2009 SURVEY RESULTS ANALYSIS: IMPLEMENTATION OF PROGRAMMATIC & LAND USE ACTIONS

Lake Washington/Cedar/Sammamish Watershed (WRIA 8)

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TABLE OF CONTENTS

Executive Summary

I. Introduction

II. The 2009 Survey Overview

III. Steps in Data Compilation and Analysis

IV. Program Ranking

V. Results Interpretation

VI. Appendices
EXECUTIVE SUMMARY

To assess progress made during 2008 in implementing programmatic recommendations in the Lake Washington/Cedar/Sammamish Watershed Chinook Salmon Conservation Plan, a survey was administered to jurisdictions in the watershed who are parties to the interlocal agreement to implement the Plan (other WRIA 8 partners such as non-profit organizations and state or federal agencies were not surveyed). This report summarizes the results of the survey.

The survey found a high rate of implementation for the following programmatic actions which were ranked as being of high importance by a WRIA 8 staff group:
- Forest Cover/Riparian Buffer Education
- Water Quality Education
- Promoting Stormwater Best Management Practices
- Critical Areas Ordinances
- Shoreline Master Plan Updates
- Tree Protection Regulations
- Stormwater Regulations
- Regulatory Flexibility to Promote Habitat Protection/Restoration

For these actions where there is a high level of implementation and they have been ranked as being of high importance for salmon recovery efforts, WRIA 8 partners should be vigilant to keep the level of implementation high and be looking for ways to measure the effectiveness of our implementation actions.

The following programmatic actions were found to have lower levels of implementation and were ranked as being of high or medium importance to salmon recovery. These Plan recommendations should be discussed by the WRIA 8 Implementation Committee and the WRIA 8 Salmon Recovery Council to identify ways to increase their level of implementation:
- Outreach Regarding the Benefits of Large Wood
- Education Programs for Landscaping Designers/Contractors on Sustainable Design
- Programs to Address Illegal Water Withdrawals
- Incentives to Protect/Restore Ecological Function
- Outreach to Property Owners to Protect Forest Cover/Habitat
- Promotion of Low Impact Development
- Natural Yard Care Program

I. INTRODUCTION
This report provides an overview of the progress made toward implementing programmatic actions recommended in the Lake Washington/Cedar/Sammamish Watershed Chinook Salmon Conservation Plan (the Plan). The Lake Washington/Cedar/Sammamish Watershed, or is also known as the Water Resource Inventory Area (WRIA) 8, and will be referred to as WRIA 8 for the purposes of this analysis. The audience for this report includes: WRIA 8 staff, committee members (e.g., the Implementation Committee, the Technical Committee, and the WRIA 8 Salmon Recovery Council), and other entities involved with the Plan’s implementation efforts.

II. THE 2009 SURVEY OVERVIEW
In assessing implementation, a survey was administered to jurisdictions via an automated web-based format in 2008, and as a text document in 2009. These jurisdictions are those participating in an interlocal agreement with WRIA 8. This document reports the results from the survey administered in 2009, which asked about actions from 2008. Survey respondents include only individuals working on programmatic and land use implementation for jurisdictions in WRIA 8, and not other implementers (such as other local partners, regional and state-level agencies, or non-governmental organizations).
The survey consisted of a combination of multiple-choice, open-ended, and comment questions divided into the categories: ‘Programmatic Activities’ and ‘Land Use Activities. A third category, ‘Monitoring Activities’ was not evaluated in this round of analysis, and is not addressed in this report.

**Programmatic Activities**

For ‘Programmatic Activities’, there were twenty (20) multiple-choice questions and four (4) comment questions subdivided into the following six categories:

- Stormwater-related Programs
- Landscaping Programs
- Lakeshore/Shoreline Programs
- Water Quality-related Programs
- Water Conservation Programs
- Programs related to Forest Cover, large Woody Debris, and Riparian Protection

A sample ‘Programmatic Action’ question is below:

The topics below relate to programmatic activities. Please place an “X” next to the answer that best describes the status of each activity in your jurisdiction, and use the comment boxes to provide detail as appropriate.

- Promote stormwater best management practices
  - Program(s) underway
  - Program(s) proposed for 2009
  - Plan to conduct program(s) in the next three years, but not yet proposed
  - Plan to conduct program(s) in the long term, but not yet proposed
  - N/A

This is how you answered last year:

Program(s) underway

**Land Use Activities**

‘Land Use Activities’ were not sub-categorized, and included: ten (10) multiple-choice questions, two (2) open-ended questions, two (2) follow-up questions, and one comment question. One of the follow-up questions was thrown out: this question required answering ‘no’ to the previous question, to which all respondents answered ‘yes’.

A sample ‘Land Use Action’ question is below:

The following questions address land use activities. Please place an “X” next to the answer that appropriately describes the status of activities in your jurisdiction, and also please use the text boxes to provide additional information to the best of your ability.

- Has your jurisdiction updated its Critical Areas or Sensitive Areas Ordinance since 2003?
  - Yes
  - No

This is how you answered last year:

Yes

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1 The initial question to which all respondents answered ‘yes’ asked: “Does your jurisdiction have existing stormwater regulations or a stormwater management program?” The follow-up question that was thrown-out asked: “If you answered no to the previous question, does your jurisdiction intend to adopt regulations and BMP’s consistent with the NPDES permit requirements by the permit’s deadline?” Questions were not numbered in the survey; otherwise, numbers would have been given in lieu of this written description.
III. STEPS IN DATA COMPILATION AND ANALYSIS

There was a high rate of respondents for the 2009 survey: out of 27 jurisdictions surveyed, 26 responded. Responses were tabulated (visually recorded) in an excel spreadsheet according to how Jurisdictions answered each survey question—tabulation was not machine generated. After tabulating the results, analysis of those results involved many steps:

STEP 1: Calculate totals for each question to reflect the ‘Percent of Jurisdictions’ that responded, by multiple-choice response.

*Percent of Jurisdictions Metric*

Using this metric, each multiple-choice response was calculated according to the number of jurisdictions responding as a percentage of the total jurisdictions that answered the survey. This allowed reporting on a question to resemble the following, for example: *Involving Promotion of Low Impact Development, 76% of Jurisdictions responded that they have “Programs Underway”.*

STEP 2: Calculate totals for each question to reflect each jurisdictions ‘Percent of Population’ and ‘Percent of Land Area’ of WRIA 8’s total population and land area.

Limitations were recognized in this ‘Percent of Jurisdictions’ analysis, which essentially granted each jurisdiction the same value or weight—where the City of Bellevue and Yarrow Point are both considered as having equal importance to salmon recovery efforts. For some programmatic and land use activities, this may be true, but not for all. In some cases, jurisdictions have differing degrees of importance in terms of the magnitude of their impact on salmon recovery efforts—this is in most cases due to the size of population or amount of developed land area for various jurisdictions. Jurisdictions such as King County occupy a greater percentage of the total land area in WRIA 8, while jurisdictions such as the City of Seattle comprise a greater percentage of WRIA 8’s total population.

One example involves Low Impact Development (LID) actions, where it is likely more important for jurisdictions with higher populations that cover a larger land area (e.g., Seattle, Bellevue, and Renton) to implement LID regulations than it would be for smaller jurisdictions that cover a smaller land area. Due to their sheer size in population, these larger jurisdictions will have a greater overall impact on ecological processes vital to salmon health. The introduction of these two additional metrics—the percent land area and population—attempts to more accurately capture the difference in impact among jurisdictions.

