Project Work Plan – Updated May 2014

Purpose and Need:

Current regulatory and legal requirements, including stormwater management, provide important environmental protections but can also make development in urban centers more expensive than in less dense areas. What approaches can the region use to encourage development in dense urban centers to meet land use goals, while meeting water quality requirements?[1]

The challenge of meeting growth management and stormwater goals is complex and involves many disciplines such as water resources, science and engineering, architecture, real estate development and finance, land use and environmental regulation, and urban design, among others. Infill development can include costs for demolition, brownfield remediation, historic preservation, aging infrastructure repair, and stormwater infrastructure. These types of requirements can ultimately make an infill project more expensive than a similar project in a less developed area. Some developers may choose to look outside of concentrated growth centers for lower cost strategies or options for their projects. The result is that, for many jurisdictions, it becomes difficult to balance between equally critical growth management and water quality objectives. A clear understanding of the elements that contribute to the challenge is needed so effective solutions can be identified.

Goals:

- To develop recommendations for incentives and cost-effective approaches to encouraging infill development within urban centers while addressing stormwater requirements that can inform comprehensive plan policy and development regulations as part of the Growth Management Act periodic updates starting in 2015.
- Increase awareness of stormwater challenges with state agencies and other entities that can help local jurisdictions address the issue.

[1] This goal is included as a current local action of the South Central Action Area: "Better alignment of land use planning with conditions for, and implementation of, municipal NPDES permits to reduce stormwater impacts."

Scope of Work

Task	Responsible Entities	Time Line	Deliverable
Task 1. Collect and organize existing information into a **background report** on stormwater management for urban centers from PSRC Growth Management Policy Board meetings. Document basic issues, requirements, options, etc.	Commerce, with assistance of Ecology, EPA and others	August – Sept 2013	Draft Memo to steering committee Sept 30, 2013 Final in October after review **Completed**
Task 2 Attend meetings of builders, planners and stormwater managers to gather information and discuss specific challenges, approaches, and solutions. Identify groups, meet with participants and record information. Locations: • NPDES Permittee Coordinators (10/17) • Planning directors/staff: County planning groups (e.g., Pierce Co Regional Council GMCC subcommittee 9/26) • Master Builders Association (Pierce Co. 9/6) • APWA stormwater manager's Group (9/20) • Others?	Commerce to attend meetings with assistance of LIO member entities.	Sept - Dec 2013	Report summarizing meetings and interviews December 15, 2013 **Completed**
Task 3. Identify innovative strategies and approaches that have been adopted to address the challenge. Identify key questions, assumptions, and conditions that potential solutions would need to address.	Commerce: Contract with consulting firm specializing in land use and stormwater engineering	October 2013 – Jan 2014	Draft document identifying innovative approaches - Jan 2014 **Completed**
Task 4 Recommend strategies and approaches that jurisdictions can use to address challenges of infill development that can inform or be implemented in comprehensive plan and development regulation updates starting in 2015. - Comprehensive plan policies - Regulatory tools and incentives - Regional approaches – watershed basin planning, regional facilities, in-lieu fee programs - Other flexibilities in the Municipal Stormwater permits - Urban density as a best management practice - Subarea planning for urban centers with stormwater management? - Funding approaches Secondary: Recommendations to inform next update of Puget Sound Partnership Action Agenda.	Commerce, with assistance from Core Team(?)	Jan-March 2014	Presentation to PSRC Growth Management Policy Board – Feb 2014 Interim Reports – June 2014, June 2015 Final Report – June 2016

Task	Responsible Entities	Time Line	Deliverable
Task 5 Develop and implement a communication plan for engaging stakeholders - Tribes, environmental community, PSSRC, permittees, building community, REALTORS, Phase II permit coalition (?),etc.	Commerce, with assistance from Core Team(?)	June 2014 July – October 2014	Outreach Plan Outreach implementation
Task 6 Develop and implement educational outreach/training plan in coordination with Ecology outreach and training programs such as Low Impact Development and In-Lieu Fee Guidance.	Commerce and Ecology, with assistance from Core Team(?)	June – August 2014	Educational outreach/training plan
Task 7 Develop and conduct ongoing workshops and training on existing and recommended strategies and approaches that jurisdictions can use to address challenges of infill development that can inform or be implemented in comprehensive plan and development regulation updates starting in 2015. (Per Task 4)	Commerce and Ecology, with assistance from Core Team(?)	Fall 2014 – 2016	Training Workshops
Task 8 Seek funding opportunities for pilot projects, training, etc.	Commerce and Ecology, with assistance from Core Team(?)	Fall 2014 – 2016	Memo that describes potential funding opportunities: 1.Recommendations to funders; and 2. Suggestions for cities seeking funding

M E M O R A N D U M

March 5, 2014

TO: Bill Moore, Dan Gariepy

FROM: Ed O'Brien

SUBJECT: Regional Alliance Proposal: Fee In Lieu Option for Regional Growth Centers

Overview:

This is an update to the comments that I wrote earlier. I've added a few more statements to help with clarity. I haven't changed the overall message that a fee-in-lieu approach to the improvement portion of the flow control requirement can be an option. We have recently sent a letter to the City of Redmond indicating our concurrence with the City's plan to implement such an approach.

The next few sections of this memo use the same section headings as used in the Regional Alliance's proposal and responds to those sections.

The last two sections, Caveats and Observations, provide more context.

How Would It Work?

We can use the Redmond Watershed Management Plan as an example.

Redmond collected information on each of their creeks in order to categorize creek basins into one of four categories: Conservation, Highest Restoration, Restoration, Restoration Development. Tables 3.1 and 3.2 in the Redmond Plan summarize existing watershed conditions by compiling information on land cover, land use, physical parameters, fish use, habitat, water quality, and stormwater influence in the basin (see attachment). This detailed information along with projected land use, ESA information, the local Salmon Recovery Plan, and 303(d) status were used for amending the general direction given by the Watershed Characterization process for categorizing the watersheds.

The retrofit component of the flow control requirement can be transferred into a highest restoration priority basin by virtue of a fee-in-lieu. In Redmond's case, they have committed to building a large flow control facility in a highest priority basin in advance of any redevelopment to kick off the program. The facility has an identified capacity for providing flow control for X acres of impervious to forested, and Y acres of lawn to forested, and Z acres of pasture to forested. Then, development projects can pay a fee-in-lieu of providing the retrofit portion of their flow control obligation at their development site. The City tracks how much capacity is bought by each project by tracking the land cover. The City has to separately identify how much to charge per acre.

Why Would This Be Better Than Following the Default Stormwater Requirements? (i.e., Does the Proposal Address PCHB Concerns?)

Does/Can the Regional Alliance proposal adequately address the PCHB's concerns over Clark County's proposal? They have submitted arguments to answer each of the PCHB's concerns. Those concerns, and my reaction to the Alliance's arguments are listed below.

1. Basin planning or similar planning required.
   The Alliance proposes relying on Ecology's Watershed Characterization approach. If the proposal starts with the Watershed Characterization approach, and supplements that with more specific knowledge about each basin, similar to Redmond, it might be defendable. However, the PCHB didn't like the aspect of transferring the requirement just anywhere within the WRIA that Clark County is a part of. There has to be a clear delineation of priority areas based on sound science and pertinent data.

2. Location of alternative mitigation.
   The above response may not be adequate for this issue. The Board's issue, in part, was that there wasn't a guarantee that the miles of stream improved by the alternative mitigation was going to be at least as much, if not greater, than the alternative site.

3. Ecology's lack of a say in the mitigation location.
   The proposal is to use the Ecy Watershed Characterization approach. That approach by itself is probably not adequate. It is based on general principles rather than watershed-specific information. The Watershed Characterization designers concede that the conclusions reached by their process should be fine tuned by local information. That is what Redmond has done.

4. Ecy has no role in ensuring alternative projects achieve the goal of the flow control standard.
   The Alliance statement does not address this issue. But then, I don't think it can be addressed. Ecology has never done a quality control check on the proper implementation of the flow control standard by local governments. We provide training on the requirement and the modeling procedures. We review the Phase I permittees' stormwater manuals. But we do not do a quality control review of the municipalities' stormwater project reviews.

5. No monitoring to confirm equivalency.
   The Alliance proposes monitoring for retrofit projects. That seems inappropriate. It would be better for each municipality to have a long-term monitoring project, such as proposed by Redmond, to see if the overall strategy is working, rather than monitoring each project. The idea would be to monitor for improvements in the hydrology and water quality of a high priority stream - to which projects funded by the fee-in-lieu program are discharging. But if this is over and above the regional status and trends monitoring, the permittees may object.

6. Acreage metric is without merit. No science to indicate harm caused in one watershed can be mitigated by a project in another watershed.
   These are two different statements. The PCHB is wrong on the first statement. They are misdirected with the second statement. The proposals are not trying to accomplish that second statement. The Alliance acknowledges the need to be able to indicate greater benefit at the alternative site. Also, it is good that their proposal recognizes that if the RGC drains to a waterbody with good health, the option isn't recommended. We could go through the RGC and MIC's and identify B-IBI data for those areas. If the B-IBI scores are in the "good" range or better (38 and higher), this option should be off the table. It probably should be off the table for projects to streams with B-IBI scores in the fair range (28-37) too. But that could depend upon other factors that could be identified in the priority watershed ranking system.

7. Vesting.
   The Alliance statement is that this doesn't apply. But some discussion is necessary about when the start date would be for this option.

8. Impermissible reduction in effort in the structural retrofit program.
   The Alliance correctly indicates the Phase II permittees don't have a structural retrofit requirement. But it would be wise for Ecology to suggest that such a requirement will be considered for the next Phase II permit. And, that requirement would be over and above the type of program being discussed in this proposal. Note that this proposal involves taking private money to make improvements in higher priority watersheds. There is no significant public $ commitment (unless it applies to public projects too) to capital projects to improve the status of their waters. Without a publicly funded structural retrofit program, facilities to retrofit water quality treatment and to reduce flow-related problems caused by existing development would only occur at the pace of re-development. That is something deserving of lots of discussion for the next permit round. The WRIA 9 study results will provide another perspective on the importance of the redevelopment requirements and the limitations of relying solely on those requirements to solve stream problems caused by existing development.

9. LID not required in the proposal.
   The Alliance indicates that their proposal would apply only to flow control, but could be expanded to LID in the future. That should be acceptable to Ecology, but I am unsure that it addresses the PCHB's concern. We are finding that the new LID requirements complicate how this alternative retrofit strategy would be implemented. We are discussing this issue with Redmond. Our current understanding is that a fee-in-lieu option works only by transferring attainment of the LID Performance Standard for replaced impervious surfaces.

10. No minimum level of sustained effort for the structural retrofit program.
    Same response as for issue 8.

11. The strategy undercuts efforts to make gradual improvements as redevelopment occurs, and undercuts enhanced investment in retrofit projects.
    The Alliance response is the correct response. The PCHB seems to have missed the point that an equivalent amount of improvement will occur somewhere. The strength of the proposal is that those improvements can be made in locations where they are more likely to result in tangible, documentable improvements in protecting the resources and beneficial uses at risk.

Questions for Bill:

1. Does the idea have merit? Is it worth looking into further?
   Yes, it has merit. Ecology has indicated for a long time that this type of approach is an acceptable alternative to the default stormwater requirement for flow control. The general approach need not be restricted to just Regional and Industrial Centers, as demonstrated by our support for the City of Redmond's strategy.

2. If so, what would be most valuable to further explore this approach?
   a. Environmental benefit analysis? Answer: I think it would prove very difficult to do a quantifiable environmental benefit analysis. And even more difficult to quantify a difference in the "ecological lift" between applying the default in an urbanized basin versus providing an equivalent flow reduction in a less developed basin. I don't recommend that. We may be able to rely on the general logic to focus improvements on basins in the "Fair" and "Good" B-IBI ranges, that still have natural salmonid populations, and that have less needs to restore habitat associated with sustainable, healthy salmonid populations. That is already a focus of the Puget Sound Partnership. Let's not volunteer to over-think or prove the obvious and what others already subscribe to.
   b. Locations of retrofit projects, or just the methodology of how jurisdictions would go about choosing the location and the analysis needed to prove the environmental benefit and effectiveness of a fee-in-lieu program?
      Answer: The methodology, and a feedback loop. I think it isn't appropriate to rely solely on the Watershed Characterization results to identify which basins to transfer the improvement projects to. We could work on identifying the types of information that can be used to identify the priority watersheds. But it would be more difficult to set a minimum amount of needed information. We can use the information collected in the Redmond project as a starting point for developing guidance.
      Because each municipality is responsible for achieving Water Quality Standards within their legal boundaries, I would expect that they will want to restrict the location of retrofit projects to another basin within their jurisdiction.
      In regard to proving effectiveness, the PCHB Clark County decision is pushing us to provide this feedback loop. An effective feedback loop would not be on a project-by-project basis. It would have to be on a basin basis and over an extended time period.
   c. Additional work through NEP grant?
      We should discuss whether there would be a benefit to providing local governments with more guidance concerning detailed steps for implementing a fee-in-lieu strategy. Possible

areas include: options for setting fees; options and restrictions for use of funds from fees; how to establish and minimum characteristics of a tracking system for credits accrued by a regional (or other) facility and credits purchased by an individual project; criteria for sub-watershed ranking to determine priority areas for watershed improvement projects.

3. Do you know where retrofit projects have been proposed or completed? We would be looking for projects that would benefit the hydrology of a RGC's watershed.
   I don't know what is being asked here, or why.

4. Are there other flexibilities in the NPDES permit that are worth exploring?
   Yes. Phase II's can adopt a Phase I approach for compliance with S5.C.4.a.i. Phase II's can adopt equivalent measures as those in the Ecology manual for compliance with S5.C.4.a.ii. Phase II's can do Watershed Planning that involves computer modeling, backed by field work to develop a watershed-specific strategy for stormwater management.

5. Conduct a Use Attainability Analysis for RGCs following EPA guidance. Is this worth exploring?
   Whatever beneficial uses existed in a stream as of 1975 have to be maintained and restored. Use Attainability is not allowed to modify that. IF the uses did not exist as of 1975, though the stream is categorized for those uses in the WA WQ Standards, THEN performing a Use Attainability Analysis is necessary to potentially remove those uses. So, wherever RGC's or MIC's are within basins that had salmonids as of 1975, there is no point in doing a Use Attainability Analysis.

Caveats:

The cities/counties remain responsible for maintaining and restoring beneficial uses and meeting water quality standards in all of their watersheds. To the extent it is necessary to moderate and control flow rates to meet that statutory requirement, they have an obligation to do so. Because it is more expensive to take the actions necessary to improve water quality (through flow control) in more highly developed areas, the cities are potentially taking on the financial burden of future retrofit projects that will cost more than what they accepted from the developer as a fee-in-lieu. They are essentially transferring this higher financial obligation from private parties to the public. Whether that obligation comes due depends upon society's adherence to the requirements of the federal Clean Water Act.

(See next page)

Observations on Listed RGCs and MICs:

Regional Growth Centers:

8 RGCs fully inside 40/20 zone: This strategy does not apply to them. They already are allowed to provide flow control only to the existing site condition.

RGCs partially inside the 40/20 zone:

1. Bellevue: Maybe 1/3rd of the area is outside the 40/20 zone.
2. Renton: Mostly or all in 40/20 zone.
3. Tacoma Mall: Probably exempt because it drains to the Thea Foss Waterway.

RGCs outside the 40/20 zone:

16 basins listed
Bremerton is likely mostly flow control exempt.
Puyallup Downtown is likely mostly flow control exempt
Puyallup South Hill is in Clarks Creek, which is a basin in fair to good condition. It is probably not a good candidate for transferring flow control out of the basin.
Redmond Downtown is flow control exempt
Redmond-Overlake has a regional approach in place

Manufacturing Industrial Centers:

Fully inside 40/20

1. Ballard/Interbay – In flow control exempt area
2. Duwamish – in flow control exempt area
3. North Tukwila – partially exempt. Remaining area still not applicable to this approach.

Partially (mostly) inside the 40/20 zone:

1. Port of Tacoma: Also, mostly or in flow control exempt area

Outside the 40/20 zone:

1. Frederickson – Clover Creek basin
2. Kent - Springbrook Creek
3. Paine Field – drains to multiple small creeks to Puget Sound. Portion in Swamp Creek basin
4. SKIA – A portion within the Gorst Creek Basin. Gorst Creek rated as a high priority stream for salmon conservation and restoration. Not a good candidate for transferring flow control out of the basin.

