

**Department of Ecology – Water Quality Program  
Development of Low Impact Development (LID) Standards for the  
Municipal Stormwater General Permits**

**Implementation Advisory Committee Meeting #3  
February 8, 2010, 10:00am–3:00pm at  
Federal Way City Hall Chambers  
MEETING SUMMARY**

**Goal of the Meeting:** The goal of this meeting was to review Ecology's proposed permit framework and discuss key questions regarding options for timing of permit revisions and feasibility.

**Agenda**

Updated Permit Framework  
Highlights from Performance Standard Modeling Presented to TAC  
Feasibility  
    Low infiltration rates  
    Competing needs  
    Cost

**ATTENDEES**

A list of attendees is provided at the end of this meeting summary.

**MEETING SUMMARY FROM FLIP-CHART NOTES**

*The meeting summary provided here is a transcription of the flip-chart notes taken by Kate Snider during the meeting supplemented by staff notes. This does not provide a full documentation of the dialogue, but provides a record of the primary input received from the attendees.*

**PERMIT FRAMEWORK**

**Reissued Municipal Stormwater Permit Requirements**

Discussion Questions

1. *Do you agree with Ecology's proposed approach to apply hydrologic performance standard(s) to new development and a standardized evaluation process similar to that proposed by Seattle Public Utilities for redevelopment projects and small sites (less than 10,000 sq. ft impervious; 5,000 sq. ft. PGIS; or ¼ acres disturbance)?*

2. *Should a standardized evaluation process also be used in urban infill types of new development? Consider three categories of new development: greenfield development outside of UGAs, urban infill on small lots, and urban infill on larger parcels?*
    - a. *Is there an appropriate size to differentiate between small and large urban infill sites?*
    - b. *For urban infill on larger parcels, should achievement of a hydrologic performance standard be considered feasible even if the local government has to change the allowed housing type to make the achievement possible? (e.g., An original single family residential density of 10 homes/acre on till has to change to multi-family to achieve the performance standard and maintain same housing density per gross acre)*
- Bremerton successfully implemented LID at multiple development scales. This has worked, and developers have found some ability to do LID on all sites. With encouragement, they recognized economic benefit. With some facilitation by our local government staff, the carrot approach has worked well. They used LID on multiple scales, including a significant replacement of military housing at densities from 5 to 20 units per acre. However, we are encouraging LID, not requiring it.
  - Question: Is Ecology defining any development in the UGA as 'urban infill'
    - Ecology answer: No, we are asking whether there are some larger undeveloped urban parcels to determine if there are more flexible options for LID at different scales.
  - Why not require redevelopment above a certain size threshold meet the hydrologic performance standard?
  - For redevelopment there are good precedents for the use of LID. We should make sure we have process that extracts as much benefit as possible.
  - Ecology: We are asking for input on the appropriate size for setting the hydrologic standard. We heard from the Technical Committee that it is harder to retrofit LID in urban areas where options tend to be restricted by adjacent land uses.
  - In a small city, we encourage LID across the board, including single-family homes.
  - Regarding Question 2b: Changing the housing type is ok in some instances, and usually the code has options for clustering. But at some level of density, it starts to conflict with the comprehensive plan, especially if the density becomes very intense.
  - From a developer perspective, the answer to Question # 1 is yes. The small project works well with a standardized approach.
  - Beyond the small projects, do not see a need to discriminate between redevelopment and new development. Large redevelopment projects can meet a performance standard.
  - Concur about requiring LID for redevelopment. What is the appropriate threshold? New development usually bears the burden of the standards, and this would be more

equitable. Feasibility for developers relates to whether it is a small or large company. There should be flexibility in how to implement the requirements.

