# Aquatic Species Restoration Plan

# Project Implementation Cover Sheet

## Project Contact Information

Sponsor Name: Click or tap here to enter text.

Contact Person: Click or tap here to enter text.

Email: Click or tap here to enter text.

Phone Number: Click or tap here to enter text.

Mailing Address: Click or tap here to enter text.

## Project Information

Project Address (main access): Click or tap here to enter text.

Project Parcels: Click or tap here to enter text.

Project GPS Coordinates (main access location): Click or tap here to enter text.

Have participating landowners signed a landowner acknowledgement form? Yes  No

Priority Geospatial Unit: Click or tap here to enter text.

Other Geospatial Unit: Click or tap here to enter text.

If your project is not located within an Aquatic Species Restoration Plan (ASRP) priority geospatial unit (GSU), please provide a description of how your project will directly benefit an ASRP priority GSU or ASRP focal species.

Click or tap here to enter text.

# Initial Site Assessment Template

## Project Overview

Which priority GSU is this project in? Click or tap here to enter text.

Which top three limiting factors are prioritized in this GSU? Click or tap here to enter text.

What restoration/protection actions are emphasized for this GSU? Click or tap here to enter text.

How do the actions you propose specifically address the limiting factor(s) identified above? How effective are those actions likely to be in addressing the limiting factors (local scale vs. GSU scale)? Click or tap here to enter text.

Is (are) the landowner(s) interested and willing to participate? Yes  No

Is (are) the landowner(s) interested in an acquisition or easement? Yes  No

## Background Information

*Using available GIS and published data (example data source links provided for each subsection), provide brief information to address each of the following major ecosystem topics. This information is important to help project reviewers and participants understand the key watershed issues and how feasible your project is to address the identified limiting factors and achieve ASRP goals.*

### Sub-Basin Overview

Ecoregion: Click or tap here to enter text.

Dominant land uses (OCB webmaps, aerial, landcover, parcels, zoning):

Click or tap here to enter text.

Known aquatic species presence (ASRP document, Salmonscape, Endangered Species Act map):

Click or tap here to enter text.

Which ASRP focal species will your proposal specifically address (can be more than one species)?

Click or tap here to enter text.

### Hydrology

Describe hydrologic conditions and issues within the GSU and sub-basin. For example, are low flows a concern, or are high flows or scour a concern? *Gage data may be obtained from* [*https://waterdata.usgs.gov/wa/nwis/rt*](https://waterdata.usgs.gov/wa/nwis/rt)*.*

Click or tap here to enter text.

Geology/Soils

Would any special conditions affect opportunities? Yes  No

What is the underlying geology in the GSU that may contribute to special conditions or denote specific sediment or geomorphologic conditions? ([Washington Geologic Information Portal](https://geologyportal.dnr.wa.gov/2d-view#wigm?-13983315,-12956002,5746759,6301386?Surface_Geology,500k_Surface_Geology,Geologic_Units_500K))

Click or tap here to enter text.

What are the primary soils on your project site and would they affect project actions? For example, is erosion a concern and are soils easily erodible? (<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>)

Click or tap here to enter text.

### Floodplains

Is your project site within a mapped floodway or floodplain? *Attach floodplain map or screenshot for your project site (*[*https://msc.fema.gov/portal\home*](https://msc.fema.gov/portal\home)*)*. Yes  No

Are there houses, structures, or infrastructure on or adjacent to your project site that could be affected by or constrain your proposed actions in the floodway or floodplain? Are there opportunities to work with adjacent landowners to reduce constraints? *Provide a brief description.*

Click or tap here to enter text.

### Water Quality

Is your project site in an area listed for impaired water quality? (<https://apps.ecology.wa.gov/waterqualityatlas/wqa/proposedassessment>) Yes  No

Is water temperature or other water quality concerns a limiting factor for aquatic species at your project site? Yes  No

Would actions taken at your project site ameliorate water quality concerns at your project site (local scale) and/or contribute to ameliorating water quality conditions at a larger scale (e.g., at the GSU scale)?

Click or tap here to enter text.

## Site Conditions from Initial Site Assessment

### Geomorphology

Identify geomorphic conditions in your project area (such as past or recent avulsions, bank armor, levees, evidence of bed incision or sediment aggradation, or large wood deposition) and how substantial and/or widespread these conditions are within the reach.

Click or tap here to enter text.

How would your proposed actions restore natural geomorphic processes in the reach, and what constraints might affect their effectiveness (e.g., existing levees or bank armoring that is protecting structures or infrastructure; ongoing land uses)? *Attach photographs.*

Click or tap here to enter text.

