# Method 7: Habitat Addition and Maintenance

# 7C: *Weirs or Groins*

**Project Title:**

**Project CIP Number:**

*See Section 3 of the SBE, Method 7 for a complete description of the activity and conservation measures for this method. You need this information to fill out this form.*

Weirs or Groins

1. Describe whether weirs that fully span or partially span the width of the waterbody will be installed, the number of each type of weir that will be installed, and the material (e.g., *log, rock*) that will be used to construct the weirs.

| Yes | No | Type of Weir | Number | Type Construction Material |
| --- | --- | --- | --- | --- |
| [ ]  | [ ]  | Partial span weirs |       |       |
| [ ]  | [ ]  | Full span weirs |       |       |
| [ ]  | [ ]  | Other:       |       |       |
| [ ]  | [ ]  | Other:       |       |       |

2. Describe the type of groins that will be installed,(e.g., *log, rock, etc.*) the number of each type that will be installed, and the orientation of the groin relative to stream flow (e.g., *downstream at 15 degree angle from bank*).

| Yes | No | Type of Groin | Number | Orientation |
| --- | --- | --- | --- | --- |
| [ ]  | [ ]  | Log |       |       |
| [ ]  | [ ]  | Rock |       |       |
| [ ]  | [ ]  | Other:       |       |       |
| [ ]  | [ ]  | Other:       |       |       |

3. What is the length of the work along the waterbody?

4. Will design comply with guidance provided for weirs and groins in *WDFW Integrated Stream Protection Guidelines* (2003)? [ ]  Yes [ ]  No

Explain rationale for design selected if WDFW guidelines will not be complied with or provide additional information:

5. Provide additional information (if any) on this construction method:

Conservation Measures

The following table contains the conservation measures identified for Method 7C. The table only provides a brief summary of the conservation measures. Please see Section 4 of the SBE for a complete description of each conservation measure. To get programmatic coverage by the Corps and Services for projects using this method, all conservation measures identified below must be included with the project (see Section 10 of the SBE). If, for some reason, a conservation measure is not applicable, or will not be used, you MUST provide a reason the conservation measure is not applicable or will not be used in the “Provide additional information” section below. Provide any additional conservation measures that may be implemented but are not listed. These may be found in Section 4: Conservation Measures of the SBE or in the City Standard Specifications.

| **Conservation Measures** | **Description** | **Included in****Project?** |
| --- | --- | --- |
| 1 | Approved work windows |  |
| 2 | Onsite Temporary Erosion and Sediment Control Plan |  |
| 3 | Onsite Spill Prevention and Control Plan |  |
| 4 | Maintain a spill kit onsite |  |
| 5 | Confine construction impacts to the minimum area necessary, delineate impacts on project plans and onsite |  |
| 6 | Establish staging and site access areas along existing roadways or other disturbed areas |  |
| 7 | Limit clearing and grubbing areas to minimum required, retain vegetation to maximum extent |  |
| 9 | Implement BMPs to prevent erosion of excavated material |  |
| 10 | Stockpile large wood, vegetation, and soils for establishment of staging area and site restoration |  |
| 11 | Salvage debris to use for habitat or mulch |  |
| 12 | Use sediment barriers to prevent erosion and sediment from entering waterbodies |  |
| 13 | Keep erosion control materials onsite to respond to emergencies |  |
| 14 | Use curb inlet sediment traps and geotextile filters to capture sediment before it leaves the site |  |
| 15 | Clean equipment that will work below the OHW or MHHW lines or in riparian or shoreline areas |  |
| 16 | Fuel equipment in staging areas |  |
| 17 | Onsite oil absorbing floating booms |  |
| 18 | Use vegetable-based hydraulic fluid when equipment operates in sensitive areas |  |
| 19 | Operate machinery from existing roads and paved areas |  |
| 20 | Use temporary materials to stabilize haul and access routes, staging areas, and stockpile areas |  |
| 21 | Stockpile native streambed or substrate material |  |
| 22 | Locate equipment wash areas where washwater, sediment, and pollutants cannot enter waterbodies |  |
| 25 | Minimize stream and riparian crossings |  |
| 26 | Manage stream crossings to minimize erosion |  |
| 27 | Place erosion and water quality control devices prior to beginning of work |  |
| 28 | If mechanized equipment is used within the OHW or MHHW, only an extension arm with bucket or similar attachment shall enter the water. Conduct debris removal and work below OHW or MHHW during low water levels (fresh waters) or at low tide (marine waters) |  |
| 29 | Confine use of equipment operating below OHW or MHHW to designated access corridors |  |
| 30 | Develop a TDP for any dewater lasting more than 1 day |  |
| 57 | Perform all work in the dry when possible |  |
| 58 | Conduct work during minus tides or low water levels |  |
| 59 | Use clean, washed material |  |
| 60 | Slope or fill excavated trenches in open water between tidal cycles |  |
| 61 | Equipment and materials are mobilized to and from the site via upland access or construction barge |  |
| 62 | Do not ground or rest construction barge on substrate or on vegetation |  |
| 63 | Take care to prevent spread of invasive plant species during their removal |  |
| 64 | Plant with native vegetation |  |
| 65 | Retrieve and remove debris that enters waterbody |  |
| 68 | Use habitat mix |  |
| 69 | No wet concrete or epoxy shall come in contact with water |  |
| 75 | Apply pesticides under direct supervision of a licensed applicator |  |
| 76 | Use pesticides only to control weeds listed on King County Noxious Week list |  |
| 77 | Use herbicide products containing glyphosate or other Ecology-approved herbicide |  |

Please provide any additional information on Conservation Measures used or not used for this Method: