

# STORMWATER WORK GROUP

Wednesday, April 14, 2010 9:00 AM – 3:00 PM  
USGS Conference Room  
934 Broadway, Tacoma

## Draft Summary

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS AND AGREEMENTS

### ATTENDEES:

*Work Group Members and Alternates, and the organizations or groups they represent:*

**Fred Bergdolt** (WSDOT), State Agencies; **Alison Chamberlain** (Mason Co.), Local Governments; State Agencies; **Jay Davis** (US Fish and Wildlife Service), Federal Agencies; **Dana de Leon** (Tacoma), Local Governments; **Mindy Fohn** (Kitsap Co.), Local Governments; **Jonathan Frodge** (Seattle), Local Governments; **Dick Gersib** (WSDOT), State Agencies; **Heather Kibbey** (Everett), Local Governments; **DeeAnn Kirkpatrick** (National Marine Fisheries Service), Federal Agencies; **Bill Moore** (WA Dept. of Ecology), State Agencies; **Kit Paulsen** (Bellevue), Local Governments; **Tony Paulson** (US Geological Survey), Federal Agencies; **Jim Simmonds** (King Co.), Local Governments and the Work Group's Chair; **Carol Smith** (WA Conservation Commission), Agriculture; **Heather Trim** (People for Puget Sound), Environmental Groups.

*Work Group Staff:* **Karen Dinicola** (Ecology), Project Manager; **Leska Fore** (Statistical Design), Facilitator

*Others in Attendance:* **Mark Bieber**, Thurston Co.; **Phyllis Varner**, Bellevue.

### WORK GROUP CHECKS IN ON PROGRESS TOWARDS COMPLETING THE DRAFT STRATEGY

The committee observed changes from last fall's approach to completing the document: last fall we had a separate writing team drafting materials for the scientific framework; we now have multiple work group members involved in writing implementation plan sections and revising the scientific framework. Karen Dinicola, who will be compiling and editing the overall document, is looking at all of the materials coming to her and working to organize it in a way that will be accessible, logical, and compelling for our readers. She described the structure she envisions for the document, with:

- a "fanny pack" of overarching key recommendations;
- an "overnight bag" of essential information in sufficient explanatory detail to orient the reader about the Adaptive Management framework, proposed scientific framework for the three monitoring categories, and implementation steps, roles, and costs; and
- a "motor home" of appendices where all the technical and other very detailed information is stored.

We are on a journey! The SWG checked in with each chapter lead to get a sense of where we are in completing our work.

Introduction, Revisions to Scientific Framework, and Program Design Elements: Karen is working on the long list of editing and writing tasks and is most concerned about: revising the Conceptual Model; rewriting the sections on Hypotheses; and finalizing the section on the pay-in option which will be discussed today. It is coming along.

Conceptual Model: Heather Trim shared a new version of Table 1 that the group did not have a chance to discuss, but provides scientific evidence to boost the best professional judgment and conclusions of the old Table 1.

Heather also announced that she is compiling an inventory of monitoring efforts to post as a work in progress for review with our draft document. She will provide draft text to introduce both of these products.

Status and Trends: Kit Paulsen reported that the subgroup is nearly done with the scientific framework and appendix, and has yet to write the implementation recommendations. They hope to be able to assign one place to house all of the data collection and management. Worried about the cost of the proposed monitoring effort.

Source Identification: Mindy Fohn reported that the scientific framework chapter is posted and she will accept comments on it until noon on Monday. A process is needed to develop experimental designs for this monitoring. A draft implementation plan is posted, we will discuss key recommendations today. Need costs.

Effectiveness Studies: Carol Smith reported that the subcommittee believes their key recommendations are in good shape for today's discussion. The implementation chapter is very preliminary, and the hypotheses are not done: subgroup is developing questions to guide further definition but needs accurate information. Still mostly at the level of various topics. Need to define a decision making process. Will scale back scientific framework.

Data Management and Analysis: Jim Simmonds reported that he has some recommendations but neither of the subgroups has met to discuss them or to write either of these two chapters, which may be combined.

Data Collection: Jon Frodge reported that the chapter is in pretty good shape. It was a straightforward technical effort to collect this information.

Communication: Neil Aaland has been working on a communication plan for the SWG focused on now to June. For long term communication, we need to identify key needs and likely rely on the Partnership. Will likely not include chapter in document.

Roles/Responsibilities, Cost Summary: The group decided to develop summaries as handouts to distribute at the May 19 workshop rather than including these summaries in the document. Karen reminded chapter leads that we need ballpark cost estimates for *everything* in the implementation plan.