- For question 2b: No, leave feasibility to local discretion. The public will oppose denser projects. We need development to meet the existing zoning and the comprehensive plan vision for the community.
- Sometimes zoning will conflict with the ability to meet hydrologic standard and water quality. Don't want sprawl, but we may have to decide which is more important. Propose reducing density where needed for water quality.
- The small site threshold makes sense. Regarding 2b: Zoning changes require significant public involvement. This brings forward a lot of comprehensive plan policies and sectors of the community with their own issues that might conflict with zoning changes.
- For comprehensive plan policy changes, restoring the State Department of Commerce funding for comprehensive plan updates and technical assistance is important.
- This approach seems to be for small sites to apply LID to the maximum extent feasible with a tool, and for large sites to meet a hydrologic performance standard. If there are off-ramps, the local government can use its discretion in how they are applied.
- If you are requiring a hydrologic standard for large sites but not for small, then the large site off-ramps must be carefully defined to not be the same as the standardized checklist approach. If not, then why treat them differently?
- Site conditions will determine feasibility. Site conditions decide whether a project can meet a performance standard or not. Caution against making a standard that sites can't meet. That will discourage redevelopment.
- Success comes down to site conditions.
- LID should be integrated into regional facilities by the stormwater utility in urban areas, so that redevelopment volumes are addressed. We can't expect redevelopment to fix all the ills.
- Agree that redevelopment has many techniques that can be implemented. We should treat redevelopment the same as new development with a different standard for small sites.
- Is there a way to encourage infill and still maximize LID techniques? This needs more discussion.
- Concern regarding paragraph 4 of the permit framework (under Section III-Ecology Proposal). The 2<sup>nd</sup> bullet regarding vegetation protection on redevelopment sites may not be possible in urban areas since the natural vegetation is usually gone.
- We also need to address a hydrologic performance standard for sites if the discharge waterbody is exempt from the flow control standard. On those sites, the permits should require LID for water quality goals.
- On question 2b – LID should be density neutral.

- Ecology: For example, on an 8 to 10 acre site, unless it is developed with homes sharing a common-wall and clustering, it can't meet the LID performance standard with single family homes. We're asking for input on whether to require this kind of change in housing type.
- King County: We took a similar approach in critical areas, where we allow clustering or common-wall construction to achieve the density if there is a buffer or wetland that must be preserved.
- An extensive review of codes is required to eliminate conflicts with the existing code and make the changes necessary to meet the LID performance standard. This includes allowing narrower streets and removing prohibitions against clustering. That's part of requiring LID.
- Local governments should remove restrictions against clustering so developers have some flexibility in decisions in order to meet LID requirements.
- Some codes only allow clustering for recreational purposes, but those governments need to broaden the clustering language to include stormwater as a reason to allow it.
- Suggest giving local governments one hydrologic performance standard, and then the flexibility to change codes to meet it. They should allow development to change housing types or implement a wider range of LID BMPs.
- The local government must allow development the flexibility to meet both the broader flow control standard as well as the LID hydrologic performance standard.
- For small sites and sites that are exempt from flow controls, the LID checklist approach makes sense, because flow control is currently not required. The performance standard for larger new development projects should be the same whether in or out of the UGA
- Ecology: Should we treat a project with 4 urban lots the same as 20 acres of greenfield? The project can meet some level of LID, but if there is a hydrologic performance standard, it may not be able to meet that.
- Agree that there is a point on the continuum from small to large urban infill and then to large greenfield where that is not feasible.
- These questions are still coming back to site feasibility. We need to remember that in a UGA there may be no native vegetation.
- In parts of western Washington, the rainfall volume is as high as 90 inches per year and we can't meet the hydrologic performance standard.

## Compliance Schedules

### Discussion Questions:

1. *Is a 2-year timeline for Phase I achievable? If not, what are the reasons for a delay, and what is an alternative preferred timeline?*
2. *Is a 3-year timeline for Phase II a reasonable timeline? If not, what are the reasons for a delay, and what is an alternative preferred timeline?*

- We need to speed it up. It seems like 2015 is too far away, and in 5 years things can get a lot worse. The Phase II's can learn from the Phase I's. Encourage Ecology to hold to an earlier timeline.
- Actually, it seems very fast for Phase II's. The PCHB noted the lack of capacity for Phase II's. There are significant questions about implementation. Support allowing the Phase II's more time to evaluate the Phase I implementation, so that timeline should be later. The Phase I timeline seems ok.
- Southwest Washington was hit hard by the economic downturn. Local governments lost as many as 1/3 of employees. Do not support an earlier timeline. Those that want to adopt earlier can do so.
- The schedule looks about right, and should not be shorter. The local governments need time for the public process, and it would be hard to accelerate any faster than what is proposed.
- This schedule misses opportunities. Ecology could notify them earlier that this would be the permit date, and they could do the planning and start the code changes now. They could start adopting at the time of permit reissuance. After all, Phase I permit modification should be done now as the 2008 PCHB ruling indicated, to implement code changes, and should not even wait for the permit reissuance in 2012.
- Ecology could modify both the Phase I and Phase II permits, expanding on current permit requirements to identify barriers. The permittees can go through codes and define those things that would need to be changed by the end of this permit cycle.
- Prefer a more aggressive timeline. We have recommendations for code revisions for 36 local governments. PSP will have a new guidance document in mid-2011 for how to review codes and requirements to include LID. It will have model ordinances in time for permit reissuance in 2012.
- Ecology: The permit modification administrative process takes at least 3 months if it is a very simple change, and 6 months for a modestly complicated modification.
- Could Ecology move timelines to 1-2 years with early notification?
- Ecology notified permittees about the flow control standard in 2004, 2005 2006, and issued the permits in 2007. The Phase I permittees had 1.5 years, and the Phase 2's had 2.5 years, and more than half didn't meet the deadline with more than five years advance warning. This approach has not realistically worked. There's also concern that litigation on an LID modification of the current Phase I permit would hold up reissuance of the 2012 permits.
- Agree with the goal to accelerate but also underscore that the lack of resources is a concern. Support 1-2 years timeline after reissuance.
- This is not just a technical process, but a political one. There may be conflicts with other political objectives. Guessing that 2 years is a short time.
- What are usual timelines for major code changes?

- It took at least 15 months in Federal Way for a clearing and grading ordinance, and 1.5 years for the shoreline program. Two to three years seems right (from today, not reissuance).
- King County needs at least 6 months, more likely 1 year.
- If it requires a comprehensive plan amendment, there is a docket timeframe. If the codes are bundled together, the slowest one will slow all of them down.
- If this process involves a number of ordinances, there are many stakeholders. It may be better to do 1-2 sections of the code at a time.
- In Bremerton, the process takes 3 to 6 months if the comprehensive plan policy is in place before the code change, but if the policy is not in place, then it will take 1-2 years.
- If permittees miss the deadline, then the permit could require a permitting moratorium. Another option is to require mitigation for projects that are approved under standards that are out of compliance, or to address projects through individual permits.
- Under the Shoreline Management Act, if a jurisdiction does not meet the deadline Ecology has the authority to impose default standards. This would encourage local governments to move quickly.
- There is a question as to whether Ecology legally could impose standards on third parties through a municipal stormwater permit.

### **Performance Standard Modeling Results**

Ecology summary of results: The TAC looked at different possibilities for a hydrologic performance standard. It would be good to use the existing continuous simulation model to determine whether LID is sufficient, since developers are already using it to meet the flow control standard. The two options we modeled include:

1. Match annual runoff volume of historic (forested) conditions at the site.
2. Match the duration of flows that occur 10% of time or less under an historic condition.

The scenarios modeled included different densities of development, using three infiltration rates (2 in/hr, 0.25 in/hr, 0.02 in/hr), and Lacey rainfall of 50 in/year (which is upper end of precipitation for Puget Sound).

- Using the model, we applied the following LID techniques:
  - a. Bio retention + pervious pavement on private property and public sidewalks
  - b. Bio retention + pervious pavement on private property, public sidewalks, and public roads
  - c. Bio retention + above + native vegetation
- Modeling results are posted on Ecology's website. In summary:
  1. In outwash soils, it is not difficult to meet either performance standard with infiltration.

2. In mid-range soils, we can match volume and flow to 10% with broad use of permeable pavements with storage beneath the pavement, and dispersion on some sites.

3. In the lowest infiltration rates we cannot match the volume or the flow duration curve, even with the use of pervious pavement everywhere possible and rain gardens in public and private space. The only way to get there is by removing water, such as with rainwater harvesting.

- The TAC members had a range of opinions and preferences. Our discussion question relates to the issue of soils with low infiltration rates.
- Comment: The model assumes that stormwater not discharged into native vegetation. In addition, with an infiltration rate of 0.25 inches/hr, you need a hybrid system to meet flow control standard for larger storms.
- Ecology: Yes, in the mid-range, you still need a pond for very large storms, and then you have to do more LID to meet the LID standard.

Discussion Question:

5. *The two performance standards under consideration (match historic volumes or match historic flow durations in the 1% to 10% frequency range) can be met without the use of LID at project sites with outwash soils. Should use of LID be required at those sites anyway?*

- Based on the results of modeling for tight soils, it seems to make sense to have different performance standards, even though at our earlier meeting we agreed that we prefer one hydrologic performance standard.
- LID should be used with other conventional stormwater management tools.
- Agree, and think that LID is intended to meet the resource protection goal, not as an end in itself.
- There's a difference between urban and rural areas. In rural areas, the objective isn't density. We have other objectives such as protecting native vegetation and critical areas, so in that rural area it's important to maintain the LID requirement. It is not so important in urban areas.
- Agree that the goal is natural resources protection. If a project can meet the performance standard with clearing and an infiltration vault, then it is not LID and the stream is not protected.
- LID has more advantages than matching the flow duration curve. It protects streams and wetlands and natural hydrology.
- Yes, but it needs a science based justification.
- There is a distinction between Phase I and Phase II in the PCHB rulings. It requires LID in Phase I and in Phase II requires removing barriers to LID and preparing for LID. The Phase II's could go to this in the next permit cycle.

## PUBLIC INPUT

- It would be useful to understand where within the 1 to 10 % flows the change occurs. What is the environmental benefit to getting down to that?
- Should require as much LID as possible, plus pond for flow control as needed. The pond needs to have the ability to discharge, otherwise, it's a requirement for a pond sized to infinite for storage.
- Regarding Question 5: Yes. One big pond doesn't meet the LID objectives because it doesn't mimic the natural state. Regarding the timing question: Accelerate the process and send preliminary requirements with a forewarning to permittees. Regarding the Permit Framework's third step for the adoption process, education should be the first step.
- Regarding Question 2b: It's great to have flexibility, but there is concern that if a local government must change zoning for hydrologic reasons, there are many other issues that bear on zoning as well, like infrastructure, jobs, and highways. We can't put hydrology at the center of zoning.
- Regarding a performance standard versus a standardized checklist: if both methods have off-ramps what is the difference in requirements for redevelopment? A standardized approach allows evaluation but respects variability in redevelopment projects. If there are not off-ramps, then it becomes a variance.
- A 1-2 year timeline for code change is more reasonable than a number of months, but is very optimistic. The Director's Rule for SPU took over 1 year and is only in draft stage. We haven't yet done public comment. Major updates like the shoreline regulations with guidance and appeals, takes at least 2 years. This should be done in one process with the comprehensive plan and legislative updates adopted together.
- Regarding the modeled examples, there's an extra level of complexity when stormwater management facilities are in the public Right of Way. SPU uses it to manage runoff from roads, but not for runoff from private property. There's concern about issues such as liability if it fails, conflicts with transportation, and operation and maintenance.
- High groundwater should be considered an off-ramp.
- Question 5: "Protect the resource" needs to be adequately defined. If you set a performance standard based only on hydrology, it is not complete protection.
- Given the limited resources, local governments won't move to prepare these codes ahead of requirements. Our city is already in a risk-management mode for actions.
- The capacity of local government to address these issues is very low. Our local government officials are only interested in jobs. For the broader community, 2-3 years is very optimistic.
- Agree that it's important to define 'the resource' and 'protection.' It's not just hydrology, but also water quality.

## FEASIBILITY CONSTRAINTS

### Infiltration Rates

#### Discussion Questions:

6. *Where soil infiltration rates are very low, is it feasible to mandate green roofs and/or rainwater harvesting - to meet the performance standard or to satisfy a required site evaluation process?*
7. *Should the permits require that on low infiltration rate sites developers do as much LID as feasible?*

- Regarding Question 6: Absolutely not. Green roofs are not effective on volume control where rainfall is high. Rainwater harvest has a high cost and you have to store a lot of water to make a difference, and requires the development have a plan to use the volume collected. Regarding Question 7: LID should be a tool and a first choice, but with low infiltration rates, leave it to engineers to decide.
- Regarding Question 6: No. Regarding Question 7: Yes. Do as much as possible. There are too many variables to consider. The permit should say “where feasible” and let municipalities evaluate on a site-by-site basis.
- Regarding Question 6: No. It’s difficult for contractors to get liability insurance if they are using green roofs and rainwater harvesting. Insurance companies are skittish about water near structures. The roofs have market issues, and cisterns are not marketable or practical. Regarding Question 7: Yes. Use LID as first choice tool, but then give local government the flexibility to base feasibility on the site conditions.
- Question 6 is an odd question, because we haven’t discussed mandating specific BMPs. We know these BMPs are practicable. Regarding Question 7, the permit should set a protective standard, a numeric LID standard, expect them to meet it.
- For rainwater harvesting and green roofs, there is a problem when the home or facility is vacant.

### Competing Needs Feasibility

#### Discussion Questions:

8. *Do you agree that there are times in which competing needs for space (i.e., not related to stormwater) can make an LID technique or principle not feasible? Examples identified in the APWA text include: pedestrian and vehicle mobility, and housing unit demands. Examples identified by the November edition of the proposed Seattle Public Utilities Director’s rule (2009-007) include: historical designation, pedestrian access, usable open space.*

9. *Should the decision about deferring compliance with stormwater LID requirements due to a competing demand be left to the local government on a case-by-case basis? Or, should there be an attempt made to develop more defined guidance for instances where deferring to another demand is acceptable?*

- Regarding Question 8: Yes of course there will be competing needs – but how far does it go? Should the state provide guidance, or let engineers and local governments decide if a project will work?
- For Question 8: These are not mutually exclusive as the state could provide some guidance. For Question 9: Leave it to the local government.
- State requirements on this would be micromanagement. Instead, identify where it won't work and leave it up to local government.
- This is a variant of question 2b – what happens when LID collides with other goals. We have a performance standard. Require them to meet it and make up for competing uses in other ways.
- Regarding Question 8: There should be guidance from Ecology at a high level to set public policy. Because there are a number of goals of growth management, let the local jurisdiction implement.
- As an example for urban areas, the Growth Management Act has density goals. If we are applying LID, can we reduce densities or do we instead relax the standard of LID to meet the density goal?
- All development must meet the broader flow control standard. Suggest giving locals as much flexibility as possible, but still having a backstop of the existing flow control standard.
- There's an opportunity to address this issue in Phase I communities and learn from that. This is part of the logic for letting Phase II implement later.
- There should be a process to bring those decisions to Ecology for review, or at least for Ecology to counsel the local government. Each community has different values.
- Ecology should provide guidance at a very high conceptual level and let the community choose.
- Ecology: If we let the local government decide feasibility, LID implementation will be inconsistent. As a regulatory agency, Ecology needs to set a point of compliance.
- This raises the question Ecology raised initially of multiple performance standards for different levels of infiltration and density. If there is only one aggressive standard, almost everything will be infeasible. Soils with low infiltration rates may warrant a separate standard. Then there could be a higher bar for off-ramps.
- If they can't meet the standard, should they do a standardized checklist? The checklist would ask series of questions such as can bioretention be used? Are there competing uses at the community level? Then, if the project can't meet the rigorous performance standard, the questions will make sure the project maximizes the LID.

- We can always do some LID on any site. The question is - what is the benefit?