*Application of Percent Population & Percent Land Area Metrics*

For both the percent population and percent land area calculations, Jurisdictions were sorted by their multiple-choice response, and paired with their corresponding percent of population/land area total. For each multiple-choice response would result in a grouping of jurisdictions with varying percentage values (representing either population or land area). Each program was analyzed separately for percent population and percent land area (as in, these metrics were not mixed, but used to conduct two separate calculations for each program).

The following is a brief description of the three metrics used:

*Percent of Population Metric*

This metric measured each jurisdiction’s response according to the jurisdiction’s amount of population as a percentage of the total population in WRIA 8.

*Percent of Land Area Metric*
This metric measured each jurisdiction’s response according to the jurisdiction’s amount of land area as a percentage of the total land area in WRIA 8.

**Step 2a:** Calculated totals for each question to reflect the percent of Land Area encompassed by Jurisdictions implementation of programmatic and land use actions.

**Step 2b:** Calculated totals for each question to reflect the percent of Population encompassed by Jurisdictions implementation of programmatic and land use actions.

**STEP 3: Compile results based on additional metrics.**

Data were analyzed according to the introduction of two additional metrics: ‘Percent of Land Area’ and ‘Percent of Population’. Results of this analysis were presented to the WRIA 8 Implementation Committee. The Committee recommended an additional level of analysis involving ‘ranking’ the progress made toward implementing the WRIA 8 programmatic and land use actions.

**STEP 4: Devise a method for ranking the progress made toward implementation of the programmatic and land use actions.**

In this method, each question was ranked according to its 1) ‘Level of Importance’ to salmon recovery, and 2) ‘Status of Implementation’, based on percent of jurisdictions with the program in place, and the percent of land area or population encompassed by the jurisdiction. Please refer to section IV. PROGRAM RANKING for further detail.

**STEP 5: Compile results into a final ‘Program Ranking’ scatterplot or matrix.**

This allowed for a visual representation of how each program was ranked jointly in terms of ‘Status of Implementation’ and ‘Level of Importance’. Please refer to section IV. PROGRAM RANKING for further detail and for ‘Program Ranking Matrix’.

**STEP 6: Interpret results.**

In addition to the systematic elements introduced involving ranking and metrics, results were interpreted based on WRIA 8 staff discussions. This involved professional judgment and interpretation of results, whereby programmatic and land use actions were evaluated according to their associated contexts.
IV. PROGRAM RANKING

An additional step in the evaluation process different from last year’s analysis involved designing a ranking of programmatic and land use implementation. This was based on ideas generated during WRIA 8 Implementation Committee meetings. As per the Committee’s suggestions, each program was given a combined ranking based on two metrics: ‘Level of Importance’ and ‘Status of Implementation’ (explained in further detail below).

Level of Importance
To determine a program’s ‘Level of Importance’, WRIA 8 Staff and Implementation Committee Members ranked programs on a scale of 1-5 (one being least important, 5 being most important). The individual scores were averaged to produce a final ‘Level of Importance’ ranking. See below for a visual representation of how that ranking works. Level of Importance ranking was based on a loose set of criteria, provided to each ranker as a guide for ranking. See Appendix C: Level of Importance Ranking Criteria List.

Status of Implementation
Each programmatic or land use action was calculated based on the multiple-choice response and according to one of three metrics (Percent of Jurisdictions, Population, or Land Area) mentioned in Section III. However, the ‘Status of Implementation’ ranking was based on the percent of jurisdictions reporting ‘Programs Underway’, and represented on the ranking matrix.

To view the separate scores for Status of Implementation and Level of Importance, see Appendix D: Program Ranking by Metric.
MATRIX DEPICTING STATUS OF IMPLEMENTATION RANKED BY PERCENT OF JURISDICTIONS

Program Ranking

Level of Importance

Status of Implementation (in percent)
MATRIX DEPICTING STATUS OF IMPLEMENTATION RANKED BY PERCENT OF: JURISDICTIONS, LAND AREA, AND POPULATION
MATRIX DEPICTING STATUS OF IMPLEMENTATION COMPARING BOTH RANKING METHODS:

Program Ranking

Level of Importance

Status of Implementation (in percent)

LEGEND

- Percent of Jurisdiction, Land Area, and Population level of analysis (depicting no change)
- Percent of Jurisdiction level of analysis (depicting change)
### V. RESULTS INTERPRETATION

#### FINAL RESULTS CHART

<table>
<thead>
<tr>
<th>AREAS for FOCUS</th>
<th>PRIORITY ACTION ISSUES</th>
<th>PRIORITY ISSUES FOR MONITORING</th>
<th>LOWER PRIORITY ISSUES</th>
</tr>
</thead>
</table>
| **LH—LOW IMPLEMENTATION, HIGH IMPORTANCE** | • Shoreline Contractor Workshops  
• Lakeshore Workshops  
• Lakeshore Demonstration Projects  
• Shoreline Outreach  
• Large Woody Debris | | |
| **MH—MEDIUM IMPLEMENTATION, HIGH IMPORTANCE** | • Incentives  
• Outreach to Property Owners  
• Low Impact Development  
• Natural Yard Care  
• Stormwater Regulations w/ LID  
• Volunteer Events | | |
| **HH—HIGH IMPLEMENTATION, HIGH IMPORTANCE** | • Forest Cover/Riparian Buffer Education  
• Water Quality Education  
• Best Management Practices (BMPs)  
• Critical Areas Ordinances (CAOs)  
• Shoreline Master Programs (SMPs)  
• Tree Regulations  
• Stormwater Regulations | | |
| **LM—LOW IMPLEMENTATION, MEDIUM IMPORTANCE** | • Boater Education  
• Designer/Contractor Education  
• Withdrawals | | |
| **MM—MEDIUM IMPLEMENTATION, MEDIUM IMPORTANCE** | • Groundwater Protection  
• TMDL  
• CARAs  
• Water Conservation  
• Car Washes | | |
| **LM—MEDIUM IMPLEMENTATION, MEDIUM IMPORTANCE** | • Forest Cover/Riparian Buffer Education  
• Water Quality Education  
• Best Management Practices (BMPs)  
• Critical Areas Ordinances (CAOs)  
• Shoreline Master Programs (SMPs)  
• Tree Regulations  
• Stormwater Regulations | | |
| **HM—HIGH IMPLEMENTATION, MEDIUM IMPORTANCE** | • Forest Cover/Riparian Buffer Education  
• Water Quality Education  
• Best Management Practices (BMPs)  
• Critical Areas Ordinances (CAOs)  
• Shoreline Master Programs (SMPs)  
• Tree Regulations  
• Stormwater Regulations | | |
| **LL—LOW IMPLEMENTATION, LOW IMPORTANCE** | • Garden Tours | | |
| **ML—MEDIUM IMPLEMENTATION, LOW IMPORTANCE** | • Call Numbers | | |

**LEVEL OF IMPORTANCE**

Low  
Medium  
High  

**STATUS OF IMPLEMENTATION**

Low  
Medium  
High

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2 See next page (p. 15) for score ranges
Actions in the High Implementation High Importance & High Implementation Medium Importance (in yellow):
WRIA 8 partners should feel good about taking action on topics which are of very high importance to salmon recovery in the Lake Washington/Cedar/Sammamish watershed. We need to be vigilant that these stay at a high level of implementation. Some of these actions are at a high level of implementation because there are regulatory requirements driving them (e.g. NPDES requirements, Critical Areas Ordinance and Shoreline Master Plan updates). It’s importance to acknowledge that WRIA 8 partners are advancing salmon recovery when they are meeting these regulatory requirements. WRIA 8 partners should review their regulatory actions to be sure they are consistent with the WRIA 8 conservation strategy and recommendations.