[1]Flexibility in permit: Options for redevelopment

Ecology often cites Basin Planning as the main source of flexibility in the NPDES permit (Appx 1, Sect 7 in both permits).
What are other areas of flexibility in the permit? A common complaint from planners, stormwater managers, and the building community was that the permit "doesn't give enough credit to redevelopment" which is where you want to encourage growth. We should explore all these individually, and perhaps in combination.

Flexibility in permit for redevelopment	**NOTES**
Modifying the thresholds for when *replaced* surfaces must retrofit Local governments can select from various bases for identifying projects that must retrofit the replaced hard surfaces on the project site. Those can include: • Exceeding 50% of the assessed value of the existing improvements; • Exceeding 50% of the replacement value of the existing site improvements as determined by the Marshall Value System, or a similar valuation system; and • Exceeding a certain dollar value of improvements; and • Exceeding a certain ratio of the new hard surfaces to the total of replaced plus new hard surfaces. A local government's thresholds for the application of stormwater controls to replaced hard surfaces must be at least as stringent as Ecology's thresholds. Local governments should be prepared to demonstrate that by comparing the number and types of historical projects that would have been regulated using the Ecology thresholds versus the local government's thresholds.	Examples? Citations to codes? Seattle that set a lower flow control standard but increased the thresholds for when it would be applied, and Ecology agreed the net result was better - document? Note these costs thresholds are not related to scientific identified needs related to water quality of receiving waters. They are politically determined thresholds, borrowed from similar thresholds set for public health and safety (building codes). Some argue that based on the source, this cost threshold should only apply to actual pollutants rather than Flow Control. Or alternatively, that maximum flexibility in setting thresholds should be allowed in areas planned for concentrated growth to account for the per capita benefits of density, and to encourage redevelopment.
Stop loss Local governments are allowed to institute a stop-loss provision on the application of stormwater requirements to *replaced* hard surfaces. A stop-loss provision is an upper limit on the extent to which a requirement is applied. For instance, there could be a **maximum percentage of the estimated total project costs that are dedicated to meeting stormwater requirements**. A project would not have to incur additional stormwater	Research current application of stop-loss provisions. Where is this found in local stormwater programs? Concern was raised that the thresholds were set too high to be meaningful. This provision is only for replaced hard surfaces, so setting a reasonable upper cap on costs will only apply to

[1] This is a list developed by Tim Gates, Department of Commerce. It was not reviewed or approved by Ecology. Thus, any errors in the statements in this document are entirely from Commerce.

costs above that maximum though the standard redevelopment requirements will not be fully achieved. The allowance for a stop-loss provision pertains to the extent that treatment, flow control and wetlands protection requirements are imposed on replaced hard surfaces. It does not apply to meeting stormwater requirements for *new* hard surfaces.	requirements that are improvements over baseline.
Fee in lieu Local governments can also establish criteria for allowing redevelopment projects to pay a fee in lieu of constructing water quality or flow control facilities on a redeveloped site. At a minimum, the fee should be the equivalent of an engineering estimate of the cost of meeting all applicable stormwater requirements for the project. The local government should use such funds for the implementation of stormwater control projects that would have similar benefits to the same receiving water as if the project had constructed its required improvements. Expenditure of such funds is subject to other state statutory requirements. Ecology cautions local governments about the potential long-term consequences of allowing a fee-in-lieu of stormwater facilities. Sites that are allowed to pay a fee continue without stormwater controls. If it is determined, through future basin planning for instance, that controls on such sites are necessary to achieve water quality goals or legal requirements, the public may bear the costs for providing those controls.	The requirement that fee should be equivalent to site-based controls is not clear. Fees should ideally be lower than meeting requirements on site, shouldn't they? The issue should not be the amount of money paid, but the area treated. Is it possible for Ecology to clarify their cautionary note? If the program is set up appropriately, isn't the city speeding improvements and getting better quality? Should there be an implied possible penalty implied in taking a more sophisticated approach?
Variance provisions A local government may grant a **variance/exception** to the application of the flow control requirements to replaced impervious surfaces if such application imposes a severe economic hardship. See Section 2.8 of this chapter.	Is it possible for a jurisdiction to identify areas where costs to meet certain requirements would impose severe economic hardship, based on careful analysis? Perhaps an evaluation that determined a lower FC standard could be applied that would still gain net improvements, but not achieve full compliance. For example, a Regional Growth Center where costs would discourage improvements could use the "Grass" target rather than the "Forested" target as a standard? This could then be used to size regional facilities for the area. Essentially an area-wide shortcut to basin planning that sets an alternative standard based on policy (removing economic barrier

	to achieving the per capita benefits of density).

Example of combining flexibilities for targeted growth areas

Is it possible to combine different flexibilities within the permit to incorporate consideration of the per capita benefits of Regional Growth Centers/Transit Oriented Development? For example

Lower threshold for redevelopment:

The permit allows you to change the thresholds for redevelopment, as long as they are equivalent or better.
{**For guidance document:** Show where this is contained. Illustrate this with an example: Seattle drops the treatment standard, but applies it to lower thresholds of development, right? Seattle showed how this was better and Ecology approved it. How does Ecology approve such a change? Do they actually "certify" the regs, is it a permit modification, or is it a letter like the one they sent Redmond for their watershed plan. Find the Seattle example, show exactly what they did. Where in the Seattle Manual is that found. Have a comparison in a call-out box that shows how this compares with the default.}

Perhaps you could set a *lower* threshold for improvements to Water Quality treatment, so more projects need to clean up pollutants, but in exchange, modify the Flow Control requirement to match "grass" rather than "forested." It's still an increment of improvement

In-Lieu Fee

You could combine this with an In-Lieu Fee/ Regional facility program so developers just cut a check, the city gets a grant to build the Flow Control facility up-front. It's a cheaper facility because it's build to a somewhat lower standard.
[For guidance: could you have Lynnwood do a comparison replacing Forested with Grass and see what their regional facility to treat their RGC would be? This could illustrate the cost savings.]

Why is this equivalent or better?

Faster: With a regional facility paid off (in part at least) through In-Lieu Fees, the city gets earlier improvement to flow control. You also would get better pollutant treatment quicker because you've lowered the total cost threshold by reducing the Flow Control costs.
(Can state grant dollars for retrofits prioritize projects for RGCs with no direct discharge, outside 40/20, and with high salmon habitat resources?)
Cheaper: dropping from Forest to Grass is a lower flow control standard so the amount to contribute is less. By building regionally you can cite the project where costs are lower.
Greener: Requiring retrofit to Grass is still an improvement for flow control. It's not the full increment of improvement but you do get the per capita benefits in those areas, and also you've set lower thresholds for when you need to do pollutant treatment. This could create more certainty that there will actually be improvements because at current costs, there will be no redevelopment and the area will just continue to pollute. That should be factored into the equation.

Citations

Appendix 1 in both Phase and Phase II Permits (2013)

The Redevelopment thresholds are found in Appx 1,3.3, and Figure 3.3.
The following redevelopment shall comply with Minimum Requirements #1 through #9 for the new hard surfaces and converted vegetation areas:

- Adds 5,000 square feet or more of new hard surfaces or,
- Converts ¾ acres, or more, of vegetation to lawn or landscaped areas, or
- Converts 2.5 acres, or more, of native vegetation to pasture.

See Figure 3.3, Flow Chart
Is the total of new plus replaced hard surfaces 5,000 square feet or more, AND does the **value of the proposed improvements** – including interior improvements – **exceed 50% of the assessed value** (or replacement value) of the existing site improvements?

NOTE: For significant redevelopment that are most desirable in RGCs, the cost triggers will often be tripped, e.g., when you move from parking lots to high density mixed us. This threshold is not based on anything directly related to the health of receiving waters, in essence, it is an entirely political decision. Considering the per capita benefits of redevelopment, this could be an area of flexibility worth exploring that should not put a city at risk of lawsuits claiming they are harming water quality when redeveloping, especially if projects treat all actual pollutants.

W WA Stormwater Manual, Volume I Minimum Technical Requirements, page 2-13

2.4.2 Redevelopment

Additional Requirements for the Project Site
Redevelopment projects (other than road projects)…
"shall comply with Minimum Requirements #1 through #9 for the new and replaced hard surfaces and the converted vegetated areas if the total of new plus replaced hard surfaces is 5,000 square feet or more, and the valuation of proposed improvements – including interior improvements – exceeds 50% of the assessed value of the existing site improvements.

A local government may exempt or institute a **stop-loss provision** for redevelopment projects from compliance with Minimum Requirements #5 On-site Stormwater Management, Minimum Requirement #6 Runoff Treatment, Minimum Requirement #7 Flow Control, and/or Minimum Requirement #8 Wetlands Protection as applied to the replaced hard surfaces if the local government has adopted a plan and a schedule that fulfills those requirements in regional facilities.
A local government may grant a **variance/exception** to the application of the flow control requirements to replaced impervious surfaces if such application imposes a severe economic hardship. See Section 2.8 of this chapter.

Objective

Redevelopment projects have the same requirements as new development projects in order to minimize the impacts from new surfaces. To not discourage redevelopment projects, replaced surfaces aren't required to be brought up to new stormwater standards unless the noted cost or space thresholds are exceeded. As long as the replaced surfaces have similar pollution-generating potential, the amount of pollutants discharged shouldn't be significantly different. However, if the redevelopment project scope is sufficiently large that the cost or space criteria noted above are exceeded, it is reasonable to require the replaced surfaces to be brought up to current stormwater standards. This is consistent with other utility standards. When a structure or a property undergoes significant remodeling, local governments often require the site to be brought up to new building code requirements (e.g., on-site sewage disposal systems, fire systems).

Supplemental Guidelines

If runoff from new hard surfaces, converted vegetation areas, and replaced hard surfaces (if the applicable cost or space threshold has been exceeded) is not separated from runoff from other existing surfaces within the project site or the site, the guidance in Appendix III-B of Volume III for off-site inflow shall be used to size the detention facilities.

Local governments can select from various bases for identifying projects that must retrofit the replaced hard surfaces on the project site. Those can include:

- Exceeding 50% of the assessed value of the existing improvements;
- Exceeding 50% of the replacement value of the existing site improvements as determined by the Marshall Value System, or a similar valuation system; and
- Exceeding a certain dollar value of improvements; and
- Exceeding a certain ratio of the new hard surfaces to the total of replaced plus new hard surfaces.

A local government's thresholds for the application of stormwater controls to replaced hard surfaces must be at least as stringent as Ecology's thresholds. Local governments should be prepared to demonstrate that by comparing the number and types of historical projects that would have been regulated using the Ecology thresholds versus the local government's thresholds.

Local governments are allowed to institute a stop-loss provision on the application of stormwater requirements to replaced hard surfaces. A stop-loss provision is an upper limit on the extent to which a requirement is applied. For instance, there could be a maximum percentage of the estimated total project costs that are dedicated to meeting stormwater requirements. A project would not have to incur additional stormwater costs above that maximum though the standard redevelopment requirements will not be fully achieved. The allowance for a stop-loss provision pertains to the extent that treatment, flow control and wetlands protection requirements are imposed on replaced hard surfaces. It does not apply to meeting stormwater requirements for new hard surfaces.

Local governments can also establish criteria for allowing redevelopment projects to pay a fee in lieu of constructing water quality or flow control facilities on a redeveloped site. At a minimum, the fee should be the equivalent of an engineering estimate of the cost of meeting

all applicable stormwater requirements for the project. The local government should use such funds for the implementation of stormwater control projects that would have similar benefits to the same receiving water as if the project had constructed its required improvements. Expenditure of such funds is subject to other state statutory requirements.

Ecology cautions local governments about the potential long-term consequences of allowing a fee-in-lieu of stormwater facilities. Sites that are allowed to pay a fee continue without stormwater controls. If it is determined, through future basin planning for instance, that controls on such sites are necessary to achieve water quality goals or legal requirements, the public may bear the costs for providing those controls.

Building Cities in the Rain

The Washington State Department of Commerce, with funding from the U.S. Environmental Protection Agency's National Estuary Program, is partnering with the South Central Sound Puget Caucus to identify approaches to managing stormwater in infill areas. Commerce is providing coordination and technical assistance with help from a group of interested stakeholders including Puget Sound Regional Council (PSRC) staff, boards, and committees; staff from Ecology; and a subcommittee of the South Central Local Integrating Organization.