### Habitat Conditions

#### Aquatic

Describe the general stream habitat characteristics of your project reach (e.g., pools, riffles, glides, side-channels, oxbows, or presence of large wood). Describe how your actions would increase habitat quantity and quality within the project reach.

Click or tap here to enter text.

#### Riparian

Describe the riparian conditions of your project reach (e.g., generally forested with deciduous trees such as alder and big-leaf maple ranging from 12 to 24 inches in diameter). Describe how your actions would increase riparian quantity and quality and contribute to riparian processes.

Click or tap here to enter text.

#### Barriers

Are there fish passage barriers within your project reach? If so, explain. Describe if your actions would address fish passage barriers within the project reach. Yes  No

Click or tap here to enter text.

## Opportunities/Concept Plan

Describe proposed restoration actions with a narrative on which actions are most important and why. *Attach an aerial map with parcels and project area outlined with concept features (can be circles with callouts indicating project features).*

Click or tap here to enter text.

## Which ASRP Goals Does Your Project Address?

Protect and restore natural habitat-forming processes within the Chehalis Basin watershed context.

* Protect and restore natural riverine processes including channel migration, sediment and wood transport, and floodplain connectivity.
* Protect and restore riparian processes and functions including cover, shade, inputs of large wood, leaf litter and insect inputs to the aquatic food web, sediment and erosion functions, nutrient and pollutant trapping and filtering, and floodplain processes.

Increase the quality and quantity of habitats for aquatic species in priority areas within the Chehalis Basin.

* Significantly increase quality of and access to instream habitat for aquatic species (including habitat needs for migration, reproduction, rearing/feeding, and overwintering habitats).
* Protect and enhance existing functioning core habitats for species across their life history trajectories.
* Increase habitat complexity and diversity.
* Protect and restore native riparian, floodplain, off-channel, and wetland habitats.
* Minimize suitability for invasive species within instream and riparian habitats.

Protect and restore aquatic species viability within and across the Chehalis Basin considering viable species population parameters.

Increase watershed resiliency to climate change by protecting and improving natural water quantity, timing characteristics, and water quality characteristics.

## Budget Narrative

Provide an overall narrative of what you are requesting funding for (e.g., design only, design and construction, construction only) and provide an explanation of how the costs were derived.

Click or tap here to enter text.

## Initial Cost Estimate

Fill in proposed project design and/or construction or acquisition costs. If design is included, please state to what level of design you are proposing (conceptual, preliminary, final) and provide a more detailed explanation of design costs.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ASRP Reach-Scale Project** |  |  |  |  |  |
| **Concept Level Cost Estimate** |  |  |  |  |  |
| **Construction** | **Unit** | **Unit Cost** | **Type** | **Number** | **Subtotal** |
| Engineered Log Jams | Each | Unit Cost | Type | Number | $0 |
| Beaver Dam Analogs | Each | Unit Cost | Type | Number | $0 |
| Large Wood (Single Pieces) | Each | Unit Cost | Type | Number | $0 |
| Riparian Restoration | Acre | Unit Cost | Type | Number | $0 |
| Floodplain Reconnection | Linear Feet | Unit Cost | Type | Number | $0 |
| Oxbow or Side-Channel Reconnection | Linear Feet | Unit Cost | Type | Number | $0 |
| Wetland Restoration | Acre | Unit Cost | Type | Number | $0 |
| Invasive Species Management | Acre | Unit Cost | Type | Number | $0 |
| Other (please explain): Click or tap here to enter text. | Unit | Unit Cost | Type | Number | $0 |
| **Removals or Relocations** | Each | Unit Cost | Type | Number | $0 |
| **Acquisition or Easement** | Acre | Unit Cost | Type | Number | $0 |
| ***Subtotal Construction*** | | | | | $0 |
| **Design1** | Lump Sum | N/A | N/A | N/A | $0 |
| **Permitting2** | Lump Sum | N/A | N/A | N/A | $0 |
| **Management3** | Lump Sum | N/A | N/A | N/A | $0 |
| **Other (please explain):** Click or tap here to enter text. | Unit | Unit Cost | Type | Number | $0 |
| **Contingency4** | Lump Sum | N/A | N/A | N/A | $0 |
| **Tax** | | | | %0 | $0 |
| **Total** | | | | | $0 |
| Notes: |  |  |  |  |  |
| 1. Design is typically 10% to 15% of construction costs (less for planting or invasives treatment projects). | | | | | |
| 2. Permitting is typically 5% to 10% of construction costs (less for planting or invasives treatment projects). | | | | | |
| 3. Management includes sponsor management and construction management and is typically 10% to-15% of construction costs. | | | | | |
| 4. Contingency at the early project stage is typically 25% to 30%. | | | | | |

Attachment A  
Geospatial Unit Table