For this category of actions where we have a high level of implementation and we know they are important for salmon recovery efforts, WRIA 8 partners should be looking for ways to measure the effectiveness of our implementation actions. With land cover change analysis which will be done in 2010, WRIA 8 partners can get an indication of the effectiveness forest cover education and tree ordinances. Likewise habitat status and trends monitoring can help us to evaluate whether or not Critical Areas Ordinances, Shoreline Master Program, Stormwater Regulations and education on Best Management Practices are protecting habitat conditions in WRIA 8 streams. More targeted monitoring of the effectiveness of these programs would be beneficial in identifying any changes which would make them more effective and should be pursued.

Actions which were Ranked as Low Importance (bottom row in blue): The staff group ranked the following two actions as lower importance to salmon recovery: salmon friendly garden tours (which has a low level of implementation) and water quality call numbers (which has a high level of implementation, probably due to NPDES requirements). Garden tours relate to natural yard care education, an important topic, but this may not be perceived as the most important tool for reaching affecting homeowners’ behavior. Water quality call numbers are very important for water quality, but perhaps less directly important to salmon recovery efforts. Due to the lower importance ranking by the staff group, these two items do not seem to be a high priority for WRIA 8 attention in the near term.

Action which were Ranked as High or Medium Level of Importance but have a Low or Medium Level of Implementation (in orange): These actions are important for WRIA 8 partners to revisit and determine whether or not additional emphasis is warranted. These actions are discussed in greater detail below:

- **Actions with a Low Level of Implementation/High Level of Importance:**
  - Shoreline Contractor Workshops, Lakeshore Workshops, Lakeshore Demonstration Projects and Shoreline Outreach are all actions related to the issue of working with shoreline property owners on Lake Washington and Lake Sammamish to improve shoreline habitat to be more salmon-friendly. This was identified as an area needing greater attention in the 2006-2007 WRIA 8 Implementation Progress Report. As a result the Green Shorelines Guidebook was developed by the City of Seattle with King Conservation District funding and a series of four workshops was held in 2009 to identify ways to reduce barriers and increase incentives for lakeshore restoration. This is actually one of WRIA 8’s
priority focus areas even though it was ranked as a low level of implementation by individual jurisdictions. The work is being done collectively through the Green Shorelines Steering Committee and multiple local, state and federal partners.

- **Outreach Regarding the Benefits of Large Wood** - It is a concern that outreach regarding the importance of large wood and its benefit to salmon has a low level of implementation. It is important that streamside property owners who might clear wood out of streams hear about the benefit of wood in streams and why it should remain there. Large wood is a controversial topic with some audiences, particularly some recreational river users who see wood in river as a hazard and property owners on larger, flood prone rivers who are concerned about logjams forming and increasing flooding and/or large wood being deposited on their property. Outreach regarding the importance of large wood needs to be carefully crafted and targeted to be effective, especially for larger rivers with flooding issues and frequent recreational use by boaters. It is probably most important that WRIA 8 partners doing habitat restoration projects involving wood placement be involved in outreach regarding large wood. This topic should be further discussed by WRIA 8 partners.

### Actions with Low Level of Implementation/Medium Level of Importance:
- **Provide education related to the water quality impacts of boats** – Educational efforts in the watershed related to reducing the water quality impacts of boating is likely under-reported here because this usually not a role for local governments. There are education materials promoted by state agencies such as the Washington State Parks and Recreation Commission and the Washington Department of Ecology. There are also educational campaigns conducted by non-profit organizations such as the Puget Soundkeepers Alliance. For example, the Washington State requires motor boat operators to take a boating safety course and exam which includes a section on reducing impacts of boating on the environment and the Washington Department of Ecology has publications on topics such as pollution prevention in marinas. Puget Soundkeepers Alliance published a detailed guidebook on best management practices for boat repair.

- **Education Programs for Landscaping Designers/Contractors on Sustainable Design** is an area which should be further researched. The “Puget Sound Starts Here” campaign has messages about best practice in yard maintenance to reduce water pollution and conserve water. There are also ongoing Natural Yard Care workshops. There doesn’t appear to be much work with contractors and landscape designers on landscaping best practices. This topic should be discussed further by WRIA 8 partners to determine if additional emphasis on this topic is warranted.

- **Programs to Address Illegal Water Withdrawals** – Local governments are usually not the implementers on the issue of illegal water withdrawals. It is traditionally and legally more of a role for the Washington Department of Ecology. Addressing low flows due to illegal surface water withdrawals/groundwater withdrawals was also identified as needing more attention by the WRIA 8 analysis done in 2008 of the overlap between WRIA 8 programmatic actions and other regional planning efforts (funded through a Washington Department of Ecology grant) and should be revisited and discussed. The WRIA 8 team and partners many not be in a position to affect this long-standing and difficult issue, but it may be worth flagging the issue for action by other entities/agencies.

### Actions with Medium Level of Implementation/High Level of Importance:
- **Incentives to Protect/Restore Ecological Function** – Incentives for property owners such as tax breaks for habitat protection (also know as current use taxation or the Public Benefit Rating System) and transfer development rights are an important tool for protecting forest cover, riparian buffers, wetlands and other habitat beyond what is required by regulations. It is a concern that it only has a “medium” level of implementation. Anecdotally we know that some incentive programs are suffering due to local government funding shortfalls. For example, King County’s staff for the Public Benefit Rating System has been reduced since the 2006-2007 survey. This topic should be revisited by the WRIA 8 partners to determine if additional emphasis on this topic is warranted.
- **Outreach to Property Owners to Protect Forest Cover & Habitat** – Research shows that targeted outreach to private property owners related to the protection of forest cover and habitat especially in the form of in-person contact is known to be a very effective tool for changing property owners’ behavior. Anecdotally we know that this is another area which has experienced staff reductions due to local government funding shortfalls. In particular King County’s basin steward program has been reduced to only one basin steward for WRIA 8. When the last survey was done for 2006-2007, there were two basin stewards in WRIA 8 (focused on the Cedar River and Bear and Issaquah Creeks). In the mid-90s King County had five basin stewards in the WRIA 8 watershed. This topic should be discussed by WRIA 8 partners.

- **Promotion of Low Impact Development** – WRIA 8 jurisdictions have shown a strong past interest in working together on promoting Low Impact Development. In 2007, WRIA 8 applied for an EPA grant to advance low impact development in the watershed. We were unsuccessful in obtaining the grant, but 18 jurisdictions were ready to sign up as partners on the grant so there is a strong interest in working together on this issue. Most WRIA 8 jurisdictions are updating their NPDES permits which have requirements related to low impact development promotion. This topic should be discussed more by WRIA 8 partners to see if implementation could be increased by working together on low impact development promotion and whether or not additional emphasis on implementation is needed.

- **Natural Yard Care Program** – This is a long-standing program which many WRIA 8 jurisdictions have partnered on with a strong track record for changing property owners’ behavior (due to an effectiveness monitoring program). The “Puget Sound Starts Here” campaign has messaging about natural yard care practices as one of its three focus areas. The funding for the Natural Yard Care workshops themselves is currently year to year grants. The WRIA 8 partners may want to discuss ways to secure more stable funding for this program. One idea to explore would be a longer term grant to fund both Natural Yard Care workshops and rain gardens workshops in WRIA 8 (to promote both Low Impact Development and Natural Yard Care).

- **Stormwater Regulation with Low Impact Development Component** – Allowing low impact development in stormwater regulations is a requirement of the new NPDES permits being implemented by many jurisdictions in WRIA 8. There are some legal issues about what the exact requirements are for allowing low impact development “where feasible” which are still being worked out. This uncertainty is one reason why this topic only has a medium level of implementation at this time, but implementation is likely to increase once greater clarity about what is required has been reached.

- **Volunteer Stewardship Events** – The implementation of volunteer stewardship events is likely under-reported in this survey because many non-profit organizations host volunteer stewardship events in the watershed including the Friends of the Cedar River Watershed, the Mountains to Sounds Greenway and the Green Seattle Partnership. The WRIA 8 team added a calendar of stewardship events to the WRIA 8 website to help promote these events.

- **Actions with Medium Level of Implementation/Medium Level of Importance:**
  - **Groundwater Protection Education** – In the WRIA 8 watershed, groundwater education is most important in those subareas of the watershed which are impacted by low flows and in some cases high water temperatures (since groundwater can be a source of cold, clean water). From a quick cross reference between subareas experiencing low flows or which would benefit from increased groundwater (Bear Creek, East Fork Issaquah Creek, Issaquah Creek, Rock Creek, Sammamish River, North Fork of Issaquah Creek and Cottage Lake Creek), it appears that the jurisdictions which these subareas fall within are doing groundwater protection education.

  - **Designation of Critical Aquifer Recharge Areas (CARAs)** – This implementation topic is similar to the groundwater protection education topic (see above description) in that it appears that those jurisdictions with subareas in WRIA 8 which would most benefit from CARA designations, have designated CARAs.

  - **Implementation of Water Cleanup Plans (Total Maximum Daily Load or TMDLs)** – Some subareas in the WRIA 8 watershed have been identified as not meeting water quality standards (usually
for fecal coliform, temperatures or low dissolved oxygen). The Washington Department of Ecology can require that jurisdictions in these subareas develop a TMDL plan to address the water quality problems. Frequently what is done to address the water quality issue, especially temperatures and dissolved oxygen are also very beneficial to salmon. For example, TMDL plan have been developed for Little Bear Creek and Bear/Evans Creek and are being implemented by jurisdictions in those watersheds. It appears that those jurisdictions which should be working on TMDL Plans are doing so.

- **Water Conservation Education** – Implementation efforts regarding water conservation is probably under reported here because many WRIA 8 jurisdictions depend on their water purveyor to conduct education campaigns regarding the need for and ways to conserve water. For example Seattle Public Utilities has an extensive water conservation campaign and so do the water districts serving the WRIA 8 region.

- **Encourage Use of Commercial Carwashes/Car Wash Kits** – Using professional car washes and other ways to prevent pollution from car maintenance practices is one of the educational messages being promoted by the “Puget Sound Starts Here campaign” which many WRIA 8 jurisdictions are participating in actively. Therefore, educational efforts to encourage the use of commercial car washes or car wash kits are likely under reported in the survey.

**Conclusions:**

For actions where there is a high level of implementation and they have been ranked as being of high importance for salmon recovery efforts, WRIA 8 partners should be vigilant to keep the level of implementation high and be looking for ways to measure the effectiveness of our implementation actions. These actions include:

- Forest Cover/Riparian Buffer Education
- Water Quality Education
- Promoting Stormwater Best Management Practices
- Critical Areas Ordinances
- Shoreline Master Plan Updates
- Tree Protection Regulations
- Stormwater Regulations
- Regulatory Flexibility to Promote Habitat Protection/Restoration

The following programmatic actions should be revisited and discussed by the WRIA 8 Implementation Committee and the WRIA 8 Salmon Recovery Council to identify potentials ways to increase implementation of these recommended actions:

- Outreach Regarding the Benefits of Large Wood
- Education Programs for Landscaping Designers/Contractors on Sustainable Design
- Programs to Address Illegal Water Withdrawals
- Incentives to Protect/Restore Ecological Function
- Outreach to Property Owners to Protect Forest Cover/Habitat
- Promotion of Low Impact Development
- Natural Yard Care Program
VI. APPENDICES

Appendix A—DATA & ANALYSIS
The survey asked about two types of actions for implementation: Programmatic and Land Use. Data categories for ‘Programmatic Actions’ correspond with the legend on each page. Data categories for ‘Land Use Actions’ are labeled on the individual pie charts.

[see below for data]
—PROGRAMMATIC ACTIONS—

PROMOTION OF STORMWATER BEST MANAGEMENT PRACTICES (BMPs)

Data

![Pie charts showing data by percent of jurisdictions, population, and land area.]

**Ranking**
This action scored a high 98% for Status of Implementation, and received a high score of 4.67 for Level of Importance.

**Points to Consider**
These actions are required by NPDES (National Pollution Discharge Elimination System) Permits.

**Highlights of Comments**
In terms of current actions, comments reflected compliance with NPDES Permit requirements and ongoing Surface Water Management Plans (SWMP). In terms of proposed actions, comments reflected efforts to update stormwater code, implement new regulations improving surface water design requirements, and develop programs to improve surface water health.

Examples of typical comments:
“...completed an engineering study in 2008 to upgrade the town’s stormwater system to current standards...We hope to begin construction in 2009.” —Yarrow Point

“We are updating our stormwater code and illicit discharge code per the Phase II Permit requirements” --Edmonds

**LEGEND**
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer

PROMOTION OF LOW IMPACT DEVELOPMENT (LID)
Ranking
This action scored a medium 45% for Status of Implementation, and received a high score of 4.65 for Level of Importance.

Points to Consider
In the previous (2008) survey, eight jurisdictions reported plans to promote LID in 2008, however, based on these results, fewer jurisdictions may have implemented their LID programs in 2008 than planned. These results may be partially explained by some uncertainty among jurisdictions about what is required for the NPDES regulations for LID.

Highlights of Comments

LEGEND
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer
ENCOURAGE COMMERCIAL CAR WASHES / CAR WASH KITS

Data (did not analyze by land area)

by Percent of Jurisdictions

- 61%
- 8%
- 8%
- 23%

by Percent of Population

- 81%
- 15%
- 2%
- 2%

Ranking
This action scored a high 81% for Status of Implementation, and received a high score of 3.33 for Level of Importance.

Points to Consider
Use of commercial car washes are being promoted as part of the Puget Sound Starts Here campaign.

Highlights of Comments

LEGEND
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer
RUN NATURAL YARD CARE PROGRAM

**Data** (did not analyze by land area)

**Ranking**
This action scored a high 79% for Status of Implementation, and received a high score of 4.0 for Level of Importance.

**Points to Consider**
The *Puget Sound Start Here* campaign includes Natural Yard Care messages.

**Highlights of Comments**

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**LEGEND**
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer
PROMOTE NEIGHBORHOOD GARDEN TOURS TO SHOWCASE SALMON-FRIENDLY LANDSCAPE DESIGN

**Data** (did not analyze by land area)

**Ranking**
This action scored a medium 44% for Status of Implementation, and received a low score of 2.0 for Level of Importance.

**Highlights of Comments**
OFFER EDUCATIONAL PROGRAMS FOR LANDSCAPE DESIGNERS/CONTRACTORS ON SUSTAINABLE DESIGN

Data

by Percent of Jurisdictions

- 4% Program(s) underway
- 8% Program(s) proposed for 2009
- 8% Plan to conduct program(s) in the next three years, but not yet proposed
- 15% Plan to conduct program(s) in the long term, but not yet proposed
- 23% N/A
- 42% No answer

by Percent of Population

- 25% Program(s) underway
- 5% Program(s) proposed for 2009
- 4% Plan to conduct program(s) in the next three years, but not yet proposed
- 17% Plan to conduct program(s) in the long term, but not yet proposed
- 16% N/A
- 4% No answer

by Percent of Land Area

- 23% Program(s) underway
- 4% Program(s) proposed for 2009
- 4% Plan to conduct program(s) in the next three years, but not yet proposed
- 16% Plan to conduct program(s) in the long term, but not yet proposed
- 23% N/A
- 53% No answer

Ranking
This action scored a low 8% for Status of Implementation, and received a medium score of 3.33 for Level of Importance.

Points to Consider
The WRIA 8 Chinook Conservation Plan recommends educating landscape designers/contractors as another way to address salmon-friendly yard care. However, only a small percent (8%) of jurisdictions are offering this type of program. Note: under the ‘Percent of Land Area’ metric, 53% of jurisdictions have programs underway. This large number is due to the fact that King County answered this way (King County comprises 38% of WRIA 8 land area). Still, roughly two-fifths (44%) of jurisdictions reported that providing this program is not applicable (N/A) in their area.

Highlights of Comments
CONDUCT OUTREACH ABOUT SHORELINE DESIGN & MAINTENANCE AND SHORELINE ARMORING ALTERNATIVES

Data

![Pie charts showing data by percent of jurisdictions, population, and land area with lakeshore/nearshore.]

Ranking
This action scored a low 23% for Status of Implementation, but received a high score of 4.11 for Level of Importance.

Points to Consider
For this “question”/category, jurisdictions without any lakeshore or nearshore (4 jurisdictions) were removed from the master list of 26 jurisdictions, leaving 22 jurisdictions to be analyzed. This method allowed a more precise level of analysis, accurately reflecting the fact that this topic would not apply to jurisdictions without lakeshore and nearshore. In spite of the removal of jurisdictions lacking lakeshore/nearshore, 19% of jurisdictions still answered N/A (according to the ‘Percent of Jurisdictions’ metric). However, this number would have been higher had those jurisdictions not been removed from the list. This action was reported at a low level of implementation in 2006-2007, so it’s one of the issues that WRIA 8 has chosen to focus on, through efforts such as the Green Shorelines workshop series.

Note: According to the ‘Percent of Population’ metric: the 57% that answered ‘Plan to Implement in the Next Three Years’ reflect that the City of Seattle answered this way (Seattle comprises 31% of the population in WRIA 8). For a list of jurisdictions included for analysis of this question, see Appendix B: Jurisdiction Lists, List 2.

Highlights of Comments

**LEGEND**
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer
HOLD WORKSHOPS FOR LAKESHORE PROPERTY OWNERS RELATED TO LANDSCAPING, SHORELINE DESIGN, BOAT MAINTENANCE, DOCK DESIGN, ETC.

**Data**

by Percent of Jurisdictions with Lakeshore

- 35%
- 6%
- 6%

by Percent of Population with Lakeshore

- 20%
- 12%
- 5%

by Percent of Land Area with Lakeshore

- 54%
- 9%
- 4%

**Ranking**

This action scored a low 6% for Status of Implementation, but a high score of 3.67 for Level of Importance.

**Points to Consider**

For this “question”/category, jurisdictions without any lakeshore (8 total) were removed from the master list of 26 jurisdictions. This way, responses were analyzed for only those jurisdictions with lakeshore (consisting of 18 out of 26 jurisdictions). Again, this method allowed a more precise level of analysis, accurately reflecting the fact that this topic applies only to jurisdictions with lakeshore (and not to those jurisdictions without lakeshore). For the purposes of this analysis, jurisdictions with ‘Lakeshore’ are those with shoreline on Lake Washington or Lake Sammamish, or both.

As a side note: WRIA 8 conducted lakeshore workshops in 2005, utilizing a grant from the King Conservation District—many jurisdictions partnered with WRIA 8 to carry out these workshops.

For a list of jurisdictions included for analysis of this question, see Appendix B: Jurisdiction List, List 3
HOLD WORKSHOPS FOR MARINE CONTRACTORS AND SHORELINE DESIGN PROFESSIONALS ON SALMON-FRIENDLY DESIGNS

Data

by Percent of Jurisdictions with Lakeshore/Nearshore

- 5%
- 19%
- 10%
- 61%

by Percent of Population with Lakeshore/Nearshore

- 4%
- 49%
- 38%

by Percent of Land Area with Lakeshore/Nearshore

- 3%
- 9%
- 38%
- 73%

Ranking
This action scored a low 5% for Status of Implementation, but a high score of 4.0 for Level of Importance.

Points to Consider
For this “question”/category, jurisdictions without any lakeshore or nearshore (4 jurisdictions) were removed from the master list of 26 jurisdictions, leaving 22 jurisdictions to be analyzed for this question. This method allowed a more precise level of analysis, accurately reflecting the fact that this topic would not apply to jurisdictions lacking in both lakeshore and nearshore.

Similar to Natural Yard Care activities, the Plan recommends outreach to contractors and consultants on salmon friendly design. Among all three metrics, there is a high percent of N/A response, perhaps reflecting that many jurisdictions don’t see this action as their role.

For a list of jurisdictions included for analysis of this question, see Appendix B: Jurisdiction Lists, List 2

Highlights of Comments

<table>
<thead>
<tr>
<th>LEGEND</th>
<th>Description</th>
</tr>
</thead>
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<tr>
<td>Program(s) underway</td>
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<td>Program(s) proposed for 2009</td>
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<tr>
<td>Plan to conduct program(s) in the next three years, but not yet proposed</td>
<td></td>
</tr>
<tr>
<td>Plan to conduct program(s) in the long term, but not yet proposed</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td></td>
</tr>
</tbody>
</table>
CONDUCT LAKEFRONT OR STREAMSIDE DEMONSTRATION PROJECTS TO PROMOTE ENVIRONMENTALLY FRIENDLY DESIGN

Data
(did not analyze by land area)

by Percent of Jurisdictions

27%
4%
23%
19%

by Percent of Population

18%
2%
53%
9%
9%
9%

Ranking
This action scored a low 12% for Status of Implementation, but a high score of 3.89 for Level of Importance.

Highlights of Comments
PUBLICIZE CALL NUMBERS TO REPORT WATER QUALITY AND/OR QUANTITY PROBLEMS

**Data** (did not analyze by land area)

**Ranking**
This action scored a high 97% for Status of Implementation, but a low score of 2.22 for Level of Importance.

**Highlights of Comments**

**Legend**
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer
OFFER EDUCATIONAL MATERIALS ADDRESSING WATER QUALITY

**Data**

- **by Percent of Jurisdictions**: 80%
- **by Percent of Population**: 99%
- **by Percent of Land Area**: 98%

**Ranking**
This action scored a high 99% for Status of Implementation, and a high score of 4.11 for Level of Importance.

**Points to Consider**
Education regarding water quality best practices is a requirement of NPDES permits.

**Highlights of Comments**
PROVIDE EDUCATION RELATED TO WATER QUALITY IMPACTS OF BOATS

**Data**

**by Percent of Jurisdictions with Lakeshore/Nearshore**

- 5%
- 5%
- 10%
- 19%
- 61%

**by Percent of Population with Lakeshore/Nearshore**

- 14%
- 3%
- 6%
- 38%
- 39%

**by Percent of Land Area with Lakeshore/Nearshore**

- 41%
- 2%
- 4%
- 18%
- 35%

**Ranking**

This action scored a low 5% for Status of Implementation, and a medium score of 3.11 for Level of Importance.