## Cost Feasibility

### Discussion Questions:

- 10. Relative to redevelopment: Do you agree that cost should routinely be considered in redevelopment projects on the premise that we want to encourage redevelopment in preference to new development, but we still want to achieve some improvement in stormwater management at these sites?*
- 11. Do you have a suggestion for a generic cost threshold for limiting the application of LID at redevelopment sites? e.g., the cost of implementing LID strategies should not exceed X% of the total redevelopment project cost.*

- What is the existing cost threshold for the flow control standard?
  - Ecology reply: There is no cost threshold for new impervious surfaces. For redevelopment projects where new plus replaced impervious surfaces is 5000 square feet or more, if the cost of the proposed improvements is more than 50% of the assessed value of the existing site improvements, then it is subject to the flow control standard.
- Why would there be a cost off-ramp for LID when this cost threshold already exists?
- The current flow control standard does not say “where feasible” but the LID ruling does. Having a separate standard for redevelopment versus new development isn’t fair and will fall on new housing. Cost should be considered for development across the board.
- We are being asked about where to draw the line regarding feasibility with density, soils, etc. We have answered that local governments should determine this. But we have to decide how to maximize LID within that context and achieve the goals of LID. Recommend that Ecology sets broad guidelines for feasibility.
- Phase 1’s can implement LID under the Ecology guidance, and then Phase 2’s can learn from the Phase 1 experience and tailor it to their communities. If they set the bar too low, the local governments will have negative publicity and be subject to third party lawsuits.
- Doesn’t Ecology approve local government manuals?
  - Ecology reply: Only for Phase 1’s.
- Should cost be a criterion? Yes, set a menu of options and let them choose from those in the most cost-efficient way to meet standards
- Should there be incentives for redevelopment? Maybe we should take this out of the mix for LID.

- Use a checklist to get to feasibility with questions like: Can you use a specific BMP? If no, why? Give the local government the flexibility to evaluate this.

## **PUBLIC INPUT**

- Local governments require written findings of fact for a variance. It might help to do this for feasibility.
- For Question 7: As a consultant, I would like the local government to provide a yes or no answer on whether LID is required for sites with low infiltration soils, rather than requiring a “do what you can on the site” standard. Negotiation with the local government takes time.
- Seattle Public Utilities does not set a cost percentage. We do not have enough information to set a certain percentage. We request additional detail from the developer to document economic hardship. We get a huge range of costs, especially for green roofs. We’ll evaluate this information over time and perhaps will set one up the road, if there is enough information to support it.
- Feasibility is always about cost. It would help to have information on the value of LID compared to traditional techniques. Feasibility should be about the physical limitations of the site, and then you’re done. How much does it cost to bridge the gap after doing the “easy” LID? The gap is what you can do to buy your way out of it.
- There should be off-ramps for competing public interests. We have to be able to demonstrate to the community the clear benefits of LID in the face of competing interests
- Cost is also a consideration for the local government in terms of long-term maintenance. This discussion should address ongoing O&M costs as well as costs to the developer. If the public entity maintains it, we need to build in administrative and other costs.
- Too many feasibility issues could become a morass of front-end design and feasibility studies. Prefer a clear bar for off-ramps under a rigorous standard, like what is in place for flow control.

## **Additional discussion of feasibility by the committee**

- The Ecology proposal has a hydrologic performance standard for large sites and then a checklist approach for small sites and redevelopment. Recommend that where there is a hydrologic performance standard, set a high bar for meeting it. For redevelopment, the checklist approach is more flexible, but it should be rigorous and documented.
- For financial feasibility, the committee could request input from a resource economist.
- When doing an LID approach to site design, it’s hard to quantify the cost. How much vegetation to protect and where to cluster homes are design principles. It doesn’t cost anything to avoid cutting trees. There is no cost control in current flow control standard, so why is one needed here? There should be no cost exemption.

