

City of Seattle
Attachment 1 - LID Comments
July 1, 2011

COMMENTS

Comment #1: Deadlines in Permit

All timeframes throughout permit should begin with effective date of revised permit (2013), rather than issuance date (2012).

Comment #2: S5.C.5.b. iii - Full review, revision, and adoption of local development-related codes and standards.

Main points: In urban areas, review and revision of local development-related codes and standards to incorporate LID should be where feasible and cost-effective, for new development on sites not already substantially developed, and where compatible with Comprehensive Plan provisions; timeline for revisions of codes and standards should be extended to account for the complexity, possible litigation, and required outreach associated with such revisions.

While the City of Seattle has pioneered many of the recommendations in Puget Sound Partnership's *Integrating LID into Local Codes* document, there are other recommendations that Seattle cannot realistically incorporate in Seattle's codes, and others that would take much longer to incorporate than the proposed 2014 deadline. Ecology should indicate that previous local revisions, and existing codes and programs, count toward meeting this requirement.

For specific examples, here are some of the recommendations that Seattle is already addressing (Table 1) and some which cannot be meaningfully achieved within the proposed time period (Table 2).

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Table 1

| Examples of recommendations already used in Seattle | Comments |
|--|---|
| Soil amendments | Required by the 2009 Stormwater Code and the Seattle Green Factor landscaping standard for all new or disturbed landscape areas. |
| Native plants | Incentives in Green Factor requirement, required in ECA and shoreline regulations. |
| Counting LID features as landscaping | Seattle Green Factor |
| Less rigid bulk and dimensional standards | Seattle's Land Use Code has broadly been moving away from strict dimensional standards and toward Floor Area Ratio limits (FAR). This transition is occurring over multiple years as different zones are rewritten. |
| Parking maximums | Proposed in draft Yesler Terrace regulations, but would take many years to establish workable parking maximums for zones and area plans city-wide. |

Table 2

| Examples of recommendations that would take extensive work beyond 2 years and/or are not appropriate for urban areas | Comments |
|---|---|
| Impervious surface limits | Seattle's Stormwater Code provisions encourage less impervious surface, but do not establish maximum limits. Establishing whether or not maximums are appropriate in urban areas, and setting any maximums, would be multi-year process for most zones. Altogether it could easily take 10+ years. |
| More extensive use of permeable paving in the right-of-way | A variety of construction and maintenance issues have constrained use of permeable paving in the right-of-way – SDOT doesn't have the budget to adequately maintain permeable paving at a large scale, and state statutes do not allow the City to require property owners to maintain adjacent right-of-way. |

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| Examples of recommendations that would take extensive work beyond 2 years and/or are not appropriate for urban areas | Comments |
|--|---|
| Minimize building footprint/impervious surface for all site design and review | If required, this recommendation would require fundamental changes to all of our zoning regulations, and would prevent certain kinds of typical urban development. (Depending on how strongly it is implemented, this could also stake out a major policy shift at the state level that LID stormwater management supersedes other major policy goals including growth management, economic growth, and housing affordability.) |

Seattle will be able to offer more detailed feedback on this proposal if Ecology can provide more detail in the next draft on expectations.

Seattle recommends edits to S5.C.5.b.iii (1) to rephrase the requirement to allow local flexibility in urban areas:

"... Permittees shall review and revise their local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and Best Management Practices (BMPs) ~~to the maximum extent practicable where feasible and cost-effective, for new development on sites not already substantially developed, and where compatible with local Comprehensive Plan provisions.~~ The intent of the revisions shall be to make LID the preferred and commonly used approach to site development. In reviewing the local codes, rules, standards, or other enforceable documents, Permittees shall look for opportunities to require project proponents to minimize reduce impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations consider LID options for sites not already substantially developed. Permittees shall make a serious local effort to conduct a review and revision process similar to the steps and range of issues outlined in the following document, as each determines is appropriate to local conditions: Integrating LID into Local Codes: A Guidebook for Local Governments (Puget Sound Partnership, 2011). Local review and revisions before the Permit effective date apply to meeting this requirement."

