<table>
<thead>
<tr>
<th>Project Name</th>
<th>Type</th>
<th>Start Year</th>
<th>Status</th>
<th>End Year</th>
<th>Cost Estimate</th>
<th>Funding (%)</th>
<th>WQ Benfic $</th>
<th>Hydro Benefit $</th>
<th>Retrofit Incentive</th>
<th>Other Benefit</th>
<th>Monitoring</th>
<th>Planned</th>
<th>Lat</th>
<th>Long</th>
<th>Receiving Water Body</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitol Hill Water Quality Project (aka Swale on Yale)</td>
<td>2</td>
<td>2006</td>
<td>4,4,*</td>
<td>2019</td>
<td>12.7 M</td>
<td>82% 8%</td>
<td>97,600 lbs TSS/yr</td>
<td>NA</td>
<td>580</td>
<td>Increased green space</td>
<td>Yes</td>
<td>47.621</td>
<td>-122.331</td>
<td>Lake Union</td>
<td>Biofiltration swales treating 439 ac; 387 ac impervious. Retrofit Incentive = better than existing - in known water quality problem area (150%) X 387 imp ac = 580.5 *Status: Phase 1 &amp; 4 (Diversion, Pretreatment, Conveyance &amp; Utility Relocation): 4 Phase 2 &amp; 3 (Block 10 Swale): 4 Phase 5 &amp; 6 (Block 11 Swale): 2 Local funding includes 1.8M SRF Loan and 1M Stormwater Retrofit &amp; LID grant. Private funding: 10%.</td>
<td></td>
</tr>
<tr>
<td>Venema Natural Drainage System (NDS) Project</td>
<td>2</td>
<td>2005</td>
<td>4</td>
<td>2016</td>
<td>7.65 M</td>
<td>85% 15%</td>
<td>12,000 lbs TSS/yr</td>
<td>92% 2</td>
<td>73</td>
<td>Increased green space</td>
<td>Yes</td>
<td>47.717</td>
<td>-122.361</td>
<td>Piper’s Creek</td>
<td>Bioinfiltration followed by infiltration treating 80 acres total; 42 ac impervious. Retrofit incentive = enhanced treatment (175%) X 42 ac impervious = 73.5</td>
<td></td>
</tr>
<tr>
<td>South Park Water Quality Project</td>
<td>2</td>
<td>2005</td>
<td>2</td>
<td>2025</td>
<td>30 M*</td>
<td>100%</td>
<td>46,000 lbs TSS/yr</td>
<td>NA</td>
<td>213</td>
<td>Protects Duwamish sediments (Superfund site)</td>
<td>Yes</td>
<td>47.535</td>
<td>-122.325</td>
<td>Duwamish Waterway</td>
<td>Active treatment (e.g., chitosan enhanced sand filtration) for 240 total acres of industrial/commercial/HDR; 42 ac impervious. Retrofit incentive = better than existing - in known water quality problem area X 142 ac impervious = 213 * Cost estimate includes pump station and water quality facility.</td>
<td></td>
</tr>
<tr>
<td>Street Sweeping for Water Quality Program</td>
<td>11</td>
<td>2011</td>
<td>4</td>
<td>Ongoing</td>
<td>2.0 M /yr</td>
<td>100%</td>
<td>3,191,000 lbs TS/yr (dry)</td>
<td>NA</td>
<td>350</td>
<td>Improved air quality; clean streets</td>
<td>Yes</td>
<td>City wide</td>
<td>Lake Washington, Lake Union, Ship Canal/ Salmon Bay, Puget Sound, Duwamish Waterway, Longfellow Creek, Piper’s Creek, Thornton Creek</td>
<td>High efficiency sweeping of 1398 acres of arterial roadways. Retrofit incentive = maintenance action (25%) X 1398 ac = 350</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Project Type**

Instructions: Do not alter this table. The type numbers and descriptions are for reference only.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New flow control facility, including Low Impact Development (LID) Best Management Practices (BMPs)</td>
</tr>
<tr>
<td>2</td>
<td>New treatment facility (or treatment and flow control facility), including LID BMPs</td>
</tr>
<tr>
<td>3</td>
<td>Retrofit of existing treatment and/or flow control facility</td>
</tr>
<tr>
<td>4</td>
<td>Property acquisition for water quality and/or flow control benefits (not associated with future facility)</td>
</tr>
<tr>
<td>5</td>
<td>Maintenance with capital construction costs ≥ $25,000</td>
</tr>
<tr>
<td>6</td>
<td>Property acquisition for riparian habitat</td>
</tr>
<tr>
<td>7</td>
<td>Restoration of forest cover</td>
</tr>
<tr>
<td>8</td>
<td>Restoration of riparian buffer</td>
</tr>
<tr>
<td>9</td>
<td>Floodplain reconnection projects on water bodies that are not flow control exempt per Appendix 1</td>
</tr>
<tr>
<td>10</td>
<td>Capital projects related to the MS4 which implement an Ecology approved basin or watershed plan</td>
</tr>
<tr>
<td>11</td>
<td>Other actions to address stormwater runoff into or from the MS4 not otherwise required in §5.C</td>
</tr>
</tbody>
</table>
### Project Status

**Instructions:** Do not alter this table. The status numbers and descriptions are for reference only.

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning</td>
</tr>
<tr>
<td>2</td>
<td>Design and permitting</td>
</tr>
<tr>
<td>3</td>
<td>Construction</td>
</tr>
<tr>
<td>4</td>
<td>Complete/Maintenance</td>
</tr>
<tr>
<td>5</td>
<td>Project cancelled</td>
</tr>
<tr>
<td>6</td>
<td>Property acquisition</td>
</tr>
</tbody>
</table>
Instructions: These descriptions are provided for reference only.

Cost Estimate
Costs must be updated to reflect final costs when Status 4 or 6 is reached

Funding (%)
Estimate the percentage of funds from local, state, and federal sources
## Water Quality Benefit

(Estimated Total Suspended Solids (TSS) or Total Solids (TS) reduction in pounds per year (lbs/yr))

**Instructions:** Use this tool to calculate the TSS or TS load reduction for each project. Enter contributing acreage for each land use category in the blue cells on the left, and the estimated unit area loading rate (from your S.B.D data) in the blue cells on the right. Then enter the removal efficiency in the blue box under Treatment Efficiency. The value to enter into the main table will appear under Estimated TSS Reduction.

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Contributing Acres</th>
<th>Median TSS Unit Area Loading Rate (lbs/ac/yr)*</th>
<th>Treatment Removal Efficiency for TSS (%)</th>
<th>Estimated TSS Reduction (lbs/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-density Residential</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-density Residential</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>0</strong></td>
<td></td>
<td><strong>-</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Insert this number in Worksheet for Water Quality Benefit*

**Notes:**

*Values derived from S.B.D data collected under 2007/12 Phase I Permits

Estimated Total Solids (TS): For maintenance projects involving solids removal, enter the estimated dry weight of TS removed in pounds (lbs) in the Worksheet for Water Quality Benefit.

For 2014, in absence of a Western Washington median TSS unit area loading rate, Permittees should base this on their own S.B.D data.

Ecology may approve other methods for calculating an estimated TSS reduction if the Permittee justifies the method is appropriate for the relevant project type.
Hydro Benefit
Estimated average percent flow reduction

Instructions: Do not alter this table. The hydro benefit numbers and descriptions are for reference only.

Option #  Description
1 Standard Flow Control Requirement: Enter the hydro benefit number in the reporting table under "Hydro Benefit" equal to the project's volume ratio, up to 100%. Refer to Volume Ratio Calculation.
2 LID Performance Standard: Enter the hydro benefit number in the reporting table under "Hydro Benefit" according to the following:
   - 100% if the project meets the LID Performance Standard in Appendix 1, Section 4.5
   - 100% if the project uses Full Dispersion functionally equivalent to BMP T 5.30 in Chapter 5 of Volume V of the Stormwater Management Manual for Western Washington
   - Equal to the project's volume ratio, up to 100%. Refer to Volume Ratio Calculation
Volume Ratio Calculation

Instructions: Use one of the forms below to calculate the volume ratio, then copy and paste the value into the "Hydro Benefit" column of the worksheet. Units do not matter, as long as they are the same for the first and second fields. Use either Option 1 or Option 2.