**Points to Consider**

For this “question”/category, jurisdictions without any lakeshore or nearshore (4 jurisdictions) were removed from the master list of 26 jurisdictions, leaving 22 jurisdictions to be analyzed. This method allowed a more precise level of analysis, accurately reflecting the fact that this topic would not apply to jurisdictions lacking in both lakeshore and nearshore. According to all three metrics, implementation appears poor, where many jurisdictions responded N/A. In the end, there may be a greater role for addressing this action at the State and NGO levels. For example, Puget Sound Keepers Alliance has outreach programs for boaters and marinas, as in, others entities may simply be providing this boater education. Note: under the ‘Percent of Population’ metric, Seattle (holding 31% of WRIA 8’s population) answered ‘Plan to conduct program (s) in the long term, but not yet proposed’.

For a list of jurisdictions included for analysis of this question, see *Appendix B: Jurisdiction Lists, List 2*

**Highlights of Comments**

<table>
<thead>
<tr>
<th>LEGEND</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Program(s) underway</td>
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<td>Program(s) proposed for 2009</td>
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<tr>
<td>Plan to conduct program(s) in the next three years, but not yet proposed</td>
<td></td>
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<tr>
<td>Plan to conduct program(s) in the long term, but not yet proposed</td>
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<tr>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td></td>
</tr>
</tbody>
</table>
PROMOTE WATER CONSERVATION PROGRAMS

Data

by Percent of Jurisdictions

- 45%
- 35%
- 8%
- 8%
- 4%

by Percent of Population

- 77%
- 12%
- 4%
- 1%
- 6%

by Percent of Land Area

- 76%
- 13%
- 3%
- 1%
- 7%

Ranking
This action scored a high 77% for Status of Implementation, and a medium score of 3.44 for Level of Importance.

Highlights of Comments
PROMOTE GROUNDWATER PROTECTION MESSAGES

Data
(did not analyze according to population)

by Percent of Jurisdictions

35%
12%
4%
8%
41%

by Percent of Land Area

66%
26%
3%
1%
4%

Ranking
This action scored a medium 35% for Status of Implementation, and a medium score of 3.44 for Level of Importance.

Highlights of Comments

LEGEND
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer
OFFER EDUCATION ABOUT PROTECTION OF FOREST COVER OR IMPORTANCE OF RIPARIAN BUFFERS

Data

by Percent of Jurisdictions
- 73%
- 15%
- 8%
- 4%

by Percent of Population
- 94%
- 1%
- 3%
- 2%

by Percent of Land Area
- 94%
- 1%
- 3%
- 2%

Ranking
This action scored a high 73% for Status of Implementation and a high score of 4.67 for Level of Importance.

Highlights of Comments
DISPLAY SIGNS OR CARRY OUT OTHER OUTREACH RELATED TO THE BENEFITS OF LARGE WOODY DEBRIS

*Data* did not analyze according to Population)

**Ranking**
This action scored a low 27% for Status of Implementation, but received a high score of 3.67 for Level of Importance.

**Highlights of Comments**
CONDUCT OUTREACH TARGETED AT PRIVATE PROPERTY OWNERS RELATED TO THE PROTECTION OF FOREST COVER AND HABITAT

**Data** (did not analyze according to population)

**Ranking**
This action scored a medium 44% for Status of Implementation, but a high score of 4.33 for Level of Importance.

**Highlights of Comments**
OFFER VOLUNTEER STEWARDSHIP EVENTS (SUCH AS TREE PLANTINGS, RESTORATION EVENTS, ETC.)

Data

Ranking
This action scored a medium 68% for Status of Implementation and a high score of 3.78 for Level of Importance.

Highlights of Comments

LEGEND
- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
- No answer
—LAND USE ACTIVITIES—

CRITICAL AREAS ORDINANCE (CAO) OR SENSITIVE AREAS ORDINANCE (SAO) UPDATES SINCE 2003

Data (did not analyze according to population)

<table>
<thead>
<tr>
<th></th>
<th>By Percent of Jurisdictions</th>
<th>By Percent of Land Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated</td>
<td>85%</td>
<td>97%</td>
</tr>
<tr>
<td>Not Updated</td>
<td>15%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Ranking
This action scored a high 97% for Status of Implementation, and received a high score of 4.56 for Level of Importance.

Highlights of Comments
CRITICAL AQUIFER RECHARGE AREAS (CARAS)

*Data* (did not analyze according to population)

### by Percent of Jurisdictions

- **Designated**: 42%
- **Not Designated**: 58%

### by Percent of Land Area

- **Designated**: 69%
- **Not Designated**: 31%

**Ranking**

This action scored a medium 42% for Status of Implementation, and received a medium score of 3.22 for Level of Importance.

**Points to Consider**

Not all of a jurisdictions’ land area includes aquifer recharge areas—meaning, the land area graph does not necessarily represent that area with which CARAs overlap. Jurisdictions that do have designated CARAs include: Redmond, Renton, Issaquah, Sammamish, Woodinville, Shoreline, King County, and smaller jurisdictions, by virtue of being within county boundaries, must comply with CARA designation according to the County’s specifications.

**Highlights of Comments**
SHORELINE MASTER PROGRAM (SMP) UPDATES SINCE 2004

**Data** (did not analyze according to population)

### by Percent of Jurisdictions

- **Updated**: 12%
- **Not Updated**: 88%

### by Percent of Land Area

- **Updated**: 4%
- **Not Updated**: 96%

**Ranking**

This action scored a high 88% for Status of Implementation, and received a high score of 4.44 for Level of Importance.

**Points to Consider**

Many jurisdictions are in the process of updating their SMPs, required by the Growth Management Act, and also a component of the WRIA 8 Plan Implementation. For King County and Cities within King County that have a population greater than 10,000, the deadline for SMP updates is December 1, 2009 (with an additional year available upon request). For Smaller King County cities, the deadline is December 1, 2011 (with an additional year upon request).

**Highlights of Comments**
LOW IMPACT DEVELOPMENT AS A COMPONENT OF STORMWATER REGULATIONS ALREADY IN PLACE

Data

by Percent of Jurisdictions

Yes 54%
No 38%
No Answer 8%

by Percent of Population

Yes 84%
No 12%
No Answer 4%

by Percent of Land Area

Yes 87%
No 10%
No Answer 3%

Ranking
This action scored a high 87% for Status of Implementation, and received a high score of 4.44 for Level of Importance.

Points to Consider
The question in the survey that preceded this question asked whether jurisdictions have stormwater regulations in place: 99.9% of jurisdictions reported ‘Yes’*. The NPDES permit requires these regulations be in place. For the question here, it asks: of those jurisdictions that have stormwater regulations in place, is Low Impact Development a component of those regulations? Response reflects a high level of implementation for jurisdictions including LID as part of stormwater regulations.

*The results of the proceeding question are not depicted here.

Highlights of Comments
IMPLEMENTATION OF WATER CLEANUP PLANS (TMDLs)

**Data**

- **by Percent of Jurisdictions**
  - Involved: 36%
  - Not Involved: 64%

- **by Percent of Population**
  - Involved: 65%
  - Not Involved: 35%

- **by Percent of Land Area**
  - Involved: 70%
  - Not Involved: 30%

**Ranking**

This action scored a high 65% for Status of Implementation, but received a medium score of 3.22 for Level of Importance.

**Highlights of Comments**
TREE PROTECTION REGULATIONS

*Data* (did not analyze according to population)

**by Percent of Jurisdictions**

- Regulations in Place: 92%
- None in place: 8%

**by Percent of Land Area**

- Regulations in Place: 99%
- None in Place: 1%

**Ranking**

This action scored a high 92% for Status of Implementation, and a high score of 4.11 for Level of Importance.

**Highlights of Comments**
ACTIVITES IN PROGRESS / PLANNED RELATING TO ILLEGAL SURFACE WATER OR GROUNDWATER WITHDRAWALS

**Data** (did not analyze according to population or land area)

- **by Percent of Jurisdictions**
  - No: 92%
  - Yes: 8%

**Ranking**
This action scored a low 8% for Status of Implementation, but received a medium score of 2.67 for Level of Importance.

**Highlights of Comments**
REGULATORY FLEXIBILITY (e.g., expedited permitting) OFFERED DURING NEW DEVELOPMENT OR REDEVELOPMENT IN ORDER TO PROTECT / RESTORE ECOLOGICAL FUNCTION

**change %Js**

Data

- **by Percent of Jurisdictions**
  - Not Offered: 54%
  - Offered: 46%

- **by Percent of Population**
  - Not Offered: 20%
  - Offered: 80%

- **by Percent of Land Area**
  - Not Offered: 17%
  - Offered: 83%

**Ranking**
This action scored a high 83% for Status of Implementation, and received a high score of 3.33 for Level of Importance.

**Highlights of Comments**
INCENTIVES (e.g., transferable development rights, current use taxation, reduced permit fees, etc.) OFFERED TO PROTECT AND/OR RESTORE ECOLOGICAL FUNCTION

**Data**

<table>
<thead>
<tr>
<th></th>
<th>Offered</th>
<th>Not Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>by Percent of Jurisdictions</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>by Percent of Population</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>by Percent of Land Area</td>
<td>Yes 84%</td>
<td>No 16%</td>
</tr>
</tbody>
</table>

**Ranking**

This action scored a medium 42% for Status of Implementation, and received a high score of 4.33 for Level of Importance.

**Highlights of Comments**
## Appendix B—Jurisdiction Lists

<table>
<thead>
<tr>
<th>LIST 1—Full list of Jurisdictions/Survey Respondents</th>
<th>LIST 2—List of Jurisdictions with Lakeshore &amp; Nearshore</th>
<th>LIST 3—List of Jurisdictions with Lakeshore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaux Arts, Bellevue, Bothell, Clyde Hill, Edmonds, Hunts Point, Issaquah, Kenmore, King County, Kirkland, Lake Forest Park, Maple Valley, Medina, Mercer Island, Mill Creek, Mountlake Terrace, Mukilteo, Newcastle, Redmond, Renton, Sammamish, Seattle, Shoreline, Snohomish County, Woodinville, Yarrow Point</td>
<td>Beaux Arts, Bellevue, Clyde Hill, Edmonds, Hunts Point, Issaquah, Kenmore, King County, Kirkland, Lake Forest Park, Medina, Mercer Island, Mukilteo, Newcastle, Redmond, Renton, Sammamish, Seattle, Shoreline, Snohomish County, Yarrow Point</td>
<td>Beaux Arts, Bellevue, Clyde Hill, Hunts Point, Issaquah, Kenmore, King County, Kirkland, Lake Forest Park, Medina, Mercer Island, Newcastle, Redmond, Renton, Sammamish, Seattle, Yarrow Point</td>
</tr>
<tr>
<td>(26 total)</td>
<td>(22 total)</td>
<td>(18 total)</td>
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</tbody>
</table>
Appendix C—Level of Importance Ranking Criteria List

Ranking Importance of Programmatic Actions from the WRIA 8 Plan

NOAA’s Recovery Implementation Technical Team tells us that because our watershed is the most populated watershed in the state, programmatic actions are a higher priority than on-the-ground habitat projects. Prioritizing programmatic actions however has been harder to get a handle on than habitat projects.

From the WRIA 8 Plan:

Prioritization of Public Outreach Actions, Chap. 5, p. 13
(very roughly paraphrased)

- Recommendations were focused on desired scientific outcomes – prioritize on degree to which habitat condition can be modified by public outreach actions
- Degree to which target audience can have impact on desired habitat condition
- Degree to which there is a proven track record or model for action
- Level of financial commitment required to do action (could think of as cost/benefit)
- Ease of implementation of recommended action: can it be done at the local level or does it require WRIA-wide or larger scale of implementation to be effective?

Prioritization of land use actions, Chap. 5, p. 12 (paraphrased)

1st: Protect forest cover
2nd: If forest cover is compromised, protect riparian buffers
3rd: If forest cover and riparian buffers are compromised, manage stormwater to protect water quality, flows

Geographically:
Tier 1 Areas (in priority order):
1. Cedar River
3. Bear Creek
4. Issaquah Creek

Tier 2 Areas (Cedar Tributaries, Upper Cedar River, Kelsey Creek, Little Bear, North Creek, Evans Creek)
<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>STATUS of IMPLEMENTATION</th>
<th>LEVEL OF IMPORTANCE</th>
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<tbody>
<tr>
<td>BMPs</td>
<td>A 98%</td>
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<tr>
<td>LID</td>
<td>B 45%</td>
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<tr>
<td>CAR WASHES</td>
<td>C 81%</td>
<td>3.33</td>
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<tr>
<td>NATURAL YARD CARE</td>
<td>D 79%</td>
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<td>GARDEN TOURS</td>
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<td>F 8%</td>
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<td>BOATER EDUCATION</td>
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<td>GROUNDWATER PROTECTION</td>
<td>O 35%</td>
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<td>FOREST COVER</td>
<td>P 73%</td>
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<td>LWD</td>
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<td>STEWARDS</td>
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<td>VOLUNTEER EVENTS</td>
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<td>CAO</td>
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<td>SMP</td>
<td>V 88%</td>
<td>4.44</td>
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<td>STORMWATER REGULATIONS w/ LID</td>
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<td>TMDL</td>
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<td>TREE REGULATIONS</td>
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<td>WITHDRAWALS</td>
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<tr>
<td>REGULATORY FLEXIBILITY</td>
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<td>INCENTIVES</td>
<td>CC</td>
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</tbody>
</table>
Appendix E—Sample Survey

WRJA 8 Implementation Survey 2008 – How you answered

Your name and title:

Is this person still the primary contact for this survey?

___ Yes
___ No

If no, please provide new contact information

Name: __________________________
Email address: __________________

Which jurisdiction/agency/organization do you represent?

The topics below relate to programmatic activities. Please place an “X” next to the answer that best describes the status of each activity in your jurisdiction, and use the comment boxes to provide detail as appropriate.

Promote stormwater best management practices

___ Program(s) underway
___ Program(s) proposed for 2009
___ Plan to conduct program(s) in the next three years, but not yet proposed
___ Plan to conduct program(s) in the long term, but not yet proposed
___ N/A

This is how you answered last year:

Promote low impact development

___ Program(s) underway
___ Program(s) proposed for 2009
___ Plan to conduct program(s) in the next three years, but not yet proposed
___ Plan to conduct program(s) in the long term, but not yet proposed
___ N/A

This is how you answered last year:

Encourage commercial car washes/car wash kits

___ Program(s) underway
___ Program(s) proposed for 2009
___ Plan to conduct program(s) in the next three years, but not yet proposed
___ Plan to conduct program(s) in the long term, but not yet proposed
___ N/A

This is how you answered last year:

Please provide additional detail on stormwater-related programs in your jurisdiction (LID, car wash kits, etc.):
This is how you answered last year:
Run Natural Yard Care program

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Promote neighborhood garden tours to showcase salmon-friendly landscape design

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Offer educational programs for landscape designers/contractors on sustainable design

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Please provide additional detail about landscaping programs conducted in your jurisdiction.

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Conduct outreach about shoreline design and maintenance and shoreline armoring alternatives

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
This is how you answered last year:

Hold workshops for lakeshore property owners related to landscaping, shoreline design, boat maintenance, dock design, etc.

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Hold workshops for marine contractors and shoreline design professionals on salmon-friendly designs

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Conduct lakefront or streamside demonstration projects to promote environmentally-friendly design

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Please provide additional detail related to lakeshore or shoreline programs in your jurisdiction.

This is how you answered last year:

Publicize call numbers to report water quality and/or quantity problems

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
This is how you answered last year:

Offer educational materials addressing water quality

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Provide education related to water quality impacts of boats

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Please provide additional detail about water quality-related programs in your jurisdiction.

This is how you answered last year:

Promote water conservation programs

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A

This is how you answered last year:

Promote groundwater protection messages

- Program(s) underway
- Program(s) proposed for 2009
- Plan to conduct program(s) in the next three years, but not yet proposed
- Plan to conduct program(s) in the long term, but not yet proposed
- N/A
Please provide additional detail related to water conservation in your jurisdiction.

This is how you answered last year:

Offer education about protection of forest cover or importance of riparian buffers
   □ Program(s) underway
   □ Program(s) proposed for 2009
   □ Plan to conduct program(s) in the next three years, but not yet proposed
   □ Plan to conduct program(s) in the long term, but not yet proposed
   □ N/A

This is how you answered last year:

Display signs or carry out other outreach related to the benefits of large woody debris
   □ Program(s) underway
   □ Program(s) proposed for 2009
   □ Plan to conduct program(s) in the next three years, but not yet proposed
   □ Plan to conduct program(s) in the long term, but not yet proposed
   □ N/A

This is how you answered last year:

Conduct outreach targeted at private property owners related to the protection of forest cover and habitat.
   □ Program(s) underway
   □ Program(s) proposed for 2009
   □ Plan to conduct program(s) in the next three years, but not yet proposed
   □ Plan to conduct program(s) in the long term, but not yet proposed
   □ N/A

This is how you answered last year:

Offer volunteer stewardship events (such as tree plantings, restoration events, etc.)
   □ Program(s) underway
   □ Program(s) proposed for 2009
   □ Plan to conduct program(s) in the next three years, but not yet proposed
   □ Plan to conduct program(s) in the long term, but not yet proposed
   □ N/A

This is how you answered last year:

Please provide additional detail about programs related to forest cover, large woody debris, and/or riparian protection in your jurisdiction.
The following questions address land use activities. Please place an “X” next to the answer that appropriately describes the status of activities in your jurisdiction, and also please use the text boxes to provide additional information to the best of your ability.

Has your jurisdiction updated its Critical Areas or Sensitive Areas Ordinance since 2003?
_____ Yes
_____ No

When do you next anticipate updating your CAO?

Has your jurisdiction designated Critical Aquifer Recharge Areas (CARAs)?
_____ Yes
_____ No

Has your jurisdiction updated its Shoreline Master Program since 2004?
_____ Yes
_____ No

If your jurisdiction's SMP is not updated, or if an update is in process, when do you anticipate completing your SMP update?

Does your jurisdiction have existing stormwater regulations or a stormwater management program?
_____ Yes
_____ No

If you answered no to the previous question, does your jurisdiction intend to adopt regulations and BMPs consistent with the NPDES permit requirements by the permit’s deadline?

This is how you answered last year:

This is how you answered last year:

This is how you answered last year:

This is how you answered last year:

This is how you answered last year:

This is how you answered last year:
If your jurisdiction does have stormwater regulations in place, is low impact development a component of these regulations?

_____ Yes
_____ No

*This is how you answered last year:*

Is your jurisdiction actively involved in implementation of Water Cleanup Plans (TMDLs)?

_____ Yes
_____ No

*This is how you answered last year:*

Does your jurisdiction employ tree protection regulations?

_____ Yes
_____ No

*This is how you answered last year:*

Does your jurisdiction have any activities in progress or planned relating to illegal surface water or groundwater withdrawals?

_____ Yes
_____ No

*This is how you answered last year:*

Does your jurisdiction offer regulatory flexibility (e.g. expedited permitting) during new development or redevelopment in order to protect/restore ecological function?

_____ Yes
_____ No

*This is how you answered last year:*

If you answered yes to the question above, please describe the types of regulatory flexibility employed by your jurisdiction.

*This is how you answered last year:*

Does your jurisdiction offer incentives (e.g. transferable development rights, current use taxation, reduced permit fees, etc.) to protect and/or restore ecological function?

_____ Yes
_____ No

*This is how you answered last year:*

If you answered yes to the question above, please describe the types of incentives used by your jurisdiction.
This is how you answered last year:

**Monitoring is fundamental to the implementation of the WRIA 8 Plan, and the purpose of this section is to document the level and breadth of local monitoring efforts**

Does your jurisdiction (or contractors) conduct ambient water quality monitoring--such as for temperature, dissolved oxygen, fecal coliforms, pH, nutrients, metals, etc.?

_____ Yes, we have a committed annual monitoring effort
_____ Yes, but only for special projects or assessments
_____ No, but an annual program is proposed
_____ No, but we plan to conduct an annual program (not yet proposed)
_____ No, and we do not plan to conduct a program of this type
_____ N/A

This is how you answered last year:

Does your jurisdiction (or contractors) conduct stream, river, and/or riparian habitat surveys (at fixed or rotating locations)?

_____ Yes, we have a committed annual monitoring effort
_____ Yes, but only for special projects or assessments
_____ No, but an annual program is proposed
_____ No, but we plan to conduct an annual program (not yet proposed)
_____ No, and we do not plan to conduct a program of this type
_____ N/A

This is how you answered last year:

Does your jurisdiction (or contractors) conduct benthic invertebrate or fish assemblage surveys (at fixed or rotating locations)?

_____ Yes, we have a committed annual monitoring effort
_____ Yes, but only for special projects or assessments
_____ No, but an annual program is proposed
_____ No, but we plan to conduct an annual program (not yet proposed)
_____ No, and we do not plan to conduct a program of this type
_____ N/A

This is how you answered last year:

Does your jurisdiction (or contractors) conduct project implementation monitoring (as-builts, final costs, project/permit documentation)?

_____ Yes, we have a committed annual monitoring effort
_____ Yes, but only for special projects or assessments
_____ No, but an annual program is proposed
No, but we plan to conduct an annual program (not yet proposed)
No, and we do not plan to conduct a program of this type
N/A

For projects without mitigation-related monitoring requirements, does your jurisdiction (or contractors) conduct project effectiveness monitoring to test outcomes against project objectives?
Yes, we have a committed annual monitoring effort
Yes, but only for special projects or assessments
No, but an annual program is proposed
No, but we plan to conduct an annual program (not yet proposed)
No, and we do not plan to conduct a program of this type
N/A

Please provide additional detail about your monitoring efforts. Include information such as: number and location of sites, size and cost of your monitoring program, and the department (or consultant) that conducts monitoring activities.

This is how you answered last year: