

# Eastern Washington Phase II Municipal Stormwater Permit

## Preliminary Draft Language

### **Note to Reviewers:**

The Department of Ecology is soliciting comments on the preliminary approach to Low Impact Development (LID) and monitoring in this document for reissuance of the Eastern Washington Phase II Municipal Stormwater General Permit in July 2012. As the permit reissuance process moves from preliminary draft language to the formal draft permit, and then to the final permit, each version will have significant changes as a result of public comments.

During the informal review period for this document, Ecology requests comments that address only the proposed approach for developing and implementing LID requirements in construction and post-construction runoff controls for new development and re-development in permitted cities and counties (permit sections S5.B.4 and S5.B.5). We ask that you limit your comments to the LID-related requirements. Ecology will issue a complete draft permit with all proposed changes to permit language in October 2011 for formal public comment. The formal draft permit and final permit will require permittees to continue to implement existing program requirements, consistent with permit condition S5.A.2.

The 2011 legislature passed Engrossed Substitute House Bill 1478, which is awaiting the Governor's signature as Ecology begins this informal comment period. If the bill becomes law, Ecology's proposal is to incorporate these deadlines in the Phase II draft permits in October 2011. During the current public review and comment period, Ecology is asking for feedback on these proposed deadlines for low impact development and monitoring. All the deadlines presented in this proposed preliminary draft language are based on a **permit issuance date of July 1, 2012.**

## Low Impact Development Preliminary Draft Requirements

Ecology will develop proposed language for the formal draft permit to advance the implementation of low impact development (LID) in new development and redevelopment during the 2012 Eastern Washington Phase II permit cycle. The LID language will apply to permit conditions S5.B.4 Construction Site Stormwater Runoff Control and S.5.B.5 Post-Construction Stormwater Management for New Development and Redevelopment. Ecology is scheduling meetings with Permittees and interested parties in Eastern Washington to evaluate steps to advance LID in the context of local conditions and existing tools.

Ecology discussions with permittees and interested parties will include consideration of a hydrologic performance standard for onsite stormwater management. The approach would include a feasibility review for projects located in areas with soil conditions or other physical constraints that would limit stormwater infiltration. In addition, Ecology will work to identify gaps and assist in developing guidance and technical information on LID techniques appropriate to areas of Eastern Washington.

Please see the Explanatory Notes accompanying this document for more information on the background and process for this proposal.

## Monitoring Preliminary Draft Language

### **Note to Reviewers:**

Ecology has agreed to provide Eastern Washington permittees and other stakeholders an opportunity to develop a monitoring program through a process similar to that which resulted in the stormwater monitoring program for Puget Sound. Ecology has made it clear that a minimum level of effort must be committed to monitoring (not status quo and not zero). The intent of the S8 preliminary draft language below is to provide a default minimum-level-of-effort ambient monitoring program that will answer the question, "Are receiving waters getting better or worse?", and also fund some effectiveness studies. This default is provided to ensure that some useful monitoring is conducted during the permit term whether or not the stakeholder process succeeds to produce an acceptable program and means to administer it.

## S8. Monitoring

- A. All Permittees, including Primary Permittees and Secondary Permittees, are only required to conduct water sampling or other testing during the effective term of this permit under the following conditions:
1. Any water quality monitoring required for compliance with TMDLs, pursuant to section S7 *Compliance with Total Maximum Daily Load Requirements* and Appendix 2 of this permit; and
  2. Any sampling or testing required for characterizing illicit discharges pursuant to section S6.D.3 of this permit.
- B. All Permittees shall provide, in each annual report: a description of any stormwater monitoring or stormwater-related studies conducted by the Permittee during the reporting period. Permittees are not required to provide descriptions of any monitoring, studies, or analyses conducted as part of the Eastern Washington Regional Stormwater Monitoring Program (EWRSMP) in annual reports. If other stormwater monitoring or stormwater related studies were conducted on behalf of the Permittee, or if stormwater-related investigations conducted by other entities were reported to the Permittee, a brief description of the type of information gathered or received shall be included in the annual report(s) covering the time period(s) during which the information was received.
- C. All Primary Permittees listed in S1.xx shall participate in a process with other stakeholders to develop an Eastern Washington Regional Stormwater Monitoring Program (EWRSMP).
1. No later than two years from the effective date of this permit the Permittees, via participation in the stakeholder group, shall recommend to the Department:
    - a. A prioritized list of no fewer than six and no more than ten effectiveness study proposals. The study proposals shall be sufficiently detailed that a request for proposals can be generated from the information provided. Each proposal shall include, at least:
      - i. A statement of hypothesis
      - ii. A description of the management practice(s) the study would address
      - iii. A summary of what is known about the practice(s) from current literature
      - iv. Expected changes to the management practice(s) depending on the study outcome.
      - v. Proposed approach and study design (approximate number and location of sites, timing and frequency of sample collection, parameters to be analyzed; or other data proposed to be collected, and how it will be analyzed)
      - vi. An estimated budget
    - b. A transparent and objective process for evaluating and ranking proposals to do the studies.
    - c. An administrative mechanism for collecting and overseeing Permittee-contributed funds, and for contracting out to conduct the studies.

2. No later than four years from the effective date of this permit the Permittees, via participation in the stakeholder group, shall recommend to the Department:
    - a. At least one and no more than five ambient monitoring studies designed to answer priority questions agreed upon by the stakeholder group, either by consensus or by majority, and that cumulatively address one or more issues of importance to each of the Permittees. If a single study is submitted the results must provide information that will be useful to all permittees. If multiple studies are submitted they must be designed to provide information that will be useful to all permittees within identified sub-basins, areas, or associated with particular land uses within Eastern Washington.
    - b. An implementation plan including roles and responsibilities of Permittees, State, and Federal Agencies; and a means to administer the funds, award contracts, account for expenditures, and ensure that high quality data, analyses, and reports will be submitted.
  3. The Permittees shall either:
    - a. Ensure a means to conduct monitoring according to a stakeholder consensus agreement that represents, at minimum, a collective level of effort described below:
      - i. An ambient monitoring program (or programs) designed to answer the question, "Are conditions in receiving waters improving or deteriorating?" and following an Ecology-approved Quality Assurance Project Plan.
        - If the stakeholder group is unable to recommend an alternate program or programs, then the permittees shall, collectively, monitor a minimum of 30 randomly selected small streams located in the geographic areas covered by this permit. This sampling shall be conducted monthly for a period of one year (beginning approximately four years from the effective date of this permit, to be repeated once every five years).
      - ii. Effectiveness studies designed to evaluate the programmatic stormwater management requirements of this permit.
        - If the stakeholder group is unable to recommend an alternate means to identify and conduct these studies, then the permittees shall, collectively, contribute \$390,000 per year (beginning three years from the effective date of this permit) to a pool for implementing studies selected from among those that were described by permittees in their annual reports due on March 31, 2011.
- OR --
- b. Pay into a collective fund or funds to be administered as recommended in S8.C.1.c above, or at a minimum the following amounts and according to the following schedule:

i. The first payment is due two years after the effective date of this permit and annually after that. The funds will be used to implement the monitoring described in the bullets under S8.C.3.a.i and S8.C.3.a.ii above.

- If no other administrative means is recommended to the Department by the Permittees, via participation in the stakeholder group, according to either S8.C.2.c above or S8.C.3.a above, then all Permittees shall submit these payments to the Department and the Department shall enter into a contract with each permittee to administer the funds and contract out to conduct the monitoring and studies.

ii. Permittees shall pay or otherwise contribute, at minimum, the amounts specified below:

Permittee	First Payment <i>(option 1)</i>	Second Payment <i>(option 1)</i>	Second Payment <i>(option 2)</i>	Third Payment <i>(option 1)</i>	Third Payment <i>(option 2)</i>	Subsequent Payments <i>(option 1)</i>
Asotin Co.	\$ 4880	\$ 5506	\$ 8129	\$ 6006	\$ 8630	\$ 4880
Asotin	\$ 457	\$ 515	\$ 4160	\$ 562	\$ 4207	\$ 457
Clarkston	\$ 2686	\$ 3030	\$ 6160	\$ 3306	\$ 6436	\$ 2686
Benton Co.						
Kennewick	\$ 25350	\$ 28600	\$ 26500	\$ 31200	\$ 29100	\$ 25350
Richland	\$ 17960	\$ 20262	\$ 19868	\$ 22104	\$ 21710	\$ 17960
West Richland	\$ 4484	\$ 5059	\$ 7774	\$ 5519	\$ 8234	\$ 4484
Chelan Co.	\$ 11660	\$ 13155	\$ 14214	\$ 14351	\$ 15410	\$ 11660
Wenatchee	\$ 11505	\$ 12980	\$ 14075	\$ 14160	\$ 15255	\$ 11505
Douglas Co.	\$ 1465	\$ 1652	\$ 5064	\$ 1803	\$ 5215	\$ 1465
E. Wenatchee	\$ 792	\$ 893	\$ 4460	\$ 974	\$ 4542	\$ 792
Franklin Co.						
Pasco	\$ 20814	\$ 23482	\$ 22429	\$ 25617	\$ 24564	\$ 20814
Grant Co.						
Moses Lake	\$ 7194	\$ 8117	\$ 10206	\$ 8854	\$ 10944	\$ 7194
Kittitas Co.						
Ellensburg	\$ 6405	\$ 7226	\$ 9498	\$ 7883	\$ 10155	\$ 6405
Spokane Co.	\$ 50911	\$ 57438	\$ 49439	\$ 62660	\$ 54661	\$ 50911
Spokane	\$ 76489	\$ 86295	\$ 72394	\$ 94140	\$ 80239	\$ 76489
Spokane Valley	\$ 33350	\$ 37625	\$ 33679	\$ 41046	\$ 37100	\$ 33350
Walla Walla Co.	\$ 6314	\$ 7124	\$ 9417	\$ 7771	\$ 10064	\$ 6314
Walla Walla	\$ 11745	\$ 13251	\$ 14290	\$ 14455	\$ 15495	\$ 11745
Whitman Co.						
Pullman	\$ 10323	\$ 11646	\$ 13014	\$ 12705	\$ 14073	\$ 10323
Yakima Co.	\$ 33013	\$ 37246	\$ 33377	\$ 40632	\$ 36763	\$ 33013
Sunnyside	\$ 5697	\$ 6427	\$ 8863	\$ 7012	\$ 9447	\$ 5697
Selah	\$ 2654	\$ 2995	\$ 6132	\$ 3267	\$ 6404	\$ 2654
Union Gap	\$ 2163	\$ 2440	\$ 5691	\$ 2662	\$ 5913	\$ 2163
Yakima	\$ 31439	\$ 35469	\$ 31964	\$ 38694	\$ 35189	\$ 31439

# Preliminary Draft Language Explanatory Notes

May 16, 2011

## Introduction

The Washington Department of Ecology (Ecology) invites informal comment on preliminary draft language for two components of the Eastern Washington Phase II Municipal Stormwater General Permit (EWA Phase II permit). Ecology issued the permit on January 17, 2007 and it became effective on February 16, 2007 under delegated authority from the United State Environmental Protection Agency (USEPA) to permit discharges to surface water under the National Pollutant Discharge Elimination System (NPDES). Ecology plans to reissue the EWA Phase II permit in July 2012.

These explanatory notes describe the basis for Ecology's proposed preliminary draft language for two areas that will be significant changes in permit requirements: low impact development and monitoring. These changes are intended in part to address the resolution of appeals to the Pollution Control Hearings Board (PCHB). While the rulings did not directly apply to the EWA Phase II permit, Ecology recognizes the importance of addressing both LID and monitoring in E WA permit , although in a timeframe and approach that reflects the significant differences in the history of permittee participation, climate and soils conditions, and geography.

Copies of the relevant appeals, settlements and PCHB rulings for the Phase I and Western Washington Phase II Municipal Stormwater General Permits are available at <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/appeals.html>

Ecology's schedule for permit reissuance is:

Informal Public Comment Period on Preliminary Draft Permit Language for LID and Monitoring  
(May 16 – June 17, 2011)

Ecology Reviews Comments from Informal Public Comment Period  
(June 20 – October 19, 2011)

Ecology Issues Draft Permit for Formal Public Comment  
(October 19, 2011 – February 2, 2012)

Workshops and Public Hearings  
(December 2, 2011 – February 3, 2012)

Ecology Issues Final permits and Response to Comments  
(July 2012)

Permit Effective  
(August 2012)

Additional information on the permit reissuance process is available at  
<http://www.ecy.wa.gov/programs/wq/stormwater/municipal/2012Reissuance.html>

## How to Submit Comments

Ecology invites public comment on the preliminary draft language for low impact development and monitoring from May 16, 2011 until 5:00 p.m. on June 17, 2011. Please address your comments to the specifics of the preliminary draft language rather than to other elements of the permit. We will issue a draft of the entire EWA Phase II permit for formal public comment in October, 2011.

In order to clarify your comments, please include the following information with your comments:

- The permit(s) subject to your comment.
- The permit reference and/or page number in the preliminary draft language.
- A brief, concise comment including the basis for the comment.
- Suggested permit language or a conceptual alternative, where appropriate, to address your concern.

Ecology will not issue a Response to Comments for the comments submitted during this informal comment period. However, we will read and consider all comments and use them to help us prepare the formal draft Permit.

Ecology provides an online comment form at  
[www.ecy.wa.gov/programs/wq/forms/lidspubcomments.html](http://www.ecy.wa.gov/programs/wq/forms/lidspubcomments.html)

Send written comments to Ecology as follows:

Electronic file by e-mail to: [SWPermitComments@ecy.wa.gov](mailto:SWPermitComments@ecy.wa.gov)

Hard copy by mail postmarked by 5pm June 17, 2011 to:

Municipal Stormwater Permit Comments  
WA Department of Ecology  
Water Quality Program  
PO Box 47696  
Olympia, WA 98504-7696

## Low Impact Development Preliminary Draft Language – Explanatory Notes

### Background

Ecology proposes to advance low impact development (LID) in eastern Washington during the next permit cycle by building on an existing foundation of on-site stormwater management in many communities. Ecology proposes this for both environmental and legal reasons. LID is accepted as a preferred stormwater management approach because it strives to mimic pre-development hydrology and better protects water quality and beneficial uses from the impacts of development. The Pollution Control Hearings Board rulings for western Washington recognize this and ruled that LID meets the standard for protecting water quality to the maximum extent practicable and also established that LID is AKART (all available, known, and reasonable methods of prevention, control and treatment) for new development and redevelopment activities.

Because of the favorable soils, geology, and climates with low precipitation volumes in many eastern Washington communities, a number of permitted jurisdictions currently require that a significant volume of stormwater be retained on-site. A majority of eastern Washington permittees have adopted ordinances that meet or closely approximate a nationally-accepted standard for LID, and for those that do not, there are feasibility issues related to local soils or other physical conditions. Ecology proposes to initiate a process during 2011 to discuss with permittees and others the appropriate steps to advance LID in order to include requirements in the October 2011 draft permit.

At the same time, Ecology recognizes that there are challenges in implementing LID in eastern Washington. Eastern Washington Phase II permittees have not had the experience of a concerted effort to advance LID similar to that in Puget Sound or even in southwest Washington. In general, western Washington Phase I and Phase II permittees have had more experience, tools, demonstration projects, and resources for LID implementation. While the 2008 and 2009 Pollution Controls Hearing Board rulings on LID in municipal stormwater permits applied only to western Washington, eastern Washington LID projects funded by Ecology grant programs and coordination efforts among local stormwater managers has heightened interest in advancing LID for eastern Washington Phase II permitted jurisdictions.

Preliminary draft low impact development requirements proposed for Phase I and western Washington Phase II cities and counties stem from appeals rulings of the 2007 Phase I and western Washington permits. The Pollution Controls Hearing Board (PCHB) Phase I ruling on August 7, 2008 and the February 3, 2009 ruling on the Western Washington Phase II Municipal Stormwater General Permit led to Ecology's convening a stakeholder advisory process to develop technical definitions, a performance standard, and feasibility criteria for LID to gather input for adding LID requirements to those permits. The LID advisory committee meeting summaries, studies, and references are available at <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/LIDstandards.html>

The LID advisory committees agreed to the following definition:

*“Low impact development is a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, rainwater harvest, rainwater re-use, and distributed stormwater management practices that are integrated into a project design. LID strategies can be applied to new development, redevelopment, urban retrofits, and infrastructure improvements. LID strategies can have a site, subdivision, or basin scale focus.”*

## **LID Implementation in Eastern Washington**

Eastern Washington Phase II permittees did not participate in the stakeholder advisory process, and the region has not had access to the level of tools and training programs of western Washington permittees, in particular those in Puget Sound. The western Washington tools, such as an LID manual and hydrologic performance standard, do not apply to EWA Phase II permittees. The *Stormwater Management Manual for Eastern Washington* (2004) uses a single event hydrologic model rather than Ecology’s Western Washington Hydrologic Model (WWHM). The WWHM is based on continuous simulation of precipitation events over 50 years of western Washington rainfall data. Eastern Washington permittees also have identified the challenges of stormwater management that are specific to the region, such as urban snow disposal, mixed conveyance systems for stormwater and irrigation water, legacy agricultural pollutants in the soil, and excessive windblown dust.

However, large parts of the eastern Washington landscape have advantages for implementing LID in comparison to western Washington. Many areas have low average annual precipitation, soils that infiltrate well, and a relatively arid climate. Based on an online survey of stormwater codes Ecology staff conducted in March 2011, a majority of jurisdictions now require retention of the 25-year 24-hour storm onsite. In most eastern Washington jurisdictions, this rainfall exceeds or closely approximates the hydrologic performance standard applied by a number of other communities around the nation that use a single event hydrologic model for LID requirements. This standard, which is also proposed by the USEPA for new federal facilities, requires retention of the 95<sup>th</sup> percentile for the 24-hour storm onsite, except in areas where soils make this infeasible<sup>1</sup>. Ecology invites input during this informal comment period on this and other approaches to consider for implementation of LID in eastern Washington.

## **Eastern Washington Phase II LID Stakeholder Process**

Ecology expects to propose requirements to advance LID in the formal draft permit in October 2011 in EWA Phase II communities. Ecology recently met with a group of eastern Washington permittees to discuss this approach, and the group agreed to meet in a broader group of interested parties for further detailed discussion of the proposal. The LID proposal could include a menu of LID BMPs that are already in use in some jurisdictions to infiltrate stormwater onsite.

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<sup>1</sup> A December 2009 USEPA document “*Technical Requirements for Implementing Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*,” which describes the hydrologic performance standard, is available on Ecology’s webpage with LID advisory process references, in the second group of articles at <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/LID/LIDreferences.html>

Ecology recognizes the need to develop additional tools for implementing LID in eastern Washington, such as building on an Ecology grant-funded LID technical guidance manual being developed by Yakima County. The City of Pullman and Washington State University in Pullman have expressed interest in researching LID technical applications such as BMP performance, particularly in the fine-grained Palouse soils of that jurisdiction.

Ecology will discuss with permittees and interested parties an expectation that implementation would begin by the end of the permit cycle. Because many eastern Washington Phase II jurisdictions are already requiring the on-site retention and management of stormwater, they are well-positioned to implement LID at this level of effort in the next permit cycle. Ecology recognizes that jurisdictions with challenging soils or other local conditions will need to define and address those issues. The agency expects the upcoming discussions to consider feasibility criteria for such conditions and welcomes input on this approach during this informal comment period.

## **Monitoring Preliminary Draft Language – Explanatory Notes**

### **Introduction**

In this document Ecology proposes Phase II preliminary draft language on monitoring requirements in eastern Washington. The preliminary draft language proposes that a collaborative, regional approach to stormwater monitoring be developed to provide feedback on stormwater management approaches throughout eastern Washington. Ecology expects eastern Washington stakeholders to propose a monitoring scheme to address different priorities and questions based on regional issues and conditions in eastern Washington.

A default approach is provided the permit language, based on a proposal developed in a two-year stakeholder process in Puget Sound. The proposed structure includes a coordinated monitoring program based on shared costs among permittees, with Ecology acting as the service provider to administer contracts. Permittees would participate in a formal oversight committee. This proposed approach removes specific monitoring requirements from the permit and relieves individual permittees of the obligation to conduct Special Condition S8 monitoring activities. An important benefit is that it would result in:

- Regionally consistent methods to collect comparable and valid data,
- Feedback on improvements in water quality in receiving waters, and
- Transferable studies of the effectiveness of specific stormwater program activities.

The preliminary draft language includes a conceptual approach for monitoring receiving waters in eastern Washington that is a scaled-back but similar approach to that recommended for Puget Sound. Ecology welcomes regional input on monitoring requirements that address the geography, climate, soils, and land uses of eastern Washington.

## Background

Ecology has begun working with stakeholders and Phase II municipal stormwater permittees in eastern Washington to define stormwater monitoring requirements for the next permit cycle. Defining the appropriate monitoring program is a significant task, and Ecology's preliminary draft permit language recognizes that the timeframe for a stakeholder process to develop recommendations for a monitoring program will extend into the next permit cycle.

In the Pollution Control Hearing Board (PCHB, or Board) ruling on appeal of the Phase II permit, *Findings of Fact, Conclusions of Law, and Order (Phase II Municipal Stormwater Permit)*; February 2, 2009; Puget Sound keeper Alliance, People for Puget Sound, Coalition of Governmental Entities v. State of Washington, Department of Ecology, Issue #15 addressed monitoring directly, asking: "Does the permit unlawfully or unreasonably fail to require monitoring of stormwater discharges, effectiveness of control techniques, and/or receiving water quality?" Section 54 in the *Findings of Fact* (available at <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/appeals.html>) states:

*The Board finds that Ecology properly limited the monitoring requirements contained in the first version of the Phase II permit. This is especially true since all parties recognize that some type of monitoring consortium would be the preferable entity to conduct monitoring on behalf of the permittees, but that it will take some time to develop the monitoring program.*

The current permit requires that some individual permittees in eastern Washington identify sites where outfall characterization and Best Management Practice (BMP) effectiveness studies might be conducted, and that all permittees submit ideas for program effectiveness studies to answer questions of importance to each individual jurisdiction. These activities were intended to inform and prepare permittees for monitoring in the next permit cycle. Ecology's thinking at the time was that individual permittees would implement a monitoring program in eastern Washington designed as a scaled-down version the current Phase I permit-required monitoring in western Washington. As a result of the PCHB ruling, Phase I permittees' experiences monitoring outfalls, and consensus stakeholder recommendations made by the Puget Sound Stormwater Work Group, the Department has changed its thinking.

The current Phase II permit monitoring requirements were challenged, but they were ultimately upheld by the Pollution Control Hearing Board (PCHB). The PCHB concluded that Ecology should require monitoring in future Phase II permits. The PCHB endorsed the [Puget Sound Monitoring Consortium](#) (PSMC) process for framing a collaborative regional monitoring program, but that process was initiated by permittees in Puget Sound and resulted in recommendations that were specific to western Washington. Neither the eastern Washington jurisdictions nor Ecology has initiated a similar process for eastern Washington.

Ecology prefers a cooperative, regional approach to monitoring. The reasons for this preference include recognition that:

- More useful, transferable information can be collected collaboratively than by individual jurisdictions.
- The overall cost per jurisdiction will be lower.
- Jurisdictions (particularly smaller ones) can avoid hiring consultants and specialized staff.
- There will be less duplication of efforts.

Based on the number of municipal stormwater permittees statewide, it is not practical for Ecology to support individual monitoring programs, or even separate monitoring programs for each of the ten distinct geographic areas covered in the eastern Washington phase II permit. Ecology therefore prefers monitoring approaches appropriate to the broadest possible geographic sub-regions of eastern Washington.

### **Stakeholder process**

The Stormwater Work Group launched by the [Puget Sound Monitoring Consortium](#) delivered specific recommendations to Ecology to create a regional monitoring program for Puget Sound that is supported by payments from permittees. The intent is to provide a means for pooling resources to answer regional questions by: (1) doing status and trends monitoring in priority receiving waters, (2) creating a repository for source identification and diagnostic monitoring that will help local jurisdictions share information and allow for a regional roll-up analyses, and (3) conducting effectiveness studies. If an eastern Washington stakeholder group recommends this alternative, Ecology is committed to allow time for eastern Washington permittees and stakeholders to develop an effective and meaningful monitoring program for eastern Washington.

Specifically, Ecology's preliminary draft language proposes that eastern Washington have a process to gather stakeholder input to frame approaches to monitoring that meet multiple needs and objectives. Ecology believes there is a fair amount of flexibility in terms of what types of monitoring can and should be done to satisfy permit requirements. As stated above, Ecology prefers a cooperative, regional approach to monitoring.

Ecology proposes the following characteristics of a stakeholder group process for developing a regional monitoring program for eastern Washington:

- Inclusive of a broad range of interests in eastern Washington. At a minimum, the stakeholder group should include representatives from local government, state and federal agencies, Tribes, environmental groups, and business interests.
- All representatives should be selected by the agencies or groups they are designated to represent and should be responsible for communicating back to those they represent.
- It is reasonable to expect that the group will need at least 8-12 meetings to propose recommendations to Ecology.
- The process can be started before the permit is issued to allow for more time to develop the monitoring program.

Ultimately the goal for monitoring is to collect information that is useful for local governments, Ecology, and others. Where possible, the monitoring program should take advantage of opportunities to leverage other monitoring efforts. The implementation schedule in the preliminary draft language proposes a period of time to “ramp up” monitoring efforts as appropriate.

**Default regional monitoring program**

The preliminary draft permit language includes a default Eastern Washington regional stormwater monitoring program that meets the characteristics Ecology believes are necessary for a defensible and meaningful permit-required monitoring program. The intent of including this default monitoring program is to ensure that some monitoring is conducted during this permit term should the stakeholder process not produce a successful outcome. This monitoring could inform Ecology, permittees, and other stakeholders how well the permits are working (or not working).

Table S8.C.3.b.ii is based upon the following estimated costs of a monitoring program for eastern Washington:

Monitoring program component	Permit Year 3	Permit Year 4	Permit Year 5
Effectiveness studies	\$ 390,000	\$ 390,000	\$ 390,000
Ambient monitoring		\$ 50,000	\$ 90,000

The above estimated effectiveness studies costs represent a per-capita level of effort on par with the level of funding Ecology is proposing for western Washington permittees. Approximately one eastern Washington effectiveness study would be done each year with this level of funding, which would conceptually be continued in the following permit. The above estimated ambient monitoring costs are a rough calculation of costs for one year of sampling at 30 randomly selected sites for water quality, sediment chemistry, stream benthos, and habitat in small streams. Conceptually, this sampling would be repeated in the last year of the following permit.

The cost allocations in the table in S8.C.3.b.ii of the preliminary draft language were developed by (option 1) apportioning the above costs solely by jurisdiction population and (option 2) dividing ambient monitoring costs equally among all jurisdictions and apportioning the remaining costs by population. Payments proposed after year 5 would be for effectiveness studies only, until a second round of ambient sampling 5 years after the first round of sampling. This second round would be conducted in the subsequent permit.

The preliminary draft language also includes a default means of funding and administering the default monitoring program. If the stakeholder process does not produce an acceptable alternative arrangement for administering the monitoring program(s), the default proposed is that permittees pay into a fund to be managed by Ecology.

This is a default proposal for consideration as preliminary draft permit language. Ecology welcomes input on:

- How to define a default level of effort for monitoring by eastern Washington Phase II permittees, and
- Other means to administer a collaborative monitoring program.

Ecology believes that the stakeholder group process is likely to result in recommendations for a monitoring program and a system of shared responsibilities and costs to leverage the capacities of the permittees and other entities in eastern Washington. Regional monitoring can help inform local program activities from public education approaches to source control efforts to optimization of operation and maintenance. A goal of the stakeholder process is to set collective priorities so that the questions that are most important to permittees across eastern Washington will be addressed by the regional monitoring program.

### **Other monitoring**

As in the current permit, the preliminary draft language states that permittees are still required to use monitoring to identify illicit discharges and comply with Total Maximum Daily Load requirements. Regional monitoring is not designed to address locally-specific monitoring driven by these other needs and priorities. Ecology recognizes that many individual jurisdictions invest a significant level of resources in these other types of monitoring to protect local water bodies. The Department intends that the proposed collective approach to regional monitoring in the permit will minimize the diversion of resources away from local monitoring efforts and provide a benefit to all permittees.