The draft PSP Guidebook is focused on voluntary LID for new development in developing areas, particularly in Phase II jurisdictions. For this reason, it is largely not applicable to urban areas with existing development.

The public process and legislative timeline for an update of all codes would vary widely, depending on the extent of changes required by Ecology. Targeted revisions to eliminate key LID barriers in landscaping and utility standards, for example, could be quite straightforward and possibly accommodated in 2.5 years. If Ecology expects Seattle to review and revise codes to "minimize impervious surfaces" for all development however, the necessary legislation could

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involve comprehensive changes to development standards in more than 30 zones, requiring 10+ years. As an example, the City recently completed a revision to multifamily residential zoning standards (affecting 6 zones) which took more than 4 years from start to finish due largely to public input, appeals, and Council deliberation.

Comment #3: S5.C.9.b.ii.3 & 5 - Inspection compliance.

Main Points: Inspection compliance for stormwater facilities regulated by the Permittee should be limited to those projects that meet the threshold requirements of Minimum Requirements #6 & #7; Inspection of private stormwater facilities by the owner/operator of the facility should be applied towards Permittee compliance.

At this time it is difficult to comment on the maintenance standard and frequency of inspection because draft language has not been provided. Inspection and maintenance of LID BMPs on private property is a difficult and time consuming programmatic activity and Seattle requests that Ecology consider the changes below to S5.C.9.b.ii by requiring the inspection of LID and traditional facilities on development projects that meet the threshold requirements for construction of water quality treatment and flow control facilities (M.R. #6 & #7, respectively). This level of effort would have the most impact on a permittee's MS4. However, if a complaint is submitted to the Permittee, the Permittee has enforcement authority to require maintenance of stormwater facilities on any property.

Seattle suggests that Ecology allow for inspection of private stormwater facilities by the owner or operator of the facility and that these inspections be applied towards Permittee compliance. During the permitting process, private stormwater facilities will be inspected and enforced as necessary. Allowing Permittees to use a submitted certified inspection of private stormwater facilities by the owner or operator will help to enforce the local ordinance and maintain private stormwater facilities. At this time, Seattle does not have any comments regarding maintenance requirements.

As a starting point, Seattle recommends the following changes to Section S5.C.9.b.ii:

- (3) ... Permittee shall continue to implement the annual inspection schedule or the permittee specific inspection schedule that was developed during the previous permit term for projects that meet the thresholds for construction of stormwater treatment and/or flow control facilities based on the requirements of Appendix 1 Minimum Requirement #6: Runoff Treatment and Minimum Requirement #7: Flow Control. The annual inspection requirement may be reduced based on maintenance records. Reducing the inspection frequency to less frequently than annually shall be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 *Certification and Signature*.

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- (5)Compliance with the inspection requirements of S5.C.9.b.ii(2), (3), and (4), above, shall be determined by the presence of an established inspection program designed to inspect all sites, and achieving inspection of 80% of all sites. Inspections conducted and documented by the owner or operator may be used for compliance with this permit requirement.

Comment #4: S5.C.5.c - Watershed-scale stormwater planning

Main Point: Seattle has concerns about the general feasibility and effectiveness of watershed planning, and is especially concerned about how the proposal would affect urban infill within substantially developed areas. Following the decision of the PCHB, the watershed-scale planning requirement should only apply to relatively undeveloped areas where new development is occurring, not to highly urban areas targeted under GMA for concentrating growth; this approach will help minimize environmental impacts (including stormwater) to the Puget Sound region. In addition, as currently proposed, the analysis of water quality and hydrologic impacts and target establishment are infeasible.

Triggers for Watershed-scale Stormwater Planning

To be consistent with the PCHB's focus on basin planning on less developed areas and to avoid causing the land use planning problems described below, Seattle recommends that the Permit state that any proposed basin planning requirements do not apply to substantially developed areas. Specifically, as a starting point, Seattle recommends exempting changes to land use regulations within basins that already exceed 35% impervious surface coverage and are within a designated urban growth area. Jurisdictional Stormwater Code requirements for LID would still apply to development projects enabled by those planning actions.

At a minimum, Seattle recommends the following changes to Section S5.C.5.c.1.a-b:

- ...a. For counties:
 - i. ~~A cumulative~~ An expansion of the Urban Growth Area of >80 acres within a watershed, and/or
 - ii. A ~~planned~~ land use action that is projected to increase the total impervious surface area of a watershed by 5% of existing impervious area (e.g. from 10% to 10.5% or from 20% to 21%).
- b. For cities:
 - i. ~~A cumulative~~ An expansion of the incorporated area of the city of >80 acres within a watershed, or
 - ii. A ~~planned~~ land use action that is projected to increase the total impervious surface area of a watershed by 5% of existing impervious area (e.g. from 10% to 10.5% or from 20% to 21%).
 - iii. For watersheds that exceed 35% impervious surface coverage and are within a designated urban growth area, expansion of the incorporated area and planned

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land use actions are exempt from this analysis and planning requirement.¹...

On page 36 of Appendix 1 in "Competing Needs", Ecology states, "Note: Growth Management Act requirements are generally considered compatible with LID." This note should be stricken because it may or may not be the case; it depends how the LID requirements are written. If LID requirements help constrain development in relatively undeveloped areas while requiring a reasonable application of LID in urban redevelopment, they are compatible with the GMA, but if the LID requirement's focus on compact development at the site scale hinders the ability to accept increased density in cities, then those requirements are not compatible with the GMA's legal requirements and balancing approach.

LID promotes one aspect of GMA Goal 10 (protecting water quality), but the comprehensive issue is how LID affects achieving GMA Goals 1 and 2 (encouraging urban growth and reducing sprawl). The legislature has not directed that Goal 10 is more important than Goals 1 and 2, so local governments have the responsibility and authority to balance these goals. In fact, encouraging urban growth in already developed areas promotes Goal 10 by protecting developmental impacts on water quality at a regional scale. For these reasons, the Permit should reflect the legislature's intent that local governments should balance all the goals, and the Permit should retain the local governments' flexibility to evaluate the best methods to do so.

The PCHB recognized that the GMA could present limits for future LID Permit requirements when it concluded that "*Ecology may, **within the bounds of the GMA, require use of LID as a management tool.***" (CL 27, p. 65) In the August 8, 2008 PCHB decision in which the Board first addressed basin planning efforts for LID, the Board's focus was explicitly on undeveloped areas: "*...**The areas should be relatively undeveloped where new development is occurring, and from which discharges may impact aquatic resources.***" This limited emphasis makes sense not only in terms of where basin planning is most feasible and beneficial, but also in terms of harmonizing GMA goals and requirements with stormwater regulations.

Here is a recent example of "Smart Growth" planning actions in Seattle that support water quality on a regional scale by concentrating development within substantially developed cities:

- 1) *Multifamily residential zoning update.* In 2010, Seattle completed an update of our multifamily residential zoning standards. The update included provisions that allow greater density, decrease parking, increase landscaping (reinforcing LID requirements) and tree preservation, and encourage greater architectural

¹ [COMMENT: It is Seattle's assumption that Ecology's watershed planning language is intended to address areas that are relatively undeveloped where new development is occurring. Therefore, this proposed language is an attempt to respect this intention, but we have not had time to analyze whether this proposed change is the most appropriate metric. Seattle would like to continue the conversation with Ecology to refine this proposal.]

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diversity. Development standards moved away from rigid setback and spacing configurations, and applied a more flexible “floor area ratio” (FAR) approach.

FAR allows for more varied buildings and gives greater flexibility to preserve existing trees, but decreases how precisely Seattle can predict building footprints. While it’s likely that Seattle’s new regulations will result in similar impervious coverage to the previous zoning (or a possible decrease due to less parking), they could result in greater impervious coverage in some cases. If the trigger for watershed-scale stormwater planning required Seattle to evaluate the greatest impervious surface that would be allowed by the new zoning rather than what Seattle sees as the most likely outcome, the zoning update would likely trigger basin planning in any basins with a significant multifamily residential component. Again, this would have discouraged Seattle from using specific approaches that are effective from a land use planning perspective.

Pertaining to the multifamily residential example above, Seattle’s current Stormwater Code requires these projects to implement GSI/LID BMPs where feasible and requires the installation of water quality and flow control facilities (M.R. #6 & 7) in addition to GSI/LID BMPs for those projects that meet the thresholds for such requirements. Therefore, these stormwater requirements already address the impacts of the development that could feasibly be mitigated with GSI/LID without the necessity of performing an overall basin plan.

Analysis of Hydrologic and Water Quality Impacts at watershed scale

As currently proposed, the analysis of water quality and hydrologic impacts and development of measureable is vague and infeasible. We are unaware of any precedents or protocols to help municipalities implement the requirement as described. In the Explanatory Notes, Ecology acknowledges that lack of experience with such tools. We are unaware of any proven tools that can accomplish the analysis and target setting described in this section. The PCHB concluded in its 2008 Phase I ruling (CL 17, p. 59) that a Permit condition requiring municipalities to implement LID at a basin or watershed level was **not reasonable or practicable**; the same is true at present.

Watershed Definition

The definition of watersheds (“a drainage of between 2 square miles and 40 square miles”) is challenging in an urban environment. In Seattle, urban drainages (especially to large receiving waters (e.g. Puget Sound)) have been delineated in relation to specific outfalls. Most of these basins are under 2 square miles. From Ecology’s proposal, it is unclear whether a permittee would be required to aggregate these basins into systems with a minimum of 2 square miles, and if so, how that would be done.

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Comment #5: Section 4.5 - Minimum Requirement #5 Mandatory lists, general

Main Points: Ecology should allow an explicit option for Permittees to comply with the Permit using a similar calculator-based approach used by Seattle, with urban area feasibility accommodations; LID performance standard must include feasibility review that includes engineering, cost and competing needs criteria; a lower-tech version of permeable pavement should be included for smaller projects; bioretention cell sizing should be based upon unmitigated impervious surface associated with a project (not lot size).

- For basins either exempt from Minimum Requirement #7 or where the rules stated in Standard flow control requirement section Minimum Requirement #7 assigns the predevelopment condition of matching the existing land cover condition, the Permittee has the option of developing an alternative to the mandatory lists by using a menu of options and calculator approach for projects with greater than 5,000 SF of hard surface for the applicant to demonstrate implementation of LID where feasible.
- Individual BMPs should be selected by the project proponent based on what is feasible and best suited for the site for new development and redevelopment. Recommend that Ecology's proposal be modified to allow jurisdictions the option to use a calculator-based approach similar to Seattle's proposal whereby the applicant can demonstrate mitigation of the impervious area required to include LID where feasible. This would provide developers and local regulators the flexibility to determine how best to incorporate GSI into a site design, which can be particularly challenging in developed, urban population centers.
- Ecology has asked for input concerning whether permeable pavement should be included in the required on-site management BMPs that apply to projects subject only to requirement #1 - #5. Projects required to comply ONLY with MR #1 through #5 (less than 5,000 SF hard surfaces) are small projects that typically do not involve the same level of geotechnical analysis and engineering as larger projects. To support these small size projects we suggest a lower tech version of permeable pavement be included in the language similar to the way Ecology differentiated rain gardens and bioretention. In Seattle these are referred to as permeable pavement surfaces, while the more engineered systems are termed permeable pavement facilities and allow additional stormwater to be discharged to the pavement system.
- Additionally we recommend that permeable pavements in general not be required for roads for these size projects (less than 5,000 SF of hard surface) due to the higher risk of resulting structural failure because engineering design is not required. Comments in Attachment 2, Section 4.5 reflect these suggestions.