<table>
<thead>
<tr>
<th>Hydro Benefit Option 1</th>
<th>Volume Required if Project had to Meet Standard Flow Control Requirement</th>
<th>Volume Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Storage Volume</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>Provided</td>
<td></td>
<td>75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hydro Benefit Option 2</th>
<th>Volume Required if Project had to Meet LID Performance Standard</th>
<th>Volume Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Storage Volume</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>Provided</td>
<td></td>
<td>75%</td>
</tr>
</tbody>
</table>

Notes:
To calculate volume required if project had to meet the Standard Flow Control Requirement or the LID Performance Standard, use forested land cover as the pre-developed condition unless one of the following applies:

Reasonable, historic information is available that indicates the site was prairie prior to settlement (modeled as "pasture" in the WWHM).

The drainage area of the immediate stream and all subsequent downstream basins have had at least 40% total impervious area since 1985. In this case the pre-developed condition to be matched shall be the existing land cover condition. Where basin-specific studies determine a stream channel to be unstable, even though the above criterion is met, the pre-developed condition assumption shall be the "historic" land cover condition, or a land cover condition commensurate with achieving a target flow regime identified by an approved basin study.
Retrofit Incentive

Instructions: Determine the appropriate Project Achievement category from the table below based on project type and specifics. Then calculate the incentive using the formula below.

### Retrofit Incentive Table

<table>
<thead>
<tr>
<th>Incentive Points</th>
<th>Applicable Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(include the type of area listed below in the formula below in acres)</td>
</tr>
<tr>
<td>100% Impervious area</td>
<td>Water Quality: Better than Existing</td>
</tr>
<tr>
<td>150% Impervious area</td>
<td>Water Quality: Better than Existing in known water quality problem area</td>
</tr>
<tr>
<td>150% Impervious area</td>
<td>Water Quality: Basic treatment</td>
</tr>
<tr>
<td>175% Impervious area</td>
<td>Water Quality: Enhanced treatment</td>
</tr>
<tr>
<td>200% Impervious area</td>
<td>Water Quality: Meets WQ standards for target pollutant (assumed to be &gt; level of treatment than Enhanced)</td>
</tr>
<tr>
<td>100% Impervious area</td>
<td>Flow Control: Better than Existing</td>
</tr>
<tr>
<td>125% Impervious area</td>
<td>Flow Control: Meets duration standard for Pasture</td>
</tr>
<tr>
<td>150% Impervious area</td>
<td>Flow Control: Meets duration standard for Forest</td>
</tr>
<tr>
<td>150% Impervious area</td>
<td>Flow Control: Protects habitat or prevents erosion and scour in known flow control problem area</td>
</tr>
<tr>
<td>200% Impervious area</td>
<td>Flow Control: Meets LID Performance Standard</td>
</tr>
<tr>
<td>25% Total area served by maintenance activity</td>
<td>Maintenance with capital construction costs ≥ $25,000 or other maintenance actions per §5.C.6.a.ii.(S)</td>
</tr>
<tr>
<td>50% Total area acquired</td>
<td>Riparian Habitat Acquisition</td>
</tr>
<tr>
<td>25% Total area restored</td>
<td>Restoration of Forest Cover</td>
</tr>
<tr>
<td>25% Total area restored</td>
<td>Restoration of Riparian Buffer</td>
</tr>
</tbody>
</table>

### Formula

\[
\text{Retrofit Incentive} = \frac{\text{Incentive Points}}{\text{Applicable area}} \times 0.23 \times 0.345
\]

*Insert this number in Worksheet for Retrofit Incentive*