We accept that we will only get so far in completing our work. We will have a caveat in the draft document: "Here's where we got. The SWG needs to look at the entire strategy as a whole, with your comments. We will have a final recommendation to Ecology and the Partnership at the end of June." All edits are due to Karen by 7:30 p.m. on Monday April 19<sup>th</sup> so that she can compile the new material and post documents for the SWG before April 22<sup>nd</sup> in preparation for our final review of this draft at our next meeting on April 28<sup>th</sup>. Subgroups should ensure that their appendices are consistent with the SWG's decisions and key recommendations, and in particular emphasize what are the subgroup's agreed-upon details versus examples that are offered. Chapter leads should also consider drafting "dear reader" boxes for the public comment draft. Our goal is for the document to go out to the public soon after our meeting, and before COB on Friday the 30<sup>th</sup>.

## **WORK GROUP FINALIZES KEY RECOMMENDATIONS**

The work group discussed the last set of key recommendations proposed for the strategy. Karen has posted the on-screen notes taken during the discussions. Here is a summary of the decisions we made:

For Program Design: The work group **agreed**:

1. Formalize SWG as an ongoing part of the ecosystem monitoring program being created by PSP
  - a. Continue to use SWG to prioritize regional stormwater monitoring and assessment activities
  - b. Maintain SWG roles of decision making and leadership, coordination, and advising the regional stormwater control strategy
2. Create a fund dedicated to stormwater-related monitoring and assessment that includes a pay-in option for NPDES permittees.
3. The Puget Sound Partnership, Salmon Recovery Funding Board, Washington Forum on Monitoring, the Stormwater Work Group and others should develop status and trends monitoring proposals for other water bodies (lakes, rivers, groundwater, wetlands, or other).

For Data Collection, Management, and Analysis: The work group **agreed**:

1. All entities contribute funding and/or in-kind services to data management and data analysis activities.
2. The regional stormwater monitoring program will ensure that credible data are collected in a quality manner by requiring that:
  - a. Each study identify Data Quality Objectives (DQOs), have an approved Quality Analysis Project Plan (QAPP), and follow Standard Operating Procedures (SOPs).
    - i. not all QAPPs must be pre-approved, there are choices: see #c, d
  - b. Approved QAPPs are web-accessible.
  - c. Sampling methods be standardized for quality data collection and a selectable list of NPDES monitoring approved sampling methods are web-accessible.
  - d. Formulate and support a process to develop and approve standard methods
    - i. Populate a library with an extensive set of approved SOPs

- ii. Keep ongoing prioritized list of SOPs we need to develop.
  - e. Standard analytical methods with the appropriate accuracy, precision and reporting limits are used.
  - f. NPDES permittees select from a web-accessible list of approved analytical methods.
  - g. Detection limits match the intent of the hypothesis tested.  
(Example: if the program requires low level detection, low reporting limits should be used and the rationale for the selected limits should be reported in the DQO).
  - h. Ecology-accredited laboratories are used
  - i. GIS data must follow state guidelines
  - j. Follow requirements for meta data and field protocols
3. All monitoring results data, QC data, meta data, and reports should be stored in data management system(s) where:
    - a. Responsibility for providing QA/QC for data and for correcting, editing, and updating data lies with the data generators.
    - b. All data are easily shared with all interested parties and the public
  4. Create and maintain data management systems
    - a. Include data repository, storage, and management structure(s)
    - b. Provide easy public access to all data and findings
    - c. QA/QC follows recommendations data collection section

**For Status and Trends:** The work group **agreed:**

1. Starting point for implementation recommendation: Ramp-up and Conduct two rounds of densified wadeable stream status and trends sampling (30 sites each WRIA except islands) within next five-year municipal stormwater permit cycle and allow sufficient time for analyses to refine the monitoring program design and inform the following cycle of permits. Sampling is conducted by permittees, state, and others.
2. At Puget Sound scale, add to the state wadeable stream sampling protocols:
  - a. additional continuous sampling for flow and temperature.
  - b. annual grab samples for sediment toxic chemicals, and
  - c. monthly water quality samples
3. The group also agreed on the recommended parameters and NPDES permit monitoring components listed in draft tables E.1 and E.3 for Appendix E that were presented during the discussion.
4. An effort should be made to contact and coordinate with existing monitoring programs within the first year to identify opportunities for collaboration.
5. Within the first year, identify relevant existing data that could further refine the final sampling frequency and design.
6. We recommend focusing initial implementation planning on the full suite of status and trends monitoring elements, as there will be cost-savings for implementing all wadeable streams elements at the same time. (Conduct sampling at the same time: NPDES and other components such as fish and habitats that will be implemented by other entities)
7. The SWG will coordinate with the Puget Sound Partnership, Puget Sound Salmon Recovery Council, and others to seek funding to conduct the proposed Status and Trends monitoring plan for wadeable streams and nearshore areas.
8. Compile information within the next year on current flow gauging stations in Puget Sound, analyzing current regional monitoring capacity, and developing a regional network of gauges associated, if possible, with the permanent water quality monitoring sites.

**For Source Identification:** The work group **agreed:**

1. Where the source of a problem is not linked to a specific entity, multiple entities shall coordinate.
2. After prioritization of existing information of problems/impairments entities will develop a plan and proceed to implement an appropriate monitoring program, and implement early management actions on the priority problems.

3. Implementation should be a WRIA coordinated process rather than permit-driven: source ID chapter writers will propose an estimated # of these types of investigations per WRIA in a 5-year period, and propose that an equitable contribution be developed for NPDES jurisdictions.
4. Other programs besides municipal NPDES permits such as TMDLs address other sources and contamination problems.

For Effectiveness: The work group **agreed:**

1. Municipal NPDES stormwater permits should include effectiveness monitoring requirements and allow jurisdictions the flexibility to meet their requirements by either 1) paying into a fund for effectiveness monitoring activities (the “pay-in option”), or 2) conducting effectiveness monitoring themselves (the “self-conducted study option”).
  - a. We recommend that funds generated by the “pay-in option” be managed by a Stormwater Monitoring Entity whose budget is permanently dedicated to monitoring and cannot be reappropriated to other purposes by any legislative body.
  - b. We recommend that studies funded via the municipal pay-in option be related to municipal stormwater management actions and activities.
  - c. We recommend that all effectiveness monitoring conducted through the “pay-in option” and through the “self-conducted study option” of the municipal NPDES stormwater permit have their quality assurance project plans (QAPPs) reviewed and approved by Ecology.
2. The cost to each municipal stormwater NPDES permittee should be developed based on equitable factors, or about \$ \_\_\_ total per year for the five-year permit cycle (*cost estimate coming from subgroup*).
3. The new technology effectiveness monitoring program (TAP-E) should continue, with funding from new technology proponents and other long-term, reliable funding sources.
4. Other entities beyond NPDES permittees should be encouraged to self-fund and/or conduct effectiveness monitoring following SWG priorities and guidance and regional protocols. Entities should partner to share resources.
5. Other entities beyond NPDES permittees should be encouraged to contribute to the “dedicated stormwater monitoring and assessment fund” to increase funding available for coordinated effectiveness monitoring.
6. A public, transparent process is needed to identify and prioritize future and more specific **topics**, questions, and hypotheses for effectiveness monitoring, applying the following criteria for evaluating and selecting effectiveness monitoring studies:
  - a. Addresses one of the most important stormwater-caused threats or impacts in Puget Sound, based on prior assessments.
  - b. Diversity of studies across all of the prioritized topics within the new development / redevelopment, retrofit, and programmatic / non-structural BMP effectiveness monitoring categories.
  - c. Likelihood of the practice to result in improvements to beneficial uses.
  - d. Likelihood of the study to result in increased cost-effectiveness of stormwater management actions.
  - e. Likelihood to generate results within a 2 year time frame.
  - f. Strength of link to the PSP Action Agenda and results chains.
7. Requests for proposals should be issued for effectiveness monitoring **studies**, based on the guidance and priorities identified by the Stormwater Work Group, and that an open and transparent process be developed to evaluate the submitted proposals and select those for initial implementation.
  - a. For NPDES effectiveness proposals, this needs to be expedited in order to meet the needs for the coming permit cycle.
8. The Stormwater Work Group should reevaluate the focus of effectiveness monitoring on a periodic basis.
  - a. Stormwater impacts from other land use management approaches and other stormwater permits also need to be addressed in future steps.

## **WORK GROUP CONTINUES TO PLAN THIRD PUBLIC WORKSHOP**

The work group members agreed that the purpose of this workshop is primarily to get feedback on (1) the key program elements we've recommended and (2) the implementation recommendations that are based on the scientific framework. The committee discussed a revised agenda, confirmed speakers for each topic, and affirmed the idea of having handouts summarizing the costs, roles and responsibilities for implementing the program we recommend. The communication subgroup will write a registration announcement for Karen to send out soon.

### **THE WORK GROUP'S NEXT SCHEDULED MEETINGS ARE:**

Wednesday, April 28<sup>th</sup> from 9am-3pm at the USGS Office in Tacoma (brown bag lunch)

Wednesday, June 9<sup>th</sup> from 9am-3pm at the USGS Office in Tacoma (brown bag lunch)

Wednesday, June 30<sup>th</sup> from 9am-3pm at the USGS Office in Tacoma (brown bag lunch)

### **OUR THIRD PUBLIC WORKSHOP WILL BE:**

Wednesday, May 19<sup>th</sup> from 9am-3pm at the Renton Community Center