. Floodplain ecosystem protection or restoration element (*60 points*)

Describe the ecological benefit of the project, its significance, and the ability of the solution to address the overall need in the project area or watershed. Examples include, but are not limited to, reconnecting floodplains, salmon recovery actions, habitat restoration, Channel Migration Zone protections, etc. Evidence of ecosystem benefits include floodplain (including estuary) habitat type (e.g., wetland, side channel, forest) and area restored (# acres), floodplain area protected from bank armoring (# of acres), floodplain area protected from development or other land use change (# acres), hardened bank removal or levee/riprap removal (linear feet), levee setbacks constructed (linear feet, # acres), new side channels or reconnection of old side channels (linear feet or storage volume), salmon species benefitted (# of listed, non-listed species). Secondary evidence includes culvert replaced to restore fish passage or increase conveyance, logjam and or wood structures installed, riparian area planted, and other project-specific goals.

Answer question 3 here:

Currently, degraded conditions and the disconnected floodplain impact all Dungeness River salmon and char. In particular, mainstem spawning ESA-listed Chinook, Puget Sound steelhead, and Eastern Strait of Juan de Fuca/Hood Canal summer chum, as well as pink salmon, are impacted by the bed scour and aggradations (JSKT map of Chinook redds on the Dungeness River from 2002-2012; *WRIA 18 Limiting Factors Analysis*, 1999). Scour chain studies, hydraulic redd sampling, and Chinook productivity data all indicate that salmon redd survival is very low in this reach.

Degraded habitat conditions in this reach also adversely affect ESA-listed Coastal-Puget Sound bull trout as well as coho, fall chum, and cutthroat trout.

Setting back the east side levee of the Dungeness River has been recommended in numerous plans and studies since 1998 and is a major priority in the Dungeness Chapter of the Puget Sound Chinook Recovery Plan. Puget Sound Chinook cannot be delisted without recovery of the Dungeness Chinook population.

Much of the project area has been reforested. Once implemented, this project will provide the following additional ecological benefits to the Dungeness River watershed by reconnecting and restoring:

- **112 acres of its floodplain**
- **1,100 linear feet of relic, currently disconnected side channel habitat**
- **23 acres of existing but currently disconnected wetlands.**

Specific habitat features will be added to the project area, including

- **1,070 linear feet of high-flow return channel, and**
- **15 engineered log jams.**

4. Is your project in a Puget Sound Partnership Priority Floodplain? *(5 points*)

(Deschutes, Dungeness, Duwamish/Green, Elwha, Hood Canal, Lake Washington, Lower Skagit, Nisqually, Nooksack, Puyallup, Sauk, Skokomish, Skykomish, Snohomish, Snoqualmie, Stillaguamish, Upper Skagit)

Answer question 4 here: Yes X No Dungeness

5. Other benefits (*40 points*)

Describe how your project maintains or improves agricultural viability, water quality, public open space/recreation access, economic development, or other important local benefits or values, and does not conflict with other objectives of this program. Projects receive points based on the importance of the result produced, the ability of the solution to address the overall stakeholder need and the long-term improvement.

a. Agricultural viability (evidence of agricultural benefits include reductions in flooding (acres), protection from development (acres), improvement of drainage infrastructure (acres), or other capital or non-capital benefits to agricultural productivity).
b. Water quality improvement [e.g., through stormwater infrastructure upgrades, treatment of a TMDL or 303(d) issue, reduction in sediment, restoration of wetlands or riparian areas, implementation of related best management practices, etc.].
c. Public access and recreation (e.g., through land acquisition, the development of trails or other recreational infrastructure, etc.)
d. Other floodplain values or services of local importance.

Answer question 5 here:

a. Earlier phases of the project protected agricultural land and their economic values. In the greater Lower Dungeness project area, 240 acres of agricultural land are protected by agricultural conservation easement. One hundred twenty-three of those acres are located immediately to the south of the levee setback area. Please see "Lower Dungeness Restoration 2014" aerial photo/map for an illustration of protected lands.

b. The 112 acres of newly reconnected floodplain habitat will reduce flood velocities, provide sediment storage and improve water quality in both the Dungeness River and Dungeness Bay. Currently Dungeness Bay is on the Department of Ecology's 303(d) list for impaired water quality, which has limited shellfish harvest.

c. The existing levee draws neighboring residents for recreational opportunities such as walking, running, and bird watching. The new setback levee will continue to offer these opportunities.

d. Fish, shellfish, and wildlife habitat conditions will improve in the project area and downstream. Improved habitat conditions will increase the likelihood that the Jamestown S'Klallam Tribe will again be able to exercise its treaty-protected rights to harvest fish and shellfish in the lower Dungeness River and Dungeness Bay.

6. Cost-effectiveness (*20 points*)

a. Project will be judged on whether the budget is appropriate to the project scope, and designed for project success.
b. Describe how the project will be continued or maintained after the grant has been completed.
c. If project cannot be fully funded, explain how the project could be scaled downward.

Answer question 6 here:

a. The budget was developed through consultation with the Army Corps of Engineers, Clallam County Department of Public Works, the Levee Setback Technical Group, and the North Olympic Lead Entity for Salmon. All entities have extensive experience in developing, designing, and/or implementing construction projects.

b. The young floodplain forest will require stewardship until it is able to outgrow other vegetation. A vegetation management plan will be developed and implemented to control invasive vegetation and steward the growing floodplain forest. The Army Corps and Clallam County will update the existing levee maintenance agreement to meet the maintenance needs of the new setback levee.

c. Full funding is required to properly to set back the levee and reconnect the river to the floodplain.

7. Long-term cost avoidance: (*30 points*)

a. Describe how your project minimizes or eliminates future costs for maintenance, operation, or emergency response. **(*15 points*)**

Answer 7.a. here:

A timely setback of the levee will avoid the need for emergency repairs in the aging, existing levee. The setback will also reduce flood risk and prevent possible tragedy due to a levee failure. Reconnecting the river with 112 acres of its floodplain will mitigate flood risk in the project area. Water quality in the river and the estuary will improve, benefitting shellfish closure areas in Dungeness Bay.

b. Describe how your project accounts for expected future changes to hydrology, sediment regimes, or water supply resulting from other floodplain management efforts, land use changes, extreme weather events, or other causes. **(*15 points*)**

Answer 7.b. here:

Setting back the levee and reconnecting the floodplain will restore ecosystem processes. It will provide a level of ecosystem health and resiliency that the project area currently lacks. Adding habitat complexity and riparian shading, reconnecting side channels and encouraging meander formation, and channel roughness are a few of the project features that will improve current conditions. They will also provide a margin of safety as the watershed evolves to meet changing conditions resulting from both development pressures and predicted hydrologic alterations resulting from climate change.

8. Demonstration of need and support (*30 points*)

a. Describe how your project is consistent with the intent of existing floodplain management or habitat recovery plans or is specifically identified through existing plans or work programs. (Elements of the project may have been developed through more than one planning process. Please identify the planning process used for each major element if they are not from a common plan.) ***(15 points*)**

Answer question 8.a. here:

The *Dungeness River Comprehensive Flood Hazard Management Plan* (Clallam County, 2009) identifies the current levee as a flood risk. Restoration of the Lower Dungeness River is a priority in the *Puget Sound Salmon Recovery Plan* (NOAA, 2007), has been ranked as the number one priority by the Dungeness River Management Team, and is a high priority (# 2 of 70) on the North Olympic Peninsula Lead Entity for Salmon's 2014 *Three Year Work Plan.*

This project will also significantly advance the implementation of one of our local Near Term Actions (NTA) specifically cited within the 2014-2015 Puget Sound Action Agenda, namely "*A6.1 STRT #7, Implement Dungeness River Floodplain Restoration Projects*". Implementation of projects on 3-Year Work Plans and cited as NTAs, like this one, will help achieve one of the Action Agenda's Strategic Initiatives, namely "Protect and Restore Habitat". The Action Agenda's Sub-Strategy A6.1, namely, *Implement high priority projects identified in each salmon recovery watershed's 3-year work plan*, is currently proposed to continue to be a part of this Strategic Initiative.

Implementation of this project will help achieve the Puget Sound Ecosystem Recovery Target for Floodplains (*i.e.*, 15 percent of degraded floodplain areas are restored or floodplain projects to achieve that outcome are underway across Puget Sound") by restoring 112 acres of floodplain, including historic side channels, within the Dungeness River watershed. This project will also help support achievement of the Chinook Target for Puget Sound (*i.e.*, "stop the overall decline and start seeing improvements in wild Chinook abundance in two to four populations in each biogeographic regions"). Dungeness Chinook are one of two populations within the Strait of Juan de Fuca biogeographic region in need of recovery.

Restoring the floodplain within this reach is essential to increase the quantity of spawning, rearing and transitional habitat in the Dungeness River (*Puget Sound*

***Chinook Salmon Recovery Plan*, 2007), and has been identified as a crucial component of successful salmon recovery by multiple technical studies (*Summer Chum Salmon Initiative*, 2000; *Physical Processes, Human Impacts and Restoration Issues of the Lower Dungeness River*, 2002; *Recommended Restoration Projects for the Dungeness River*, 1997; *WRIA 18 Limiting Factors Analysis*, 1999).**

b. Describe which flood control authorities, Tribal Nations, local governments, lead entities, key stakeholders or decision-makers representing floodplain interests located within the river reach or affected by the project have provided letters of support explicitly endorsing the project and its outcomes for their interests. **(*15 points*)**

Answer question 8.b. here:

Jamestown S'Klallam Tribe; North Olympic Lead Entity for Salmon, Strait Ecosystem Recovery Network; North Olympic Land Trust; Washington Department of Transportation; Dungeness Farms; US Fish & Wildlife Service; Clallam County; Washington Department of Fish & Wildlife. Other entities may also provide letters of support.

9. Readiness to proceed and complete the proposed phase of the project (*25 points)*

Describe how your project is ready to proceed with the scope of work, and your capacity to complete the project successfully and maintain it over time, including your project schedule and deliverables. Describe your experience with similar projects. If your project is acquisition only, describe how you will complete floodplain restoration subsequent to the acquisition.

Answer question 9 here:

Floodplain habitat features are designed and vetted. Levee design and permitting are scheduled to be completed in 2015, through Floodplains by Design funds. The design phase begins upon the public release of the Army Corps feasibility study on September 30, 2014. Design and construction sequence fit well, with design to proceed in 2015 and construction to occur in 2016.

<u>Project schedule:</u>

<u>Year 1</u>- Prepare contract documents – 3-4 months; Go to bid – 30-60 days; Award process – 30-45 days

<u>Year 1</u> - Construction: Season 1 – Grubbing/clearing; construct setback levee; deconstruct existing levee; re-meander existing side channels; plant where appropriate; forest stewardship on existing floodplain forest

<u>Year 2</u>- Construction: Season 2 – Build log jams; continue planting and forest stewardship

<u>Capacity of the sponsor organization:</u> Clallam County has decades of experience successfully managing design, restoration and award-winning construction projects and has participated successfully in broadly collaborative, multi-million dollar, large-scale restoration projects such as the Jimmycomelately Estuary restoration on the county's east side. As far back as the 1990's, Clallam County and local, tribal, state, and federal partners have worked together on restoration efforts.

At a minimum, a qualified engineer/construction manager and a habitat biologist will lead a highly experienced technical team, which will provide on-site management.

Lower Dungeness Floodplain Restoration - two decades of stakeholder-driven work.

- **1990's**
  - **Years of stakeholder and community planning begin**
  - **Key properties are identified for acquisition**
- **Late 1990's**
  - **Key property acquisitions begin**
- **2000's**
  - **Property acquisitions continue**
  - **Infrastructure is removed from the floodplain**
  - **Riparian forest is planted and maintained annually**
  - **Numerous field studies are completed to inform design, project phasing, and acquisition needs. Including flood modeling by the US BOR 2002.**
  - **Extensive planning effort is completed**
- **Last several years**
  - **60% design floodplain habitat features is completed and vetted through stakeholders group.**
  - **Additional floodplain purchases and restored.**
  - **The entire Lower Dungeness River Middle Corps Planning Unit is purchased, deconstruction and decommissioning of structures, wells, and septic systems is complete. The entire project area is replanted with over 4000 native trees and shrubs. Floodplain forests in much of the project area are firmly established.**
  - **ACOE undertakes preliminary design and modeling work to inform feasibility study.**
  - **Funding for 100% design is in hand**
- **Next few months**
  - **ACOE delivers final feasibility and preliminary design products**
  - **Contracting for the final design will commence**
- **Within the next year to 18 months**
  - **The project expects to have completed 100 percent design and be ready to start the construction and bidding process**

The stakeholders and the community have worked for years to restore this area of the Lower Dungeness. Incredible amounts of time, funding, and public, tribal, and private resources are invested to bring this project to the point where construction could begin in the 2015-2017 biennium.

In the lower Dungeness, restoring floodplain and reconnecting it to the river has been a publicly-acknowledged priority since the late 1990's. Extensive multi-partner efforts have resulted in successful large-scale projects both in the current project location and immediately downstream. Many funding sources, including SRFB and PSAR, have contributed to the successful restoration of more than 50 acres downstream of the current project area, and in the 112 acres of the levee setback location. Funds are secured to proceed with design of the setback levee.
The sole remaining piece of this large-scale, phased restoration is funding to construct the new levee, deconstruct the existing levee, and reconnect the habitat elements. Without construction funding in place by the summer of 2015, important construction windows will be missed and two decades of project momentum will be in jeopardy. Construction funding is the last component needed to see this portion of the project through to completion.

10. Pilot project and leverage opportunities *(25 points)*

a. If applicable, describe how your project could serve as a pilot effort or result in changes or results with broader impacts to the state. ***(10 points)***

Answer question 10.a. here:

Elements of this project can easily be used as a template by other entities to design and implement a similar floodplain restoration and flood risk reduction project. The community outreach, technical study, and implementation phases are transferable to other watersheds. Collaboration with multiple partners, including the Army Corps of Engineers, can also be a model for floodplain work across the state.

b. If applicable, describe how your project leverages existing investments, such as SRFB, FCZDs, Dike Districts, TMDLs, WWRP, ESRP, NEP, and other funding sources. Evidence of this will be based on the amount and diversity of the leveraged funding sources. ***(10 points)***

Answer question 10.b. here:

This project builds on existing relationships with multiple partners, earlier phases of acquisition and protection (noted above in Item 9), and currently funded phases of restoration. Partners include but are not limited to: area citizens and landowners, Jamestown S'Klallam Tribe, Clallam Conservation District, North Olympic Salmon Coalition, North Olympic Land Trust, North Olympic Lead Entity for Salmon, U.S. Fish & Wildlife Service, WA Department of Fish & Wildlife, Department of Ecology, and the Army Corps of Engineers. Currently funded phases include wetland restoration by the Washington Department of Transportation, setback levee design through Floodplains by Design, and acquisition, decommission and restoration through Puget Sound Acquisition and Restoration, U.S. Fish and Wildlife and the Salmon Recovery Funding Board.

c. If applicable, describe how your project addresses inequity or social justice issue by benefitting underserved communities. ***(5 points)***

Answer question 10.c. here:

Flood risk reduction will benefit area residents, both in the project area and downstream. Recreation opportunities are open to all members of the community, free of charge.

11. Budget (add more tasks as needed).

Task	Amount Requested from Ecology*	Other Funding for Project** (20% of Total Cost Minimum)	Total Cost
Task 1—Administration – includes A&E	$ 1,850,000	$ 370,000	$ 2,220,000
Task 2 Levee setback	$ 7,800,000	$ 1,560,000	$ 9,360,000
Task 3 Habitat construction	$ 1,200,000	$ 240,000	$ 1,440,000
Task 4 Planting /riparian stewardship	$ 250,000	$ 50,000	$ 300,000
Tax (Tasks 2-4 only)	$ 777,000	$ 155,400	$ 932,400
Total	$ 9,501,600	$ 2,375,400	$ 11,877,000

*Amount requested from Ecology under this grant program

**Other sources of funding dedicated to this project. Insert narrative below that details what the source of funding is and whether or not it has been received or applied for but not yet received. Match must be at least 20% of Total Project cost.

Narrative and/or Table of other funding sources for project, here:

Army Corps of Engineers will provide match. Additional match may be available from PSAR funds; however, those results are not known and it feels prudent to be conservative in listing match.

If it's not possible to fully fund this proposal, please describe a *phased* approach that would still significantly advance the effort:

Full funding is needed to set back the levee and reconnect the river to the floodplain.

12. SCOPE OF WORK: Please attach a Scope of Work and schedule. If your proposal is a phase of a larger multi-year project, please place this proposal in the context of the overall project and provide preliminary cost projects to complete the project.

A detailed scope of work and schedule will be derived from the project design, which will be ready in 2015. Construction engineers have provided a general scope of work and schedule:

Prepare contract documents – 3-4 months

Go to bid – 30 - 60 days

Award process – 30 - 45 days

Construction: Season 1 – Grubbing/clearing; construct setback levee; deconstruct existing levee; remeander existing side channels; plant where appropriate

Construction: Season 2 – Build logjams; continue planting and forest stewardship

13. Maps: Please attach at least two (2) maps to your application. The first map should be a vicinity map and the second should be a map of your project.

14. Planting Maintenance/Survival: If your project includes plantings, please provide a description of how you will ensure plant survival and maintenance.
The young floodplain forest will require stewardship until it is able to outgrow other vegetation. A vegetation management plan will be developed and implemented to control invasive vegetation and steward the growing floodplain forest. At this time, the young forest is monitored and maintained by a vegetation management crew and volunteers. We expect this effort to continue into the future.

15. Photos: Photos are not required, but if you think they enhance our understanding of your application, please include them. We are particularly interested in *"before"* photos that can be matched with *"after"* photos.

16. Executive order 05-05, Archaeological and Cultural Resources (online at http://www.governor.wa.gov/office/execorders/eoarchive/eo_05-05.pdf) directs state agencies to review all capital construction projects for potential impacts to cultural resources to make sure that reasonable action is taken to avoid adverse impacts to these resources. If this grant program is funded by the 2015 Legislature, successful grant applicants will be required to submit additional information to Ecology to comply with this Executive Order.

Additional factors in ranking and award: This is a very new funding source. To ensure that projects meet the objectives of the program, these additional factors will be considered in creating the proposed funding list:

- **Balance of project types:** Balance funding ready-to-proceed construction projects with funding pre-construction activities. This balance in project types is vital to ensuring success over time.
- **Geography:** There is strong interest in ensuring that projects in all areas of the state receive funding.
- **Advancing multi-benefit floodplain management:** It is important that the project list advance the principles and practical application of multi-benefit floodplain management.

Certification

I certify to the best of my knowledge that the information provided above is true and correct and that I am legally authorized to sign and submit this information on behalf of the organization applying for this grant.

Cathy Lear

9-3-2014

Signature Date

Cathy Lear, Habitat Biologist

Printed name and Title

Clallam County

Name of Organization Applying for Grant