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| Correction Analysis Form | | | | | |
| Site Information (measurements in feet) | | | | | |
| Project Name: Island Co. Culvert Prioritization – Area 2 Culvert #1893 | | SRFB Project #: 19-1343 | | Date: 9/24/21 | |
| Bankfull Width (outside influence of culvert): 5.9’ u.s., 8.8’ d.s. | | Utilities Crossing: Yes  No  Unknown | | | |
| Road Fill at Culvert Invert: 8.9’ outlet IE to road surface | | Road Width: 31.5’ shoulder to shoulder | | | |
| Road Description/Condition (mainline, spur road, driveway/access): 2 lane county road | | | | | |
| Evaluator Information | | | | | |
| Evaluator Name: **Tom Slocum, PE** | | Affiliation: **Whidbey Island Conservation District** | | | |
| Mailing Address: **PO Box 490** | | City: **Coupeville** | State: **WA** | | Zip: **98239** |
| Telephone: | FAX: | Cell: 360 899-6041 | E-mail: tom@skagitcd.org | | |
| Upstream Habitat/Channel Description | | | | | |
| Channel Slope (outside of culvert influence): 3.9% | | Re-grade Potential (streambed US – streambed DS in feet): 2.30 | | | |
| Dominant Substrate:  Sand (<1/5”)  Gravel (1/5”–3”)  Cobble (3”-12”)  Boulder (>12”)  Bedrock | | | | | |
| Additional Upstream Information, Habitat Description, Other Site Conditions or Concerns, Including Potential Re-Grade Impacts Relative to Channel Stability And Habitat:  The channel u.s. of the culvert crossing is a straightened, excavated ditch thorugh dense blackberry thicket with no in-channel habitat features for at least 60 feet upstream of the crossing. The channel intersects the road ditch 5’ u.s. of culvert. | | | | | |
| Downstream Habitat/Channel Description | | | | | |
| Channel Slope: 1.5% (outside of culvert influence) | | | | | |
| Additional Downstream Information, Habitat Description, Other Site Conditions or Concerns:  The channel is a straightened ditch for 20 feet d.s. of the culvert crossing, then enters a less-impacted, more natural channel that runs through rose and hawthorne hedges to Race Lagoon. Tidal elevations were not measured. Tne stream is classified as Type F. See the profile drawing. | | | | | |
| Correction Options and Preferred Alternative | | | | | |
| Options to Consider – Provide up to Three Site-Appropriate Correction Alternatives. Option 1: **60’ x 14’ diameter bottomless arch culvert, per Stream Simulation design.**  Option 2: **60’ x 13’ x 7’ high 3-sided concrete box culvert, per Stream Simulation design**  Option 3: **25’ x 26’ prefabricated concrete bridge** | | | | | |
| Preferred Alternative - Provide a 1- or 2-paragraph Recommendation for this Site. Include any Site-Specific Concerns that Will Need to be Addressed During Design and Construction:Option 1 is simplest and cheapest to construct, but depending on tidal elevations, may be susceptible to salt-water corrosion. Tidal elevations need to be determined to verify this. The bridge option likely would be unfavorable to Island Count DPW due to maintenance requirements. All options may require some degree of relocating water and phone utility lines, depending on the locations (be be determined). | | | | | |
| Cost Estimates | | | | | |
| Rough Cost Estimate\* - Attach Detailed Cost Breakdown Using the Appropriate Cost Estimate Template, Provided Separately.  Option 1: $368,200  Option 2: $566,500  Option 3: $484,000  \*This is a rough approximation of project costs; actual costs may vary depending on specifications identified during final design. | | | | | |

# Correction Analysis Form Instructions

This will be completed for projects determined to be of potential high benefit to fish resources based on the information provided in Barrier Evaluation Form and Expanded Barrier Evaluation Form. The completed forms will be used to develop a prioritized list of projects to be presented to SRFB for potential funding.

## Site Information

**Project Name–**This is the landowner’s last name followed by the creek name. If more than one site per landowner is evaluated on the same creek, designate each site with a letter, e.g. Franklin–Boulder Creek A.

**RCO/SRFB Project Number–**This will be provided by PRISM database.

**Bankfull Width–**The stream width measured perpendicular to flow at the stage at which water begins to overflow into the active flood plain. Bankfull width requires a floodplain or a bench not present in many channels. In those cases, use ordinary high water. O ordinary high water is where the regular stream flow makes a line on the bank marking soil or vegetation with a character distinct from that of the abutting upland. Also defined as the lowest point at which perennial vegetation grows on the stream bank. Enter the average of several bankfull width measurements taken up and/or downstream of the culvert, outside the influence of the culvert.

**Utilities Crossing–**Include any water, gas, phone or electrical utilities at the crossing to be affected by project construction.

**Road Fill at Downstream End–**Measure height of material from top of culvert to top of fill at downstream end.

**Road Width–**Measurement should include shoulders.

**Road Description/Condition–**Provide a brief description of the road surface, use, condition, etc.

## Evaluator Information

Provide contact information for the people completing the Correction Analysis Form.

## Upstream Habitat and Channel Description

**Channel Slope–**This is measured outside of the culvert influence.

**Re-grade Potential–**Subtract the downstream streambed elevation from the upstream streambed elevation at the site.

**Dominant Substrate–**Identify the size category most prominent in the substrate.

**Additional Information–**Provide any additional upstream information that may be important to the project.

## Downstream Habitat and Channel Description

**Channel Slope–**This is measured outside of the culvert influence.

**Additional Information–**Provide any additional upstream information that may be important to the project.

## Correction Options and Preferred Alternative

**Options to Consider–**The purpose of this section is to provide the sponsor some guidance on the intended fix. Most small forest landowner projects should be relatively straightforward; however each site is different.

**Preferred Alternative–**Describe the recommended correction and site-specific concerns to be addressed during design and construction.

## Cost Estimates

**Rough cost estimate–**Provide estimated costs for correction options listed above. Costs should be based on cost estimate templates, provided separately, for culverts, bottomless arch culverts, and bridges. Attach the corresponding completed template for each estimate. These represent approximate costs; actual costs may vary depending on specifications identified during final project design.