Comment #6: Section 4.5 - Mandatory lists for projects with greater than 10,000 SF hard surface

Main Points: LID requirements should apply to same areas and to same pre-developed conditions as does flow control; Ecology should not require collection and redistribution of

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flow below impermeable pavements; bioretention sizing must be based on hard surface area, not lot size, and allow jurisdictions to vary sizing based on soils and land use designation.

- For projects with greater than 10,000 SF of hard surface (MR #6-#9 required), LID requirements should apply to the same geographical areas and with same rules for pre-developed conditions as now apply for flow control.
- Infiltration Below Pavement –Seattle has strong reservations about including ‘impermeable pavements with collection and redistribution below as a required BMP and does not consider this practice AKART due to concerns about long term functioning of the infiltration bed, concern for the integrity of, and damage to, adjoining pavement and properties not designed for infiltration, and the effect on existing public and private utilities when stormwater is introduced beneath streets in the public right-of-way. This is especially true for mitigation of runoff from PGIS surfaces. It is difficult to remove the majority of sediment prior to discharging the flow to the subsurface infiltration system. This would cause infiltration rates and associated effectiveness to diminish over time, possibly requiring removal and replacement of the full system. Since it is a non-vegetated system there would be less potential for biological activity to sustain infiltration rates.
- Prescriptive bioretention sizing based on project area does not directly correlate to stormwater impacts, so sizing should be based on attributes of the project, not lot size. Additionally jurisdictions should be provided the option of varied bioretention sizing to meet the performance standard based on native soils saturated hydraulic conductivity.
- Bioretention should not be a mandatory BMP designed to accommodate runoff and overflow from permeable pavement as there is typically insufficient room to accommodate such a configuration and could often times lead to pumping.

Comment #7: Section 4.5 - LID Performance Standard

Main point: Wherever required, the LID performance standard must include feasibility considerations such as competing needs and cost as well as engineering criteria; right-of-ways should be used for the purpose of travel and transportation and should be used to mitigate impervious surfaces within the right-of-way and not impacts due to private property development.

For sites with predevelopment hydrology target of forested per MR#7, the LID performance standard is only achievable with infiltration as demonstrated in Herrera’s June 2011 memo – “LID Performance Standard Study”. As such, and knowing the variability of Puget Sound native soils, along with the PCHB ruling limited to LID “*where feasible*”, the performance standard needs to include feasibility criteria.

In the sizing scenarios presented by Ecology it was assumed that the right-of-way could be used to mitigate private property stormwater impacts. In converse, Seattle Municipal Code

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15.04.035 designates the primary purpose of the right-of-way for travel and transportation. The secondary purpose is utilities and any usage being made by the public of the site. In urban areas, the right-of-way is often times at capacity, especially in areas with increased density. Therefore, , for available space with transportation and utility infrastructure and does not have excess capacity to accommodate private infrastructure in the public right-of-way.

If private projects were allowed to meet their LID requirements in the public right-of-way, there would be less capacity available for public LID projects to mitigate public roadways. Because public projects would never have the opportunity to mitigate public LID projects on adjacent private property, the result would be a net loss of LID implementation, and ever more competition for right-of-way space.

Furthermore, there is no guarantee that any facility installed in the right-of-way to meet LID requirements would not be removed in the future to accommodate another right-of-way need (transportation, utility infrastructure, etc).

See Comment #13 for additional comments regarding the use of right-of-way.

Comment #8: Section 6 - Exceptions/Variations

Main Point: Substantially revise Section 6 ("Exceptions/Variations") to defer to local variance authority. In the alternative, revise Section 6 to match commonly-accepted variance standards.

Ecology should refrain from stating standards for exceptions/variances at all, so should provide in Appendix 1, Section 6 ("Exceptions/Variations") only as follows and delete the remainder of the Section: "Exceptions/variances (exceptions) to the Minimum Requirements may be granted by the Permittee using variance standards stated in the Permittee's land use control ordinances and development regulations and consistent with state law."

In the alternative, Appendix 1, Section 6 (if not revised to defer entirely to local standards) should be revised to conform to commonly-accepted exception and variance standards customarily used in land use codes to govern the use and development of real property in order to protect the interests of all parties and the public. "Sudden and unexpected economic hardship" is not a commonly understood or used standard. An example of commonly-accepted standards is found in the Seattle Municipal Code at SMC 23.40.020 (variance "does not go beyond the minimum necessary to afford relief" where "the strict application of this Land Use Code would deprive the property of rights and privileges enjoyed by other properties in the same zone or vicinity" and "would cause undue hardship or practical difficulties").

Background: LID standards are likely to be treated as "development standards" by courts reviewing development permits; therefore, local government Permittees should be authorized to use the commonly understood criteria for a variance that are set out in common law and statute. This can be done either by recognizing existing variance authority (and not providing

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otherwise in the MS4 NPDES Permit) or by incorporating customary variance standards into the MS4 NPDES Permit. According to the Washington Real Property Deskbook § 97.7(3)(b):

“Most variance provisions require a showing of “practical difficulty” or “unnecessary hardship” to the applicant of a strict application of the zoning code. . . . [Citations omitted] Most codes also require that the physical characteristics of the land produce unique or special circumstances that are not shared by adjacent or nearby property. [Citations omitted] The impact of the variant on surrounding property must be minimal. Finally, most codes require denial of a variance when there is proof that the hardship was in some way self-created. [Citations omitted]”

The Deskbook then continues with paragraphs on each element, describing how the courts interpret and apply these standards. It is this body of generally understood law that should be retained and applied, rather than creating new and untested standards that will be construed differently by different courts. Using existing variance standards creates certainty for Ecology, for the local government Permittees and for the applicants in how the variance will operate.

Comment #9 – Section 8.1.A - Site/Engineering Feasibility, Bioretention

Main Point: Minimum native soil hydraulic conductivity infiltration should be a minimum of 0.25 to 0.5 in/hr.

- Native soils infiltration rate is a primary predictor of bioretention and permeable pavement function. If infiltration is mandated on sites where SHC rates are questionable to the project success there is a high risk of failure, and subsequent push-back by development community on LID use globally. Seattle Ballard Roadside Rain Garden Pilot project experience was a high visibility example where SHC rates boundaries were pushed. Three of the project blocks had initial native soils SHC in the 0.2in/hr to 0.3in/hr range. The construction on those sites resulted in bioretention cells that remained full of water all winter, even after numerous days of no rain. To empty the cells required a vactor truck. It is clear to Seattle that additional geotechnical engineering beyond just test pits is necessary for any sites with slow draining soils. Comments above reflect Seattle’s experience and our recommendation for how to incorporate the lessons from our Ballard Pilot into our future bioretention projects.
- Additional technical feasibility concerns are provided in Attachment 2, the redlined version of Ecology’s Draft Permit Appendix 1.

Comment #10: Section 8.1.B - Site/Engineering Feasibility, Permeable Pavement

Main Points: Permeable pavements should be considered infeasible for principal arterials, minor arterials, collector streets and roads with AADT greater than 250; infiltration below pavement should be considered infeasible; Seattle has strong reservations towards using permeable pavement, especially on roadways with greater than 250 AADT, until more information is available regarding life cycle costs, pavement rehabilitation (structural and

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surface), pavement maintenance requirements/ costs and funding mechanisms, permeable pavements should not be required for roadways..

- Ecology has asked for input concerning a basis for an infeasibility decision concerning any particular road category (e.g., arterials, highways), or roads exceeding a certain design Annual Average Daily Traffic (AADT) count.
 - High AADT streets have greater sediment and traffic loading, requiring greater frequency of sweeping maintenance to prevent clogging and much higher capital cost for construction than conventional concrete or asphalt. Strength and durability of the street surface for roads receiving high volumes of truck and automobile traffic is a great concern for the asset owner. In addition to the numerous technical feasibility concerns of constructing permeable pavement on high AADT roadways in the urban environment, the capital cost and life-cycle maintenance cost of the permeable pavement on high AADT roadways is particularly concerning.
 - Permeable pavement roads are considered infeasible at more than 250 AADT or subject to bus, freight, and other “heavy” vehicle traffic. Until more information is available regarding life cycle costs, maintenance requirements/costs and funding mechanisms, permeable pavements should not be required for the traveled lane portion of roadways.
 - Seattle considers infiltration below pavement infeasible (not AKART), but if this practice is required by Ecology then it should be considered infeasible for roads with the same criteria noted above for permeable pavements.
- Additional technical feasibility concerns are provided in Attachment 2, Seattle’s redlined version of Ecology’s Draft Permit Appendix 1.

Comment #11: Section 8 - Cost Feasibility

Main Point: Cost feasibility should be expanded for urban areas, where construction, competing need, and lifecycle costs can be high.

- LID should be considered infeasible for cost reasons in urban areas in more cases than when applicant can “demonstrate severe and unexpected economic hardship and go through legal public notice for an exception/variance,” or in the limited instance of some vegetated roofs.
- In addition to feasible, “reasonable” in AKART implies an economic metric to justify the cost/benefit for providing LID over the typical or standard construction practice. This includes the additional cost for research, investigation and design (geotechnical evaluation, borings etc.), the actual construction cost of the LID BMP and total lifecycle cost including operations and maintenance.

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Comment #12: Section 8.II - Competing needs

Main Point: GMA requirements must be balanced with site-level stormwater management requirements; the proposed language on incompatibility between stormwater BMPs and development features should be clearer and more inclusive as it applies to urban areas.

It is important to recognize that **growth management is low impact development applied at a regional scale** – the explicit goals of RCW 36.70A include preventing the impervious surfaces of unnecessary roads, benefiting water quality by prioritizing walking, biking, and transit, preserving natural areas and agricultural lands, and protecting water resources generally. **Regional low impact development requires that urban areas accept growth** and its complications – so Ecology’s LID requirements should facilitate this aspect of regional LID.

It appears that the draft feasibility language responds to some of the competing needs concerns raised by Seattle during the advisory committee process, but Seattle requests that the wording be updated for more clarity and consistency with existing land use ordinances. Seattle has provided competing needs language and other drafting in Attachment 2 to begin to address its concerns for urban areas. Additional drafting will be needed.

First, Ecology’s statement that “Growth Management Act requirements are generally considered compatible with LID” should be deleted. As explained in more detail in Seattle’s Comment #4 on watershed planning, the Permit should reflect the legislature’s intent that local governments should balance all the GMA goals, and the Permit should retain the local governments’ flexibility to evaluate the best methods of promoting all the goals – including GMA Goals 1 and 2 (encouraging urban growth and reducing sprawl) and Goal 10 (protecting water quality). The PCHB recognized that “*the bounds of the GMA*” could limit Ecology’s future NPDES LID requirements.

Site-level LID requirements are compatible with GMA only if they are written with GMA goals, balancing, and local circumstances in mind; while dense urban growth can certainly accommodate some LID in most cases, overly stringent LID requirements that reduce development capacity within urban growth areas are clearly not compatible with meeting GMA goals on a regional or local level. GMA goals are met by local government applying its judgment to reflect local circumstances.

If and when in local areas there is a conflict between local regulation to achieve GMA goals and rigid LID standards, the Permit should allow local regulations to reduce or supersede the on-site stormwater management requirements contained in Minimum Requirement #5. The numerical performance standards contained in Minimum Requirement #6 (runoff treatment) and Minimum Requirement #7 (flow control) must still be met.