- Builders and their investors will look at the economics of the project versus the cost of LID, and eventually will recognize that LID may be cheaper.
- Developers need predictability in requirements so they can evaluate feasibility of the project for their investors.
- Feasibility and physical constraints of the site are easier to deal with. Policy off-ramps are more difficult. For example, Federal Way has decided that it wants a downtown, and this is their vision. How does that work with LID?
- The best way to address this is at the watershed level. It will assist with municipality's feasibility decisions and where to locate high density if it is done in the context of a watershed plan.
- Developers need to be able to tie up the site to initiate a project. They will talk to the local government about what's feasible. If they cannot get clear, site specific input when evaluating potential development, they can't make an intelligent decision. This has to happen in a timeframe of 60 days to 3 months.

Discussion Question:

*13. Should any type of feasibility constraints be considered for new greenfields development? Why or why not?*

- Yes. The Board didn't limit this to the physical site. We are getting into land use planning. Zoning requirements are not within the purview of NPDES. Support a checklist to apply everywhere, with a higher level of proof of infeasibility for greenfields.
- Agree. The technical aspects of feasibility depend on the site: soil type, slope, etc. It affects which techniques are possible. Technical feasibility applies to all sites
- Yes, it will affect the techniques selected, but not the ability to meet an overall performance standard. The developer should be held to the flow control standard and treatment standards and should be required to implement LID through a checklist approach. That would result in some LID, even on poor sites.
- For greenfield development in rural areas, there's no reason to allow any off-ramps
- If the greenfield development is in rural areas, the answer is no. We are not trying to densify rural areas, and it is not a public need. No off-ramps, other than the takings standard.
- Agree there should be a high bar outside UGAs similar to the rigor of the current flow control standard. A variance should be very difficult to obtain.
- If the developer can meet it with one big pond, it should be allowed.
- Disagree, as protection of native vegetation is supported by very strong science.  
Ecology: Should there be different standards for new development within UGAs versus outside UGAs?
- Yes, because there are more constraints inside the UGA.

- Disagree, and think they should be the same. Do not see an irreconcilable conflict between resource protection and density, unless there are physical constraints.
- Inside a UGA, sites have more constraints and are more complex to design. We need all the tools, and we need to consider them differently.
- What about sites in non-flow controlled areas?
- The Technical Advisory Committee has supported LID in these areas. The options for LID include a checklist that emphasizes treatment.
- The TAC has indicated zero support to exemptions from some level of LID.

## **PUBLIC INPUT**

- Seattle Public Utilities supports a standardized review approach for redevelopment in the UGA. It makes more sense to have a high performance standard for greenfields. Feasibility in both scenarios will play out differently. In redevelopment, feasibility has to do with what fits on the site. For new development, it is more about how to meet the performance standard.
- Ecology should provide a specific definition of “redevelopment,” as this will become very important. A large redevelopment site is very different from a greenfield.
- Concerned about the focus on urban versus rural. There is not much overall benefit if we do not address retrofits.
- The Ecology definition of redevelopment is, in part, 35% existing impervious surface. In an urban area, an empty lot has probably been disturbed already.
- EPA is looking for comment on NPDES municipal stormwater permits.
- Waterfront port facilities are flow control exempt. There should be no requirement to meet an LID treatment standard. These are 100% impervious. If a facility is meeting the standard, does it matter what technology is used, for example for the boatyard treatment requirement?
- Ecology cautions against confusing requirements for these municipal stormwater permits and industrial stormwater permits.
- In Thurston County, a lot of rural properties are not large lots. For example, an auto body repair facility on 1 acre has a high property value. If it's on tight soils, it can't do permeable pavement because of the business type (automotive). What kind of solutions are there to this feasibility issue?

## **Next Meeting – April 15**

- Watershed or basin planning is on the agenda planned early in the process
- Would like to take concrete examples back to developers of flow standard and checklist. We can ask them – is this enough information for your decision-making?
- Would like a more definitive performance standard from the TAC to react to as well.

- Is there an example of what basin planning is? It would help to provide specific examples ahead of time.
- We could review Seattle 'checklist' and take input based on key questions. Or we could look at a hypothetical development and ask – did it work and why or why not?
- Would like to see more specific comment to Ecology regarding cost feasibility.
- Send additional suggestions for the agenda to Harriet or Tina.
- Ecology will send questions to take to your constituents before the April 15 meeting.