STORMWATER WORK GROUP

Regional Workshop Summary Report

May 19, 2010

Prepared for:
Stormwater Work Group

Prepared on:
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Workshop Summary Report

Approximately 130 stormwater professionals gathered for a regional workshop on Wednesday, May 19, 2010 at the Renton Community Center. This all-day event was designed to gather feedback from attendees on the Draft Implementation Plan prepared by the Stormwater Work Group. This was the third in a series of three workshops that had been sponsored by the Work Group over the past year.

Workshop Format

The workshop agenda was built around four presentations that highlighted various aspects of the implementation plan. Topics included:

Session On: Proposed Regional Program Components
Session Two: Status and Trends Monitoring
Session Three: Source Identification
Session Four: Effectiveness Monitoring

After each presentation, workshop participants engaged in small group discussions at one of nine discussion tables. Each table shared their perspectives on a series of questions that had been developed by Work Group members.

The workshop agenda and discussion guides are included in Appendix A of this report. The list of participants is included in Appendix B, and the notes from each of the discussion group facilitators are included in Appendix C.

What follows is a high-level summary of the discussions that occurred at each of the nine tables.

General Feedback

Although not highlighted as a specific set of questions, there was time throughout the day to get a general sense from participants regarding their opinions of the overall efforts of the Stormwater Work Group. On the whole, those attending seemed to feel that this had been a worthwhile endeavor. They deemed the scientific framework as being "credible" and said they appreciated that there had been a scientific peer review from national experts. They noted that the Work Group had accomplished a great deal in a relatively short period of time. One comment was that *this is a good move toward beneficial uses and away from bean counting*, and that seemed to be a sentiment shared by a number of attendees.

A caution was that perhaps the implementation plan was too ambitious, with some urging *one step at a time* and a *phased approach*. Throughout the day, participants expressed the need for greater clarity and definitions in the implementation plan.

Finally, although there was strong general support for the Work Group's approach and recommendations, workshop participants reminded each other that none of the recommendations could be acted upon without full buy-in and support from the

Department of Ecology (DOE), the permittees, environmental groups, tribes, and all others associated with, and affected by, stormwater monitoring and management.

Proposed Regional Program Components

Discussion on the proposed regional components was based on three questions:

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

Because there are so many connections between these three questions, group responses tended to overlap as well.

Most of the groups asserted that there needed to be a very clear definition of what the new regional program would consist of, how the appropriate roles for each party would be defined, and specifically what the benefits might be to this regional program approach. Especially when considering that a "pay in" would be required, participants said there needed to be a clear link between that payment and the resulting benefits of participation in a regional program.

There was considerable debate about whether or not there should be a new, separate entity for stormwater monitoring. Most groups asserted that regional monitoring needed to be conducted in a way that was "beyond politics" and yet there were also concerns about the overhead cost to establish, operate, and maintain a completely new and separate organization. Some participants wondered if there might be an existing agency that could take on this role, while others insisted it needed to be a new, independent organization.

Groups were divided about how program costs should be allocated between different governmental entities and other organizations. Pros and cons of various options were highlighted throughout the discussions. For some it made sense to base the fee on population. A prevalent concerned raised during this discussion session, however, and throughout the day, was the issue of cities being required to pay for monitoring activities outside of their jurisdictional boundaries. Some groups noted that a number of jurisdictions have ordinances that specifically prohibit the use of stormwater fees for any monitoring work beyond their boundaries.

Nearly everyone seemed to agree there needed to be a requirement for all participating entities to pay-in some baseline amount to the new program. But concerns were also expressed about those jurisdictions that already have monitoring programs in place – would they get credit for those even as they are paying in to a new regional program?

Several groups thought it would be a good idea to offer incentives to jurisdictions to opt in to the new program.

WRIAs were mentioned a few times as possibly being a good model to follow, although it was clear from the discussion that some WRIAs operate more effectively than others. But, in general, the groups seemed to agree that this funding approach made sense, and that the WRIAs were relatively immune to political pressures. Throughout the day, the groups distinguished between the funding structure of WRIAs and the management authority of the WRIAs, noting that successful management decisions were not always easy to achieve under the watershed-based structure. But the funding mechanism itself has been relatively successful throughout the region.

The groups wanted to make sure tribal authorities are included in any new regional program, and there were concerns, as well, about other entities such as federal facilities, businesses and non-permitees -- how would those be included and accounted for? Those from Whidbey Island and the San Juan Islands wondered where and how they fit into the overall program, since it did not appear that the islands were included in the draft implementation plan.

One suggestion was that status and trends monitoring should be funded by state and federal governments, and that the costs for ongoing effectiveness monitoring should be shared among local jurisdictions.

Every group suggested that the Work Group take a close look at the way in which other regions had approached a regional monitoring program. Chesapeake Bay, the California Water Board, and efforts underway in the State of Michigan were all cited as examples.

Status and Trends Monitoring

The discussion on Status and Trends monitoring was focused on three key questions.

1) What questions do you want Status and Trends monitoring to answer?
Several of the groups said they appreciated that the implementation plan for status and trends appeared to build on existing information and data collection efforts. This had been a consistent theme throughout the three workshops: *don't reinvent the wheel; use what is out there already and build on it.*

Most of the groups agreed that the focus on biological end points was the right focus. Several discussed the importance of establishing the link, and baseline data, between stormwater and biological endpoints.

This conversation extended further, with several of the groups commenting that solid baseline data did not yet exist. Another concern was the need to clearly tie stormwater to water quality issues, delineating stormwater impacts from on-site septic systems or other sources of pollutants. An important theme in all the groups was the need to be able to clearly describe and communicate these specific linkages to both the public and to elected officials.

Several of the groups wondered if the stressors had been identified as comprehensively as possible.

2) What barriers exist to an integrated regional approach?

Nearly all of the groups commented that an integrated regional approach is much easier said than done, noting that a number of previous attempts had been tried and had failed. *If this was easy we would have figured it out by now.*

As with the first series of questions on program components, workshop participants noted the need to clearly define how a new entity would operate, the level of investment required, and the specific roles for each of the regional players. Who takes the lead? Who is ultimately accountable? Again, there needs to be a higher authority that can operate above and beyond jurisdictional turf wars and regulatory conflicts.

The need for a "one-stop" data depository was mentioned, along with a clearly identified leader to take actions on monitoring recommendations, and to ensure that adaptive management mechanisms are in place and working successfully.

It was noted that watershed-based permitting would represent a strong and positive move toward a more regional approach, but this was followed by: *we don't see DOE embracing a watershed-based approach*.

Several groups expressed concerns about the ability to *fully sustain* a regional approach. What if some of the players drop out? How do we keep everyone at the table and fully participating?

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

The most prevalent theme in response to this question was the need to maintain capability at the local level to continue performing localized work. Several groups said they would not want this local control to be diminished by a higher regional authority; at the very least local staff should continue to be retained to perform the work, and this information would then be coordinated/shared regionally.

The DOE was mentioned in several of the discussion groups. Participants were unclear on what their role would be, believed there needed to be a strong role for them, and wanted that role to be clearly defined.

Several groups mentioned volunteers, suggesting that the use of "citizen scientists" should be more actively pursued and promoted.

Another suggestion was that those jurisdictions with more resources, or involved in major studies, share their study results and methodologies with those jurisdictions that have fewer resources at their disposal.

Source Identification

Two discussion questions were used to gather workshop participant feedback on the recommendations related to Source Identification.

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

Although most groups agreed there was some merit in prioritizing at the WRIA level, all of them also expressed some concerns about doing so. Some said the WRIA was too big to allow for adaptive management decisions, and that prioritizing at the sub-basin level might be a better option. Others were concerned about inter-jurisdictional turf wars inside the WRIAs, and believed this would get in the way of effective decision-making.

Concerns were also expressed about how projects would be prioritized; would jurisdictions at the bottom of the basin have a greater burden for management? Others noted that the WRIAs are not currently set up to perform this function, so adjustments would be necessary. Issues of jurisdictional liability, financing, and regulatory agreement were also identified as areas that would need to be clearly defined and worked with should this recommendation be pursued.

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

Most groups found this question difficult to answer. They said the number of impairments pursued should be determined according to a set of criteria. The size of the impairment, cost, "reasonableness," TMDL requirements, level of effort required, and anticipated results/success were all mentioned as important parameters/criteria to guide this decision-making.

In response to this question, and in several other places throughout the discussion, participants urged the Work Group to move a little slower. They noted that the program outlined was very big and ambitious, and suggested that perhaps a better approach was to take smaller steps, achieve success in one or two key areas, and then continue to build on that success in order to fully develop a regional monitoring approach.

Effectiveness Monitoring

Effectiveness monitoring was guided by three discussion questions.

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

While the groups seemed to generally agree with the criteria, all suggested word changes to several of them.

A suggestion from several of the groups was another question be added to the list of basic criteria: Does this study address a data gap? If so, what is the nature of that gap, and what is the best way to approach a solution in this area?

All of the groups suggested that the two-year timeframe was likely too short, and recommended this be set at 2-5 years instead.

Finally, in this and in several other places throughout the day, participants wanted to make sure this question was answered: *Is what I am doing at the local level having an effect?*

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed? Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

These began as two separate questions, but most groups merged their answers to address both. A frequent general comment during this session was the overall importance of effectiveness monitoring, with participants stressing the need to make sure this is a high priority in any regional approach.

Most of the tables focused on Best Management Practices (BMPs) during this discussion, noting that it was important to understand their effectiveness, and to be able to link those BMPs to the beneficial uses of specific receiving waters. Cost-effectiveness between BMPs was also viewed as an important comparison.

And again, as was expressed numerous times throughout the day: *We need to make sure we are measuring the right things, so we can know whether or not we are meeting our goals.*

Appendices

Appendix A – Agenda and Discussion Guide
Appendix B – Facilitator Notes

Appendix A – Agenda & Discussion Guide

PUGET SOUND STORMWATER MONITORING WORKSHOP 3: DESIGNING A MONITORING PROGRAM FOR THE FUTURE

SPONSORED BY THE STORMWATER WORK GROUP
http://www.ecy.wa.gov/programs/wq/psmonitoring/swworkgroup.html

Wednesday, May 19, 2010
8:30 a.m. – 3:00 p.m.
Renton Community Center

Agenda

Thank you for being willing to share your collective wisdom, ideas, comments, and perspectives with the Stormwater Work Group. We appreciate your willingness to help us develop a new regional stormwater monitoring and assessment strategy. We hope to accomplish two things today:

1) Share the revised *Scientific Framework* and new draft *Implementation Plan* for Regional Stormwater Monitoring.

2) Get your feedback on our *Key Recommendations*.

We value your feedback. Thank you again for coming today!

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8:30	Coffee and Networking	Everyone
9:00	Welcome, Introductions, Overview of the Day	Margaret Norton-Arnold, *Facilitator*
9:10	Stormwater in the Context of our Regulatory Approach	Kelly Susewind, *Dept. of Ecology Water Quality Program Manager*
9:25	What We've Accomplished Since November 2009	Jim Simmonds, *Work Group Chair*
9:40	Proposed Regional Program Components • Discussion and Feedback	Karen Dinicola, *Work Group staff*
10:30	Break	

10:40	Status-and-Trends Monitoring Recommendations • Discussion and Feedback	Jonathan Frodge, *Work Group member*
11:30	Lunch • Plans for Coordinated Ecosystem Monitoring • Networking	Nathalie Hamel, *Puget Sound Partnership*
12:15	Source Identification Recommendations • Discussion and Feedback	Mindy Fohn, *Work Group member*
1:05	Break	
1:15	Effectiveness Monitoring Recommendations • Discussion and Feedback	Carol Smith, *Work Group member*
2:05	Break	
2:15	What Did We Hear?	Margaret Norton Arnold, *Facilitator*
2:30	Any Final Comments?	All Attendees
2:50	Next Steps and Adjourn	Jim Simmonds

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Directions to the Renton Community Center

From the North: Take I-405 southbound to Exit #4 (Renton-Enumclaw). Go through the first stop light, turn left on Maple Valley Highway (South 169). This will take you under I-405. Continue about 500 feet and turn right at the second stop light and follow the entrance driveway to the large parking lot area. The Renton Community Center, Carco Theatre, and the Henry Moses Aquatic Center share the parking lot.

From the South: Take I-405 northbound to Exit #4 (Maple Valley-Enumclaw). This exit will divide, take the first exit to Maple Valley-Enumclaw (South 169). At the end of the off ramp, turn right. Turn right at the second stop light and follow the entrance driveway to the large parking lot area. The Renton Community Center, Carco Theatre, and the Henry Moses Aquatic Center share the parking lot.

Questions for Discussion

Our workshop today is organized according to four presentations, followed by discussion from all of you. It's important that we get as much feedback from you as you are in your discussion groups – we're eager to hear what you have to say. Please think about these questions as you listen to the presentations:

Session One/Proposed Regional Program Components. *As you listen to Karen Dinicola:*

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

Session Two/Status and Trends Monitoring. *As you listen to Jonathan Frodge:*

1) What questions do you want Status and Trends monitoring to answer?

2) What barriers exist to an integrated regional approach?

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

Session Three/Source Identification. *As you listen to Mindy Fohn:*

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

Session Four/Effectiveness Monitoring. *As you listen to Carol Smith:*

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

Appendix B – Workshop Notes

Table One – Facilitated by Tony Paulson and Allison Butcher

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

- The WRIA 8 funding formula has been working well and is a good example.
- It's hard to see where DOT fits in here…and with cost-sharing.
- Bainbridge Island already has a comprehensive program. How do cities like them fit in/benefit?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

- The plan needs to do a better job specifying which islands/island counties are included or not. (Island County and San Juan County are not included, but the islands of Bainbridge in Kitsap County and Vashon Island in King County are).
- Could existing state/federal funds (from existing programs) be directed/earmarked toward this effort?
- The federal agencies don't have a direct role in stormwater management.
- A lot of agencies have their own programs.
- The hope for this effort is to go beyond NPDES to provide useful data.
- How much federal $ has gone into other large-scale clean-up efforts, such as the Chesapeake Bay?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

- Concern about how cities can show their constituents a direct benefit to participating in the pay-in option.
- The entity chosen to run this should be independent of DOE and PSP and not subject to politics.
- What about offering incentives for entities to participate?
- The Storm Water Technical Institute is grant-funded; however, the entity that runs this needs to be long lasting (i.e. have a steady funding source).
- WRIA 8 is a good example – program housed at King County, and there's a clear firewall against political influence.
- How would compliance/enforcement and reporting fit in insofar as monitoring requirements go?
- Over the long term, this should be organized as a trust to deal with the money, with a separate unit that does the monitoring.
- Need to consider administrative overhead. Don't want to have to pay more than necessary for this.
- Need to do a better job defining pay or play. Who is in and who is out? There are a lot of holes, and we need to be careful. Need to clearly specify this for all entities/jurisdictions (e.g. military bases, tribal land, etc.).

Session Two – Status and Trends Monitoring

1) What questions do you want Status and Trends monitoring to answer?

- Why was in-stream trout removed as a biological indicator?
- The water quality index is very broad – may not be able to say much about stormwater.
- Need to better target stormwater sediments as an integrator…need to capture what gets washed through to Puget Sound.

- Sediment is a good indicator of what's accumulated over time.
- The S&T monitoring program doesn't seem integrated.
- Plan doesn't show bioaccumulation of anything that can accumulate in fresh water tissues.

2) What barriers exist to an integrated regional approach?

- Like the idea of watersheds, but this could be problematic for cities that fall in more than one watershed.
- What about the islands?
- With the matrix, it is hard to see how DOT fits into status and trends monitoring.
- A major barrier will be pushback from cities/entities already monitoring certain sites and following their own protocols – convincing them to change will be hard.
- With random sites, there's no guarantee you can access them or that they'll be feasible. There could be safety hazards; it could fall on private property; there's a whole host of potential, practical limitations.
- Choosing right-of-ways will bias/alter results.
- Some sites are applicable to water quality standards, and some are not.
- What about individual liability issues, given the need for any agency to take action once an issue has been uncovered by S&T monitoring?
- Do we want to go to numeric? This could bust effluent limitations off the table, and measuring water quality criteria could lead to potential violations.
- We want to avoid third parties forcing monitoring; this effort needs to be focused on improving overall water quality.
- For cities, there's a concern regarding legal obligations, but they could be liable for not acting.
- Can there be a mechanism for providing technical assistance and offering a shield from lawsuits?
- This plan would benefit from adequate legal vetting.

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

- Ecology needs to play a role.
- Would existing programs be able to play a role? Could status and trends be incorporated into this? Ex. Dept. of Health's existing program.
- Depends on the study as to where entities best fit in.
- Concern expressed re: losing local knowledge if state/others step in to do studies.
- Can we borrow on entities already doing the monitoring? Ex. Snohomish County vis-à-vis its smaller cities with less resources and involvement in monitoring.
- There's a challenge with larger entities that might not be willing to share their resources.

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- Scientifically this makes sense.
- The challenge is it is difficult politically for cities to dedicate funding for areas outside their boundaries – concern re: the need to benefit taxpayers.
- Supposed to use SWMM fees for stormwater.
- WRIA 15 is defunct – didn't function very well. Not clear how this would work in WRIAs such as this.
- Areas outside of WRIAs could possibly be picked up by the state.
- Have to be able to show a benefit outside city boundaries.

- It is worth finding a work-around for this.
- Could consider problems on a WRIA-basis.
- Investigating certain pollutants may take you outside of your permit area.
- Our approach to marine waters needs to be built in the Source Identification Program, needs more focus.
- How do entities such as companies, agriculture, forestry, military and tribal land factor in?
- The big question is, who is setting the priorities and how within the WRIA?
- The WRIAs are not currently set up to assume this role, so this would be a challenge to overcome.

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- It's all about scale.
- This is not easy to answer.
- Impairments have not been identified in all areas – this question is a little like putting the cart before the horse; we don't have a solution.
- TMDLs get all the money and support.
- How would the following fit in with this new program? 1) TMDLs with a stormwater component listed in the permit (note: they're expensive); and 2) S4F with DOE notification to eliminate the source.
- We need to focus on what already works.
- Some cities already monitor outside their boundaries (e.g. Bellingham).
- How many "votes" go into the system? Would it be decided by population, impervious surface area, something else?
- It is difficult to separate out stormwater from the rest of the monitoring world. One option would be for the state to pay for monitoring with locals focusing on source i.d.
- Need criteria for source i.d.

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- D. is too far-reaching and broad.
- The criteria in the permits should be directly related to the effectiveness of their programs. But specific BMP monitoring is more rigorous and costly.
- LID is already proven, so why study?
- Legally, the ownership is still with the cities to do the BMP monitoring, but it's difficult – so let's do something different.

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

- Effectiveness monitoring is the most important of the triad – behavior, operational, structural.
- Where does adaptive management fit into the current permit structure?
- The goal should be to increase efficiency.
- Ag might fit under behavior, i.e. allowing Conservation District on property, help w/ BMPs, etc. Would help to measure this with effectiveness monitoring.
- How does this list of things that should be done translate into the permits?
- Are Ag BMPs effective? (i.e. small scale hobby farms, nurseries, etc.)
- Currently there's no enforcement.

- The focus areas are good, but the question is how you apply them.
- Should allow studies to look at new technologies.
- Cities should maintain the ability to prioritize these studies.
- We should avoid outfall and facility monitoring.

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

- **Note from Allison:** Our group suggested that it would have been easier for this discussion to have the 8 criteria (question #1), 5 proposed focus areas (question #2) and the 4 priority topic areas (question #3) actually listed with the discussion questions. Our group found it a little bit cumbersome to sift through the report and find all of the above when trying to answer these questions.

Table Two – Facilitated by Bruce Wulkan and Heather Kibbey

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

- Allocate by current budget for stormwater monitoring. Some projections involved – perhaps use % of utility fee? (Not all have utility)
- Could do it based on per capita and jurisdiction size, or land use and riparian miles (or shoreline miles)
- Could do it not to exceed x% of budget
- There's an element of buy-in based on study category based on jurisdiction (**Heather, not sure about this?)**
- If you do good, could reduce fee as an incentive (based on new impervious surface)

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

- Mixing of regulators and non-regulatory is awkward.
- Seems to be a mix of SWG and other entities – should explain better
- Explain relative roles of SWG and entity in future
- Call out role of volunteers more
- Clarify data review and analysis – Who?
- How are site specific special studies handled?
- More than just WRIAs coordinating

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

- Start up funding from legislature?
- Focus initial efforts on S&T; do others later.
- How does pay-in coordinate w/current efforts?

Session Two – Status and Trends Monitoring

1) What questions do you want Status and Trends monitoring to answer?

- Questions in framework are good.
- Doesn't address specific waterbody.
- Good that it builds on current programs.
- Complete the inventory of what's been done.
- Are our stormwater programs causing an effect? Will we see trends? Will S&T connect back to management actions?
- Using random approach, won't get us there – is a WRIA trend, not a site trend. (**Heather??)** Won't tell us enough about program effectiveness on management actions.
- Not enough data with two samplings.
- May need to link effectiveness sites to S&T sites.
- May need to choose some S&T sites – all randomly chosen sites may not show what changes are happening.
- May need some weighted.
- May need to weight 3 sets, based on impervious surface cover (could use low, medium, high impervious cover).
- Clarify number of stream flow gauges – add more!

2) What barriers exist to an integrated regional approach?

- Geologic, hydrologic, site access
- Local governments spending utility fees outside their jurisdiction
- Stratify sites/jurisdiction to solve this barrier
- Political education needed
- Environmental groups – education, communication
- What's the construct of the new entity?

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

- Those who are doing studies currently should continue
- Volunteers can do more!
- Universities – data analysis, too
- Coordinated efforts for grants
- Consultants
- Hire other jurisdictions
- Local watershed groups
- House S&T data in one entity
- May be different by watershed – King Co. (**Heather???)**
- Everybody varies by site
- Other thoughts: Good to have fish data, but outside of permits.
- Clarify monitoring frequency in the doc.

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- Unclear how to prioritize
- One goal for TMDLs is to cultivate participation by locals – does this bypass this?
- Locals still have responsibility to monitor. Build on TMDL monitoring; better knowledge of own problems/systems
- Transfer of what needs to be done at the WRIA level – locals currently not strong
- May not pinpoint local jurisdictions as responsible
- Local interests play stronger role – WRIA driven not realistic, boundaries cross
- Budgets – how does group funding funnel to local problems?
- Cost effectiveness of local efforts – closer knowledge of system, motivation (**Heather???)**
- S&T gets to larger level (**Heather?**)
- Priorities inform decision making and what is targeted
- S&T can act as characterization after one year
- How does this fit with IDDE? How does this fit with local expertise?

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- Who will identify high priority impairments? Clarify.
- 2
- 1 or 2 to allow for startup – size of problem matters (fecals vs. Superfund)

- Not comfortable with number; could be related to costs
- Criteria for prioritization is very important.
- What is chosen needs to have reasonable correlation with stormwater discharges
- Experimental process - #1 on first round and adapt later (**Heather??)**
- Other: Link to storm events? Don't remove other options – trading – when not directly a stormwater issue (just hits our ditches)
- TMDL requirements – different for each permittee

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- D and E are odd criteria, kind of pre-judging result, biasing choice
- E – cost – effectiveness – are we considering the resource over time? Interpret cost to the resource too.
- Add applicable and transferable – broad, wide scale use – bang for the buck
- C – reword for diversity of priorities
- One question good, but hard to get all others to follow
- Simplify G – just "linked"
- Mention surveys as okay, like public education, ESC program, road sediment, etc. Non-structural
- Central clearinghouse, SWG act as auditors for how program is working
- Add that findings are transferable

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

- Don't like BMP monitoring by locals
- Like A and B LID retrofit
- E is vague, like a placeholder
- Death by a thousand cuts – is solution a thousand band-aids or one big regional band-aid?
- Benchmarks - # of sediment removed from system – need metrics and baseline
- How programs get funded and up and running retrofit

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

- Hard to find the 4 priority topic areas in the document – confusing.
- Seems similar to question #2
- Need more specificity on which aspects of permit to be examined (i.e., IDDE, how many sources, business inspections, survey of BMPs installed; ESC installed, quality of installation of BMPs, O&M, stormwater facility inspections, # of calls on hotline and responded to, types of calls on hotline.)

Table Three – Facilitated by Carol Smith and Julie Lowe

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

- Municipalities want to know how this pay in option will affect individual monitoring programs currently being conducted and how they fit into the scope of this program.
- What if you buy in the program but you have individual effectiveness programs still needed to be implemented in your jurisdiction. Do they get credit for these? This is an extra cost.
- Phase I jurisdictions have transformed their programs (King County, Seattle etc.) from receiving water base to stormwater base and have spent a lot of $ to direct toward stormwater. They may be discouraged if this program goes back into receiving water monitoring
- Look at other examples of pay in structures. For example California Water Board's structure which sets regional priorities (example: reducing copper and mercury in Bays). Jurisdictions also do additional monitoring specific to their jurisdictions.
- Don't only consider or base the pay in structure on population only, this may not be equitable
- Pay in option may take funding from currently needed monitoring programs on the local level
- Sampling outside of the jurisdiction will be problematic for local jurisdictions. In fact, some jurisdictions have ordinances that prohibit using stormwater fee money outside of the jurisdiction.
- Divide out and develop the pay in option by certain criteria (% imperviousness, broad land use based, population, acreage, watershed condition, or a mixture of metrics)
- A good balance is needed for the pay in option to prioritize what exactly a jurisdiction pays for and what exactly is done
- A goal should be tied to the funding
- Michigan has a good example program of a pay-in structure. Their permits are watershed based with a lead entity that collects funds from all jurisdictions within the watershed area. The funds go to consultants or third parties that do the monitoring, develop stormwater plans etc.
- Ecology should be in charge of the pay-in program since they already have the fee structure in place
- WRIA group versus WRIA scale – very important. We should change this to WRIA scale since WRIA groups are very salmon focused.
- Discrepancy between Roles and Responsibilities Matrix and Page 69 of draft strategy:
- Page 69 reads "biological impairments can be more difficult to diagnose than water quality impairments because they could be related to a wide array of chemical, physical, and/or biological stressors. Some jurisdictions may not have the staff resources to evaluate the full range of potential stressors. Therefore, diagnostic monitoring for biological impairments should be led by the regional status-and-trends monitoring group, with support from the affected local jurisdiction(s)."
- Also, on Page 69: what does lead mean/entail? Does lead entail coordinating? If so, then it is fine.
- Source tracing on the small scale per jurisdiction should be management and implemented locally.
- Will the regional program work with TMDLS?

Session Two – Status and Trends Monitoring

1) What questions do you want Status and Trends monitoring to answer?

2) What barriers exist to an integrated regional approach?

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

- The assumption should be an issue of scale
- Status and trends could be a problem for areas which are extremely degraded. Longfellow Creek in Seattle – BIBI scores are really poor and what if the City has done everything they can do but never see any change? The linkage to the permit program to Status and Trends can be scary. What if you are implementing everything in S5 but never improve the endpoints?
- It may take a long time to see improvement and the program needs to be flexible to allow for adequate recovery time if biological endpoints are used.
- Stressors may not be comprehensive enough
- Rotating sites every two years is not enough data
- Status and trends is better for evaluating a larger, regional program but may not reach into the local program such as Seattle.
- Status and Trends based on random sampling is not compatible with answering local stormwater planning questions. Since this ties to source identification, local source control efforts will be performed in random areas as well.
- This program is not designed to address local problems
- Emerging chemicals of concern and unknowns provide barriers to biological endpoints.
- Random sampling is good for determining regional averages but not for defining local problem areas
- What if you do not see a biological response?
- Currently, the Phase I stormwater characterization monitoring links to stormwater management decisions. If this program replaces it, how does it link to stormwater management decisions?
- This program still does not answer the overarching linkage question: how does the data collected in the receiving water link to a particular stormwater discharge? This no longer seems to be the focus of this group.
- Status and Trends will be important on the local level only if a direct, solid link is made with the diagnostic monitoring.
- Research by the Universities is needed to tackle new emerging chemicals of concern (California did this)
- The Regional program should focus on the larger policy issues (example: copper) and not try and address local programs
- Barriers include finalizing sampling sites, disconnect between the probabilistic design and other designs such as Department of Health's sample design which is NOT random.
- Small streams link to nearshore is missing
- Methods need to connect as well
- How does the nearshore program answer stormwater questions?
- Rotating sites will not result in statistical power
- The sampling proposed is not at all linked to wet weather which is a problem for stormwater
- Can Ecology even legally require receiving water monitoring? This is not a permittees obligation. It may not be legal for permittees to pay for monitoring conducted outside their jurisdiction.
- Is stormwater the vector? As expressed through flow, temperature and water quality, only partially because degradation from loss of floodplains, wetlands, etc also alter the biological endpoints.

- Group is unclear and needs more information on the water quality index. What type of sampling does this involve? Grab samples may not be adequate
- What about contribution from air pollution to biological endpoints?
- Will exotic fish species be used as an indicator?
- You need to clearly define your question before you write a sampling design. The question drives the design
- Need for flexibility in random sampling

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- Is the shoreline associated with the WRIA boundary? What about small streams and sloughs that connect directly to Puget Sound?
- WRIA scale is too large for management decisions. What about sub basin – better for targeting and characterizing
- Scale suggestion: Smaller catchment area
- Use a 5-year cycle and move through the WRIA
- WRIA 8 has 27 jurisdictions – who gets the project in a 5-year cycle? Need a standardized approach to prioritize. Base it on degree of impairment or other criteria such as economic impact (ex. shellfish a higher priority in some areas)
- Heavily populated WRIAs are challenging for prioritization compared to rural areas
- What about WRIAs without municipal stormwater permittees? Maybe nothing is done there? They may just fall under 303d listing
- Prioritize by population, size of the source, create categories for prioritization – by county?
- Require in the permit a baseline level of effort in each WRIA then use the data to prioritize additional efforts
- Include recreation and economic in the criteria for prioritization
- Does this program get at the noise or the peak of a particular problem? Distinguish the problem you are trying to get at, noise is hard to fix. Is the intent to get at the noise?
- WRIA piece helps to organize, then move it out
- WRIA concern: what if the highest concern is in the most downgradient area of the WRIA? Jurisdictions at the bottom of the basin will have a greater burden for management.
- The number of impairments to investigate should depend on the size of the impairment
- WRIA scale – implement a screening program to identify number of sites
- Every jurisdiction should have at least one source identification project
- Define a reasonable effort = 1 fix, check the box for your permit, move on.
- Timeframe doesn't work because it depends on size of impairment. For example, opening a beach may take longer than 5 years
- For Phase I or larger entities, how do we keep up the momentum with what they are already doing? We need to keep current efforts moving forward
- Define the level of effort and develop a criteria/screening process
- Ecology review and approval of QAPPs can help define a level of effort
- Tier this program by providing a menu to select combinations of responses
- Does this program fit better regionally and should a regional consortium be used instead of requiring this by permittees using a team of trained people to work through the region?

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

- We shouldn't develop study ideas, allow that flexibility
- Create it similar to the grant programs where they pool ideas and then select top projects
- Distinguish between permittees and non permittees
- For those that choose not to "buy-in", do they have a voice in the consortium? (Assuming buy-ins propose ideas to consortium).
- Important criteria to be added = transferability of the data/results to other areas throughout the sound or state.
- 2 year time frame should be changed – don't be too prescriptive on this. Good studies may take more time.
- The selection criteria should connect to beneficial uses
- A good example to use is the Puget Sound Institute. This is a good model and is up and running. This could be a candidate for this program – for how to fund.
- Focus areas are ok, but very different
- Leave flexibility in the project focus areas. People should be able to make a case for a different priority.
- Permittees like S8.E in Phase I permit – very flexible and most useful to King County. Use this framework for design. Because of this, they liked the non-structural topic area because many different types of monitoring can fit into this.
- Retrofit testing is not quite ripe yet since may projects are not in the ground to test.
- For priority areas, why was forestry left out?
- Ideas on process: Puget Sound Institute
- There are challenges with local governments spending money outside of their jurisdictions
- How is the data applicable to individual jurisdictions?
- Clearing house is needed for data and projects

Table Four – Facilitated by Mindy Fohn and Tim Determan

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

Session Two – Status and Trends Monitoring

1) What questions do you want Status and Trends monitoring to answer?

2) What barriers exist to an integrated regional approach?

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- Placing priorities at the WRIA level may not be in the best interest of the local jurisdiction and place a barrier to their participation.
- Local jurisdiction may need to respond to serious issues immediately (law suits, etc.).
- WRIA prioritization may lock up funds needed to deal with local issues.
- Need an "opt-out" for jurisdictions not involved in the priority problem.
- Prioritization is not the same as implementation.
- Source ID: do a literature search for specific pollutants that are linked to potential land-based sources.
- Can data source risk survey be included in the prioritization?
- TAG (groundwater protection model): Redmond scored potential sources according to pre-defined factors.

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- There must be a balance of what needs to be done. You can't do everything well at once. Do a few things really well.
- Choices may depend on the cost of the control program. Fecal coliforms may be more cheaply controlled than pesticides.
- Adopt the industrial permit model. Monitor according to the issue presented by the discharge.
- Jurisdictions doing TMDLs already have the priorities set.
- In receiving waters, there are background stressors that must be considered.
- Storm water quality has been under discussed. This is a burden to development.
- May players contribute to storm water sources? Are they all at the table?

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- Include the difficulty of the study, costs (structural, readiness to proceed, pre-planning, new facility vs. retrofit, etc.)
- The time frames for studies might not be realistic. Some studies may take more time.
- Has a proposed study been done before? Let's not repeat past work, but focus on learning something new.
- There is lots of monitoring done without a feedback loop. This should be avoided.
- Can effectiveness of social programs be measured? Yes.
- A BMP should be monitored for the life of the facility. What are the true costs of maintenance?
- Effectiveness monitoring should include a "practicality" component.

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

- We should analyze the feasibility of installing LIDs. Ecology need to supply definitions.
- Regarding funding of projects, what are the criteria? How are the projects selected? And who will carry out the studies? Are there sufficient resources and skills available LOCALLY?
- The WSU LID Center could be considered as a model for doing studies.
- We must understand the "real world" limitations to LID studies.

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

- Ecology should narrow down the provisions included in the permit.
- Pick the highest priority provisions, and include a cost/benefit analysis.

Side discussion (during break)

- Monitoring requirements are not equal between "SIC code" and non-"SIC code" industrial facilities. SIC code facilities have stiff monitoring requirements. Non-SIC code facilities have none. (Submitted by TAD)

Table Five – Facilitated by Jonathan Frodge and Dick Gersib

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

Session Two – Status and Trends Monitoring

1) What questions do you want Status and Trends monitoring to answer?

2) What barriers exist to an integrated regional approach?

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- There was some agreement on identification of source priorities at watershed/basin scale. There was confusion between prioritization at WRIA level, were we suggesting WRIA as a geographic scale or as the governmental organization level that is often organized on the WRIA level. If the proposal is at the governmental organization level, that may be too large and complicated for the specific issue that the source ID and control is concerned with. Many source problems will be at a smaller scale than WRIA, many may be confined to a basin entirely within one governmental entity. For example Kelso needs to work with four counties.
- Sno Co discussed the issue of dueling priorities, where Everett may be interested in PCB, the county is interested in prioritizing for fecal coliform..
- Everyone agrees that it is a good idea to compare notes after the initial prioritization. The two way communication on issues and techniques was generally appreciated.
- What goes into the permit was a reoccurring theme, with reluctance to place too many requirements into the permit.

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- Depends, $, feasibility, at least one, not sure if it should be in the permit, depends on Status and Trend data, driven by 303(d), concern with expiation of responsibility under the permit
- 'Ecology cannot require cooperation'.
- 4b approach
- Use the IDDE as the method for enforcement
- When anything is in permit, liability increases.

- Problem of spending money outside of jurisdiction where it is collected.

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- 'no' use 8 criteria to set effectiveness
- Should apply to S&T and Source ID
- "is what I am doing at the local level having an effect?"
- Add effectiveness studies relavant to stormwater mgt requirements in the permit
- Need nexus between activities in local waters and permit requirements
- Effectiveness should not be tied to compliance. Why not? (back and forth conversation w/o consensus in group)
- Not worried about Ecology, worried about third party law suits
- "is the permit as crafted and implemented by Ecology having a positive effect on the environment and receiving waters?"

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

- Discussion on "what is good enough?" should there be lower standiards in urban areas where the environment is already compromised by impacted water quality and beneficial uses.
- What is the public perception of expected ecosystem services?
- "Regional effectiveness is less important to local jurisdictions relative to local effectiveness"

Table Six – Facilitated by Jay Davis and Dana de Leon

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

- How are Federal $s now & in the future going to be used for this stormwater effort specifically (past $s were $10Mil and $20Mil – this fiscal year its $50Mil but how much goes to stormwater)?
    - To grants
    - To PSP
    - To Ecology to fill holes
- How can you pay into a particular WRIA/Basin? What if the basin crosses jurisdictions?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

- WRIA approach is better but need 2 way communications. Data rolled up to Puget Sound level but also passed back down to local level.
- Not clear on City/County Role
- How do TMDLs fit in?
- What entity will do S&T and Effectiveness monitoring? Is Source Control/ID by local jurisdictions best (probably yes)?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

- Use pay-in option as a requirement in permit through increased fees then it is easier for jurisdiction to justify money to public
- Is paying in "Legal"
- What is equitable?
- Allocation by population/per capita, area/land base, and median income.
- Will probably be sticker shock for phase IIs but not so much for Phase Is who already do the work.
- Helpful to have $s crunched on different bases: surface impervious, roads, population, and income and then see what makes sense.

Session Two – Status and Trends Monitoring

- # 1 comment: Build on Existing Programs!!!

1) What questions do you want Status and Trends monitoring to answer?

- Hope that one study can lead to a finer scale study if needed (study isn't lost if it needs to be refined)
- How to link to Research
- How to prioritize
- How to tie back to stormwater management
- Use Stormwater Monitoring Programs as a basis than add other needs/questions on top that aren't tied to NPDES Permits specifically
- Use sediment sampling as one-time, throughout the watershed/basin to target/prioritize problems areas

2) What barriers exist to an integrated regional approach?

- BIBI data linked to Permit requirements and source ID is scary (source can't be found)
- Standardize Data Analysis Methods
- Need Data depository – one stop shop
- If someone looks at data, makes recommendations, then what? Who follows through sharing that information and who does the adaptive management?
- Random is tricky vs. reality (site access, losing sites, etc)

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

- Have Local organizations/jurisdiction do the monitoring for local streams to build feeling of responsibility and ownership
- Use volunteers/citizen scientists
- Use QAPPs and SOPs to help locals/volunteers to generate quality data that is consistent and comparable throughout the Puget Sound
- An entity that is not bound politically but science based
    - Entity is responsible/needs to get permanent funding in order to be successful

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- Confusion at WRIA definition (Some WRIA Organizations are difficult to work with)
- Refine to stream boundary, Watershed and subbasin not WRIA as a term (watershed is more ecosystem based).
- Which group decides prioritized list?
- How to fund efforts (worse problems)

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

Other Comments:

- Define that there are Different types of problems and at different size levels (scale issues)
- Example: Ecology's Zinc study and report: Pollutant driven and activity driven. No need for a site study on zinc. It is well documented where zinc is coming from and would be applicable region wide (pollutant driven) while fecal might be more of a local issue (activity driven).
- Data mine current Inspection/spills/complaints databases to find common problems in region and help generate regional solutions (education materials targeted for restaurants, gas stations, etc)
- Identify programs that aren't effective using existing information (IDDE dry weather outfall sampling not working, look at $s spent vs. problems identified).
- Need Data Depository to share information and results
- Identify $s needed for data management NOW
- Need to make sure that studies get into final reports (lots of data isn't written up)
    - Provide grant fund for peer review papers, or
    - Make sure info is in report format as part of grant or permit requirement

- Great that Agriculture is included

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- Emphasis on appropriate site selection for question being asked (make sure the hypothesis is truly testable).
- Good that New technologies/old technologies data gaps was identified
- Concern that education isn't enough. Need to look at financial force (fines) to get point across
- Difficult to measure behavior outcomes – look for other ways to measure
- Look at $s spent vs. measurable outcome
- May need longer term for project (>2 years) to determine maintenance life

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

- Look at other BMPs such as buffers .. are they enough for all chemicals?
- Existing BMPs: need to evaluate life of BMP, maintenance cycle
- Modeling of Societal Behavior as another type of effectiveness monitoring

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

Other comments

- Phase IIs may only be able to participate on small site BMP types
- Need to incorporate Modeling to show how BMP studies can be incorporated into larger landscape
- How many BMPs are needed to show effect on stream
- $s for BMP effectiveness isn't enough
- Storm Criteria revisit for each study – one size doesn't fit all

Table Seven – Facilitated by Heather Trim and Tom Putnam

Session One – Proposed Regional Program Components

Comments:

- Phase 2 cities person voiced dissatisfaction with allocating costs based on "functional" formulas like amount of impervious surface. (Phase 2 permit fees now based on per capita income?) Birch Bay- fee paid for % impervious surface and density.
- Basing cost allocation on per capita income and/or impervious surface is troubling if not covered by permit area, e.g., non-permitees
- How to cover non-permitted areas?
- Don't lock in funding sources; they will change. Fees should be motivational to change behavior. Focus on harm done; they should pay more.
- Look for credible funding models elsewhere. This is being done in quite a few other states.
- Funding should be sustainable, long-term. State and federal funding not reliable long term. Maybe use state/fed for initial funding only, and then phase in fees when credibility is established. Look elsewhere such as San Francisco Estuary Institute—POTW's—toilet paper tax?
- In California they are reluctant to fund monitoring; producing data produces liability. Must look to the long term good.
- How to incentivize? Drop outfall monitoring for participation.
- Statement of mission must be broad; must recognize scale of monitoring that is desired and necessary relative to that required by permits.
- Right now Phase 2 jurisdictions don't have the staff or budget to monitor; they may opt out.
- Phase 2 may not opt in because they are already doing their own monitoring; no local budget to fund "new entity." They are worried.
- Funding should reflect individual responsibilities. These questions are focused on government entities but they aren't the cause of problems.
- New entities are very expensive. Consider using UW/Tacoma/PS Institute and/or Puyallup Tech Center/committee for these functions—these are groups now being started up.
- First 5 years, must have stable base, stable funding. Maybe state and fed funding for this; after that, shift to other sources (could still have pay-in option earlier too.)

Summary:

- We must realize that the scale of monitoring is large and goes beyond permit requirements and coverage. But there are difficulties in equitably allocating costs.
- Phase 2 jurisdictions are worried; they don't have the staff and budget to monitor much or to pay for a "new entity." They may opt out and stick with the monitoring they are currently doing. There is a need to find incentives for them to participate.
- Funding should reflect individual responsibilities
- Initial funding must be stable; perhaps first five years should be state/federal, and then shift to local fees when credibility is established.

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

- Don't know. Could do arbitrary formula (1/3 state, 1/3 fed, 1/3 local). Has been uncomfortable with functional-based system (impervious-surface-based) because not good for state/local. Could work for some entities. Per capita might work. Or total people in the region. Could look at ability to pay.
- Controversial. Phase 2 are based on per capita and median-income so quite a range of jurisdictions are in place.

- For a Birch Bay study she is doing, people pay a small fee for their impervious cover and density – seems to work.
- Per capita. Troubled though (example: Port Angeles is surrounded by county) – if look at watershed, you would need to include these other areas for doing impervious area. Watersheds are above all of the impervious areas. How do you get some funding from non-permitted areas. Those areas have impacts. There are gaps in the coverage by the permits.
- Would not like to LOCK ourselves into a fixed formula as funding sources will change over time. (maybe more of a state share at first, more local share as time moves on)
- Could use the pain of paying-in as incentive. Petroleum use-based fee, for example
- Ag areas don't have a lot of population.
- Are there other groups in the US that have attempted to do this and see how it was done?
- SFEI is based on population size. Need to confirm this
- Need to be looking for sustainable long-term funding. State and federal funding are not reliable – winds of change and other factors. May be good for initial funding. In reality the stormwater dischargers/munis are the ones that are more reliable
- SFEI – is funded by industries, POTWs, and stormwater dischargers. Need a totally independent fee. A toilet paper tax. Need to be creative. Maybe fee should be phased in over time as the organization establishes credibility and so public could be brought along. Look at the long term and in the meantime, look at federal and state dollars and give a carrot to the municipalities in the short term.
- In California, the stormwater agencies have been very, very reluctant to fund stormwater funding. They have policy of don't look, don't ask, don't tell.
- Local entities could contribute 50% and get state/federal and in long-term it would be more based on storm-fees.
- Recognize the scale of the monitoring effort rather than just focusing on the Permittees. Just satisfying the permit, then that would be the scale for that amount of funding. Adding in the bigger picture makes the funding a partnership of the many levels of funding sources.
- Statement of the mission of the Framework needs to be clearer. It should be more than just the Permittees.
- From small Phase II perspective, cost allocation is less of a concern than the cost itself. They have just one staff position and that is grant funded. Fighting to be able to do monitoring at all. Small Phase IIs are going to have a major challenge.

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

- Setting up a new entity is extremely expensive and so should look at the existing entities. Should look at the PSI and WSU-Puyallup Center as the ideas.
- Need some base funding for 5 years that is independent to get the momentum going – Could be from EPA. Show a track record of success. Grants or something. The pay-in could ramp up within those 5 years.
- Opt-in and opt-out – not sure how they feel about opting in because they have been doing their own monitoring. Tthey know their own problems and the benefit of regional monitoring for the city is not clear.
- Small Phase 2: Do not have budget to fund new regional entities – overhead and staffing for the 3rd party
- The questions we are being asked are biased towards assuming that government agencies will solved the problem rather than changing people's behavior.
    - But other participant's opinion is that this is just about the monitoring, not the education we are talking about today.

Session Two – Status and Trends Monitoring

Comments:

- How do we isolate stormwater effects, say, in the nearshore—there are other stressors.
- Cause and effect relationship is difficult to identify.
- Don't necessarily look at the lowest detection limits, it's too expensive. Work in steps, start small, and keep users, endpoints, and beneficial uses in mind.
- Need to address local problems and change behaviors. Phase 2s and others are not sure of the benefits of regional monitoring.
- What areas need help? What are the sources of contamination? These questions can drive prioritization.
- What level of signal in the data prompts action (what are "trigger" points?)
- There is a tension between allocating dollars for action vs. for monitoring.
- What are the emerging threats? State and feds should fund this area.
- How to link S&T to Source ID and Effectiveness? Perhaps S&T is part of a larger monitoring universe and stormwater monitoring should focus on Source ID and Effectiveness studies.
- Initial emphasis on Status and Trends; increase Source ID after five years or so.
- Barriers: funding; regional cooperation. Who leads? Very difficult!
- Issue of local control
- How to transfer from existing multiple efforts to regional coordination?
- Problem: partners dropping out. Can impact priorities, coverage, and continuity.
- Barrier: potential liability for municipalities
- There may be multiple permitees in WRIA but also there are unpermitted jurisdictions you want to get to participate. How to recruit them?
- Since this new approach is more focused on receiving waters, not outfalls, Status and Trends monitoring becomes less stormwater-related.
- If it's not an issue related to permits, municipalities are less motivated to participate.
- A screen or filter for Status and Tends monitoring may be where you can have an effect.

Summary:

- Status and Trends monitoring is less specifically stormwater related and may thus be the purview of a larger, more general monitoring effort.
- Cause and effect relationships are hard to demonstrate.
- Some prioritization factors for S&T: what areas need help; what are sources of contamination; where can you have an effect; study emerging threats; identify threshold levels of threat.
- Work in steps; start small; focus on users, endpoints, and beneficial uses.
- Barriers: potential liabilities for municipalities; issues of local control; funding; regional cooperation; how to deal with unpermitted areas.

1) What questions do you want Status and Trends monitoring to answer?

- We don't have a good baseline in place yet
- Is stormwater the only stressor? We also have CSOs in the nearshore. How to separate and onsite septics?
- Supports sampling in streams, but cause and effect is tricky.
- This effort gets us started.
- Are already doing this in Surrey, Canada. Not as formal in the structure. Are looking at beneficial uses (for example, recreational users). Didn't look at lowest detection limits because too costly. Need to be sure about what and why we are monitoring. Not just because it would be great to know. Determne what can we afford to monitor for at the beginning.

- Their past monitoring is similar. They (Phase II jurisdiction) know where the problems are and want to address those. Not seeing benefit from regional approach. They are most interested in getting people to change their behavior. So no specific questions that they want answered because they already have baseline.
- What to have questins that answer areas that need help and what are the sources of contamination?
- What are the criteria for a signal and the results that prompt the reaction?
    - Connection between status and trends and source ID
- Thinks the focus on biological endpoints is good and the amount of effort (frequency) is good as well.
- Municipals are always stressed to put focus on monitoring because they want immediate feedback to the things that will want to make a difference – this creates a tension about regional S and T. Over time this data (S and T) is super good. The alternative is that we continue to stagger along as we have for decades
- What are the new and emerging stressors impairing beneficial water uses?
    - Other comment on that person's comment– you just added to your cost!
    - Another person's comment on that: That should be funded by state and federal government
- There is a ot proposed for S and T, is there a way to refine this for costs. Also, should look at the most burning issues (including emerging). Is it really necessary to do all of the metals, should we just do a few?
- Link-up of effectiveness monitoring and source ID is missing. This is a regional monitoring. Does the status and trends part go to another work group with a clear connection between those? Responses to this comment:
    - So the stormwater group should reduce their scope?
    - Or should we restructure overall?
    - This is not acknowledging who will do the work
- Thinks the money is correct (costs) for the first few years but wants to see the source ID costs go way up
- Would like to see water column sampling to answer related to in-water, during storm impacts (such as copper impacting sense of smell)? Responses to that comment:
    - Have already done some of the water sampling baseline sampling in the Phase I
    - Beneficial use is the info you need. Can't tie the outfall to the receiving water.
- Small streams is a good approach
- Track the success of copper brake pad bill impacts. Would like to have the before and after. Did the bill make the difference?

2) What barriers exist to an integrated regional approach?

- Funding!
- Regional cooperation – if it was easy to do, we would be doing it already. Who is going to lead the ship? They would love to be interacting more but….
- The watershed scale sounds great.
- Issue of local control, political understanding of the value of a regional approach, and can we overcome that with a good track record.
- How would you transition from the amount of data that is currently being collected to a regional program? What do pay-in members get as benefit?
- Barrier would be partners dropping out. In Canada, the feds dropped out (moved to working on air quality). Therefore, they had to provide a disincentive to dropping out (if feds drop out, then the program will drop shellfish monitoring because that was a federal thing)
- Sustainability of the program
- Potential liability associated. Point of compliance.
- Responsibility within a WRIA – unpermitted jurisdictions should be brought in, no incentive for them if it costs money.
- In Canada, looked at the wish list and then took things off the list because they had no control over it (can't control the sales of pesticides). Starting with the things they could most control. Teamwork in looking at issues.

Add more money to go to lower detection limits. PCBS were brought it because there was a partner that wanted to do that

- State has the responsibility to do 303d listings but on the other hand it the municipalities privilege to discharge pollutants. It is the state/federal's responsibility o identify chemicals of concern and then the muni to do something about it
- Small municipalities can do education on the pesticides
    - Response by someone else to that: Info needs to be spread region-wide. Not just an issue within a specific municipality.

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- Agree but it seems like a utopian world idea. Not sure that everyone would get along so well.
- Needs to be on a timeline – work towards it as a goal
- WRIA may be too big. WRIA 15 goes from Skagit to Olympia, for example. Within watersheds, you could take an action on that scale. WRIAs on the west side (Hood Canal) – need to look at the whole drainage basin.
- Clallam Co has just one city under Phase II, the other cities and the county are not. Who is going to be responsible? What is the difference between responsible agencies
- Also using S and T to find areas that are more degraded? Doesn't get that link? Random samples would somehow generate targeted sites, if truly random???
- WRIA level too big. Hood Canal has three WRIAs. Too complex. Implementation actions will occur at the local scale.
- Not including stormwater at the tops of watershed – lacking jurisdictional control
- Some problems are easy to find but some are much more insidious, larger scale. So there is a spectrum of efforts needed
- WRIA is good for big picture (shellfish beds) but need to get to individual jurisdictions to implement
- Funding is going to be a big factor in deciding the size of the beast to take on. City or community that has a specific issue – they want to put their funds to that.
- What is upstream and coming through also would be a reason to look at the bigger scale.

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- Some things we can go out and measure today, but other insidious. Depends on the scale. Integrated assessments for WQA and 303D can be at cross purposes.
- The way it is written right now, you might not be able to take it to full implementation. Need budget for doing each of the phases.
- Maybe Phase II should tackle two problems and the Phase I could do more. Sliding scale, depending on the size of jurisdiction
- Challenging question – many parameters. Should it be a beneficial use-based or number of parameters? Needs language clarity.
- Random sampling – TMDL program has already told us the impairments. We already know where the problems are and we just need to follow it up the watershed. Right now it is just BMPs. Phase I – illicit connection (IDT program) and phase II has that as well. Have to identify priority receiving waters.

- Need to get serious about categorizing what the problems are – narrative standards for now. Salmon – is it copper or is it habitat? TSS – doesn't quite tell us about the problem. Current permit has one toxicity test. But could be done more frequently with simpler approaches. Need to better define the problem that we are trying to solve - nothing so far in the plan about narrative issues. Numerical data at least tells you the problem to tackle.
- Should not be a count, but a percentage. You should tackle 10 or 15% of your streams. If we must have a number
- Does think it should be WRIA based so that we know that it is a priority (like existing TMDLs). Permit requirements should enhance work that is already going on. WRIA decides the known priority problems. First determine how many problems are known for each WRIA, not just say 3 problems per WRIA.
- The way the question is written, it is bean counting. You would just pick the low-hanging fruit. Need a way to do risk evaluation so we can pick the most important drivers.
- Individual jurisdictions already know where the problems are. Want a return on their investment – like reopening a shellfish bed. Need to know the biggest risks. How do we incentivize addressing the biggest risks?
- Need an equitable level of effort. There is more than one factor that would determine what is equitable. Contribution to the overall regional pollution problem in Puget Sound. Number of impaired waters (but not just what happens to be on the 303d list because that is random – something better, based on risk assessment)
- In Clallam Co, how much should be spent on source control versus prevention of future control. Need to think ahead and be more cost effective
- First permit cycle, need to look at funding and start up costs and how much do we really bite off so we are successful in what we do
- Two, because in last several years have been looking at fecal and sediment control. Should look at that and see how well we have done.
- He likes the example list of ranking criteria (page 68) – an excellent start.

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- Participants generally liked the criteria
- BMPs that are long-range and broad scale, and these might be the most important programs, can't be looked at in 2-4 years. So should not lock into this number of years. Public education may be an example.
- When a brand new product/technique comes on the market, we want quick answers to know if we can use these products.
- S and T, source ID and effectiveness monitoring could all be considered together rather than as three different things. In Dyes Inlet are doing an integrated effort. Should be efficient and well linked together. All part of the same package if it is on the same scale. Focused S and T on the stormwater – you already know where the stormwater problems are. Don't need to find the areas that are impacted, we already know this. What is the impact and inform the corrective actions (and it may be more than stormwater).
- "Addressing a gap" should be a criterion. What is the nature of that gap? Is it human health related? Some things are easy to find: Galvanized steel – we can spot it – we can go ahead and look at it, don't need to do S and T to get to this
- Apples and oranges are mixed in the criteria as listed
- Need to make sure it is something you can actually measure. If there are very small differences, and you can't show a difference. Did you waste the money or do you just feel good about it?
- Worst first should be the main principle. Make a big difference in your actions.

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

- Unintended consequences of some of our treatment techniques. Are we removing beneficial cations such as calcium which then triggers a negative effect on other pollutants? Are we removing nutrients that we need, when we are reducing toxics?
- Street sweeping would be included.
- Who will pay – will the local private property owner pay for it? What about the homeowner? Where are the incentives built in for private homeowners to reduce their sources? Permit fees. [Andy noted that this is not the question we are addressing here]
    - Gas tax? Industrial facilities.
- Ballard streets is a good example of public property LID efforts

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

- Need feedback – that is measuring the right thing. Need to know if we have met our goals
- TAPE protocols put a halt to new technology. Nobody could get anything approved. Need the tools on the workbench faster.
- Literature review is needed ASAP. We are leaders in the US. Let's not repeat our mistakes
- PSP has been working on the Puget Sound update – will come out soon. Looks at corrective actions.

Overall reaction to the Proposal

- Scientific framework is credible. Liked having peer review of national experts.
- Going in the right direction
- A lot of work in a short time frame, especially with all of the different perspectives
- Implementation plan still needs work
- It seems too ambitious. Let's take it a step at a time. Phased approach. For example, do TAPE and keep the other stuff on the back burner.
- Hasn't been a consideration of the political realities that will emerge with the new requirements for the Phase II. They don't even have staff to do inspections. Need to look at scale and phased in approach. "Don't heap the whole well-intentioned effort into a smoldering set of ashes and turn it into an inferno."
- Need to look at legal forces and environmental interests that are going to push for wq standards and outfalls
    - Some sort of outfall monitoring for small areas
- Be honest about the gaps in the proposal and recognize them now
- We don't know what Ecology's best professional judgment will be. Creates uncertainty.
- Current permit monitoring doesn't work because don't get useful information. So this is a step in the right direction and it is cost-prohibitive.
- Need to make sure we have buy-in from Ecology. Need the buy-in from the Permittees. Need buy-in from enviros.
- NPDES has been focused on outfalls, and assume that it will be good for the environment. This new approach looks at the environment directly to check this assumption and thinks that we will be more effectively making sure our resources are being well used.

Table Eight – Facilitated by Neil Aaland and Alison Chamberlin

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

- The proposal blurs Ecology's monitoring responsibilities
- Allocate costs on a proportional basis by stakeholder group; equitable allocation
- A base allocation depending on "footprint" – loadings
- Don't forget business and tribes
- Base it on population
- For pay-in to work, need a certain level of participation by all—baseline participation [strong agreement]
- **Need certainty for pay-in that obligations will be met (and don't then come back to those paying in and require more)** ***[general agreement]***

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

- Roles not yet correctly identified; e.g. what is the role of salmon recovery groups (lead entities, Salmon Recovery Funding Board)
- The role and structure of the Stormwater Workgroup needs more work
- **Independent entity is needed** ***[general agreement]***
    - Need a "firewall" for monitoring effort
- Independent entity should be more than a fiscal management entity
- Recognize the need for policy input, as well as technical input from the independent entity; how will state and federal agencies modify their programs to be consistent with this? Document currently states that agencies will continue with existing programs, vs. modifying as needed

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

- Everyone has to pay something (even if they do their own monitoring)—again, a baseline ***[a lot of agreement with 1 or 2 outliers]***

Session Two – Status and Trends Monitoring

1) What questions do you want Status and Trends monitoring to answer?

- Should start with asking about link of stormwater to biological end points, unless focus is to be where links are known; will eventually have to do SW baseline study to determine if SW is appropriate focus; need to look at nexus of SW to receiving water; or, do source control and see if having impacts on overall watershed [fairly strong agreement]
- Depends on what we want Status and Trends to indicate, e.g. watershed health—why, and who is contributing?
- Explain random vs. specific outfalls—random doesn't answer why
- S&T may role up best to PSP initiatives, vs. Source ID as feedback loop
- Issue with urban vs. rural, e.g. rural ditches—what is entering ditches isn't necessarily contaminated; so again, is SW always appropriate focus/expense?
- Some issues better from drainage vantage point, e.g. retrofitting—better able to adjust resources

2) What barriers exist to an integrated regional approach?

- Regulatory approach outlined is for permittees—what about "command and control" for other entities?
- Re: investment—range of appropriate level needs definition [strong agreement]
- Questions of equity vs. self interest; limitations of SW Utilities
- Barriers to contract, e.g. financial assistance requirements
- Again, question of relationship to just SW—bigger picture should be considered?
- Need more clearly defined model of integration—big question of "how to" [strong agreement]
- If jurisdiction selected for monitoring, what of liability—for findings, and if not selected, for not acting—again questions of risk, and of appropriate prioritization; There are implications once information is known (think S.4.F.)—third-party lawsuits, pressure from other stakeholders—risk factors [strong agreement]
- Numerous failed past attempts at regional approach
- What is State and Feds don't step up with funding and aren't' willing to adjust existing programs?
- Turf issues
- Regulatory conflicts—legal requirements which may preclude program requirements, e.g. pay-in option, CWA vs. ESA; so, question of how to handle requirements from multiple entities
- Forming consensus of what constitutes credible science
- Re: CWA—bio-impacts not included, though comment that recent policy trends could lead to this being considered…

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

- Needs to be a shared responsibility—baseline plus additional that entities can/will perform [strong agreement]
- Lead should be entity that knows most about it; for each watershed need to determine who is best
- Should be coordinated with local, e.g. for jurisdictions to follow-up with in IDDE program
- While agree, should be WRIA-based priorities, what of WRIAs where one or a smaller entity is it; again, questions of equity

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- What about entities that span beyond WRIA boundaries and vice versa—boundaries AND political differences; requires a cooperative component
- There are funding disconnects across jurisdictions—different priorities; again, questions of equity
- Again, questions of jurisdictional liability and finger pointing—third party lawsuits and issues raised by other bordering jurisdictions
- Group conceptually liked prioritizing, though felt strongly that prioritization must play into cost share [strong agreement]
- Regulator issues—need clear implementation mechanism and buy in—needs to be figured out; consider possible exemptions regarding associated monitoring and agency requirements
- Need incentives to help jurisdictions with capacity issues
- What of Sound-level issues, e.g. Cu/brake pads
- Need to look at causes and effects and how to break them out—maybe regional focus best for this work—already have IDDE, etc.; again, local vs. regional needs
- Again, question of liability for issues of lower priority that don't get addressed

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- As many/at whatever level can demonstrate success in five years; and
- Address whatever parameter and priority problem can actually do something about in five years [strong agreement on both bullets]
- What is most affordable and most reasonable
- As relates to pay-in—need full buy in; again, minimum "baseline" threshold, both regarding $ and commitment [strong agreement]
- Again, need incentives to pay-in—incentives that aren't just regulatory in nature

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- The criteria are very broadly written; hard to respond
- Agreement with criteria depends on the results of literature search
- The two-year timeframe is too short for generating results; consider up to a five-year timeframe ***[general agreement with this]***
- Consider a time range of 2-5 years
- Can you change your program midway through?
- Agree with retrofits

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

- For BMPs, effectiveness studies should be linked to beneficial uses of the specific receiving waters
- Forestry needs to be included
- Maintenance of BMPs is an important topic
- General cost-effectiveness is an issue (sometimes paying a fine is cheaper)
- Comparing effectiveness between BMPs
- More emphasis is needed on new treatment
- Details on how new technology will be compliant
- A general comment was made that this is good work

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?

- Due to difficulties teasing out the difficulties between this and the previous question, we merged them together in 2)

Table Nine – Facilitated by Tony Paulson and Allison Butcher

Session One – Proposed Regional Program Components

1) How should costs for implementation of the program be allocated among local governments, the state, the federal government, and others?

- Could we see an example cost table for SFEI or SCCWRP? How do these costs compare?
- Need a more fair formula than just population.
- Concern that jurisdictions may be funding monitoring outside their jurisdiction.
- Is it legal to spending money on monitoring outside geographic boundaries?
- Possible to have an in-kind payment, e.g., staff time, rather than cash for the pay-in option?
- How do we compel entity to pay?
- What is the bottom line cost for my jurisdiction?

2) Have we correctly identified the appropriate roles and responsibilities of local governments, the state, the federal government, and others?

3) What are your preferences for creating the pay-in option for collective funding and administration of prioritized monitoring and assessment activities?

- Administrative costs seem too high.
- Cost of implementation are not shown.

Session Two – Status and Trends Monitoring

1) What questions do you want Status and Trends monitoring to answer?

- Don't need S & T to address known problems.
- Proposed plan is too ambitious, take baby steps with a phased-in plan.
- What about loads from rivers and their loads?
- Data from S & T should support other programs, good example to use nearshore sampling to support FDA regulation of oyster beds.
- How do you separate signal of muni stormwater from other sources? How will we know if muni programs are working?
- How does S&T inform us about change at specific sites?

2) What barriers exist to an integrated regional approach?

- How can entities spend money outside their jurisdictions?
- Aren't there legal challenges to receiving water monitoring?
- Will this plan sacrifice long term monitoring sites?
- What happens when random sampling discovers impaired sites?
- For data management, grow existing programs, e.g., EMAP, University, USGS or Ecology
- Probabilistic sites may not be influenced by stormwater.

3) Who are the most appropriate entities to perform the various studies? How would you pair up the entities with the studies that are needed?

- Will local munis lose employees when they pay in to a fund for others to do the work?
- Who does the work? Would the Stormwater Technical resource be the coordinator, employer, or grantor?

Session Three – Source Identification

1) Do you agree with the recommendation that problems be prioritized at the WRIA level for applying adaptive management actions?

- What are the benchmarks we will use to determine sites are impaired by toxics? How will we prioritize using these benchmarks?
- How does source ID connect o characterization monitoring?
- How will WRIA monitoring solve problems at the regional scale?
- How do we engage jurisdictions in source ID problems across their boundaries?
- How do we engage other entities, e.g., businesses or non-permittees, that are not required to participate?
- Are problems or solutions or both prioritized at WRIA boundaries?
- While we may agree with this plan, how do we 'sell' it to our electeds and ratepayers?

2) How many priority problem impairments should be pursued for plans and implementation over a five-year period?

- How is this different from a big TMDL?
- How many depends on how much the projects cost.
- Could start with the 303d list. The fear of getting sites on the list could be reduced if jurisdiction receives watershed funding according to the number of sites that it has on the list.

Session Four – Effectiveness Monitoring

1) Do you agree with the 8 criteria that will be used to provide guidance, set priorities, and identify future effectiveness monitoring? If not, what have we missed?

- Removal of chemical is not the same thing as support of beneficial use, e.g., salmon reproduction.
- 2 years is too short.
- Selecting for projects that show a difference in a short time-span biases against bigger problems that take a longer time.
- Hard to measure "effectiveness" in the real world, need small controlled experiments. But there is a big jump from small scale effectiveness to regional effectiveness.
- Additional criterion: does study address a data gap?
- Additional criterion: How does the study link with other programs, eg. Status and trend monitoring?
- Which endpoints will be used to measure effectiveness (TSS, WQ, toxics, flow, biota)?
- What about emergent unknown contaminants
- How do we compare effectiveness of different techniques? What is the index to compare across projects?
- How do we balance the effectiveness of studies for previously built vs. new development? Most development is old and would need retrofits. Are retrofits worth it?
- How do we find areas to test retrofits?

2) Do you agree with the 5 proposed focus areas for effectiveness monitoring? If not, what have we missed?

3) Do you agree with the 4 priority topic areas listed for investigation? If not, what have we missed?