Second, the proposed language on incompatibility between stormwater BMPs and development features should be more inclusive as it does not cover all the potential conflicts that could arise:

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- 1) "Incompatibility... with an existing development layout..." implies that this only would apply to existing development, not proposed development. The existing layout is not a relevant benchmark – an existing single-family residential house on a commercial lot might have room for bioretention, while a proposal to replace that house with a mixed-use apartment building might not. Language that addresses incompatibility with a proposed layout would be more appropriate.

- 2) A competing needs exception based on "layout or aesthetics that are mandated by local code..." is not sufficient, since many of the potential conflicts are things that code provisions allow rather than mandate.

For example, in the rezone for the South Lake Union urban center, the City wants and will allow zero lot line development, but isn't likely to require it through a maximum setback. Because the code won't mandate that development build to the property line, Ecology's proposed feasibility language would likely force all new buildings to set back for bioretention, resulting in a substantial loss of floor area in the neighborhood and challenging the City's ability to reach Comprehensive Plan growth targets for the neighborhood. Making up that floor area is not as simple as adding additional height, since heights in the neighborhood are constricted by SEPA-protected view corridors, sea plane landing paths, and the complicated relationship between fire code, building costs, and unit affordability.

- 3) In addition to the example of zero-lot-line development, other required site plan elements often limit the space available for bioretention. Seattle's proposed edits to the Ecology document expand the list of examples. These changes are intended to protect affordable housing, provide predictability in planning and design, and support the required high density in urban areas while protecting critical areas and buffers as mandated by the GMA.

Seattle welcomes further conversation with Ecology on this important topic.

Comment #13: Section 8.II - Competing needs specific to the Right-of-Way

Main Point: Transportation and other competing uses in the limited public right-of-way take precedent in urban areas.

For City roadway redevelopment projects, the priority for transportation and other competing uses of the public right-of-way in the urban environment would likely preclude 'setting aside' a portion of the right-of-way for bioretention in many locations. The majority of the City's roadway projects are a reconstruction of the existing roadway surface. For these typical City of Seattle roadway projects, the Ecology prescriptive bioretention facility sizing requirement would make Seattle unable to use the mandatory BMP facility option.

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Further, the MS4 NPDES Permit should not require or allow private LID facilities to be cited in the public right-of-way, except at the local jurisdiction's option. Any LID NPDES permit requirement affecting the public right-of-way should take into account that the public's interest in a highway or street is held in trust for the public, and the primary purpose for which highways and streets are established and maintained is 'for the convenience of public travel.' *State ex rel. York v. Board of Commissioners of Walla Walla County*, 28 Wn.2d 891, 898, 184 P.2d 577 (1947). Local law requires a street use permit to use the public right-of-way. In evaluating a permit application, the City must consider factors such as the applicant's rights, the site and terrain, the public and private benefits of the proposed use, and the impacts of the proposed use on: 'the paramount purpose of streets for travel and transportation,' utilities, other public uses, fire access and public safety, other proposed or past uses, access rights, the environment, drainage, City plans and other factors (SMC 15.04.035.B.)

The public right-of-way, particularly in urban areas, can be under intense pressure from competing needs. Transportation and travel needs are dynamic in urban areas. Factors such as future growth projections may change or drive the use of right-of-way space for transportation and travel (e.g., future roadway channelization, parking, pedestrian corridors, cycle tracks/bike lanes, and transit priority). Existing rights-of-way may not be wide enough to meet the current urban transportation needs. Maintenance responsibilities for any drainage facilities in the public right-of-way are also an on-going concern for municipalities.

Seattle has provided feasibility language and other drafting to begin to address these concerns. Seattle also welcomes further conversation with Ecology on this topic.

Please see Attachment 2 for additional comments/proposed language to Appendix 1.