Who, What and Why: *The South Central Action Area Caucus Group is a regional "Local Integrating Organization" (LIO) designated with advancing the Puget Sound Action Agenda. This project is intended to further one of the group goals: "Better alignment of land use planning with conditions for, and implementation of, municipal NPDES permits to reduce stormwater impacts."*

For information visit the project website at EZView.wa.gov or contact Heather Ballash, Commerce, heather.ballash@commerce.wa.gov, 360.725.3044; or De'Sean Quinn, Caucus Group Coordinator, at 206.263.3420.

Problem Statement: Current regulatory and legal requirements, including stormwater management, provide important environmental protections but can also make development in urban centers more expensive than in less dense areas, which is counter to the region's growth management strategy. What approaches can the region use to both encourage development in dense urban centers to meet land use goals, while meeting water quality requirements?

Need: The challenge of meeting growth management and stormwater goals is complex and involves many disciplines such as water resources, science and engineering, architecture, real estate development and finance, land use and environmental regulation, and urban design, among others. Infill development and redevelopment can include costs for demolition, brownfield remediation, historic preservation, aging infrastructure repair, and stormwater infrastructure. These types of requirements can ultimately make an infill project more expensive than a similar project in a less developed area. Some developers may choose to look outside of concentrated growth centers for lower cost options for their projects. The result is that, for many jurisdictions, it becomes difficult to balance between equally critical growth management and water quality objectives. Focusing growth in compact centers is increasingly being identified as a best management practice for water quality by the U.S. Environmental Protection Agency (Using Smart Growth Techniques as Stormwater Best Management Practices[1]) A clear understanding of the elements that contribute to the challenge is needed so that effective solutions can be identified.

[1] http://www.epa.gov/dced/pdf/sg_stormwater_BMP.pdf

Building Cities in the Rain

Goals:

- Develop recommendations and guidance for incentives and cost-effective approaches to encouraging infill development within urban centers while addressing stormwater requirements that can inform comprehensive plan policies and development regulations as part of the Growth Management Act periodic updates starting in 2015.
- Increase awareness of stormwater challenges with state agencies and other entities that can help local jurisdictions address the issue.

Accomplishments:

- **Background Report on Existing Information** - Commerce staff reviewed the PSRC Growth Management Policy Board stormwater discussions and met with builders, planners, stormwater managers, and others to gain a better understanding of the issue. The product is a background report that identifies key concerns and challenges. The report emphasizes the benefits to water resources of redevelopment and implementing the VISION 2040 Regional Growth Strategy, which minimizes new impervious surface and results in improvements to existing impervious surfaces.

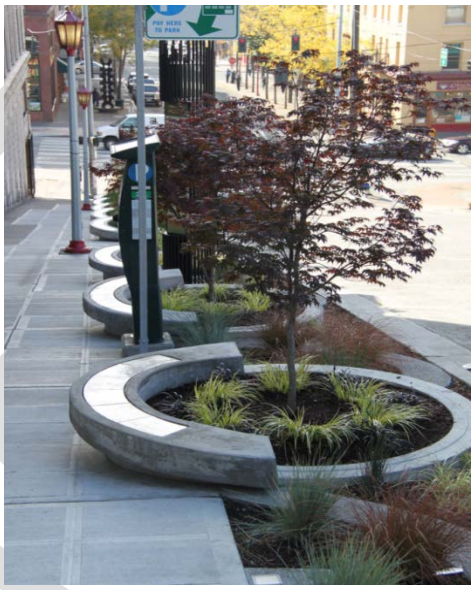

Photo: Courtesy of SvR Design

- **Portfolio of Innovative Practices** - SvR Design Company created a portfolio of innovative strategies, including policies, regulations and practices that are already being used to sustainably manage stormwater. These practices can be implemented in upcoming comprehensive plan updates. Examples include basin planning, incorporating incentives into low impact development codes, and partnering with the private sector to retrofit stormwater facilities.
- **Draft Concepts for Further Strategies and Approaches** - Ecology is developing guidance for using in-lieu fee programs, including how they can be used to strategically locate stormwater retrofits where they are most important to create healthy aquatic habitat while freeing land for development in dense centers. Other strategies and potential solutions to address stormwater in urban areas, such as watershed planning and the benefits of higher density, are also being explored.

Tools for Stormwater Management