



**Building Green Cities
Advisory Committee Meeting**

Wednesday, August 22, 2018 | 9 AM – 12:00 PM

In-Person: Center for Urban Waters, Commencement Bay South Room, 326 East D Street, Tacoma, WA 98421

Remote: (206) 413-714. Code: 96790605#

Included in this packet:

- Meeting Agenda (p. 2)
- Meeting Notes – June 28 (p. 3-9)
- Developers Screener Selection Criteria (p. 10-14)
- Developers Discussion Guide – draft (p. 15-22)
- LID Handout - draft (p. 23-24)
- Local Government Discussion Guide – draft (p. 25-31)
- Developer List – draft (p. 32-33)



Building Green Cities Advisory Committee
August 22, 2018
AGENDA

Meeting Purposes:

- Quick recap of the project goals and progress to date
- Review and discuss developer screener
- Review and discuss developer interview guide and local government interview guide

Time	Topic	Lead/ Action
9:00 – 9:10 am	Welcome & Introductions	Linda Bentley (Commerce)
9:10– 9:20 am	Recap of Building Green Cities Project (BGC) purpose and goals and work completed to-date	Linda Bentley
9:20 – 9:55 am	Developer Screener Discussion	Jessica Branom-Zwick (Cascadia)
9:55 – 10:55 am	Developer Interview Guide	Jessica Branom-Zwick Nancy Hardwick (Hardwick Research)
10:55 – 11:10 am	BREAK	
11:10 – 11:40 am	Local Government Interview Guide	Jessica Branom-Zwick Nancy Hardwick
11:40 – 11:45 am	Interviewee Discussion	Gretchen Muller (Cascadia)
11:45 – 12:00 pm	Recap of Decisions Made and Next Steps	Gretchen Muller



DRAFT Meeting Summary

Building Green Cities - Advisory Committee Meeting

WSU Extension - Washington Stormwater Center - 2606 W Pioneer Avenue, Puyallup WA 98371

June 28, 2018

1:00 PM – 3:00 PM

Attendees:

Advisory Committee Members

Name	Affiliation	Name	Affiliation
Mindy Roberts	Washington Environmental Council	Tracy Stanton (phone)	Emerald Alliance
Kevin Burrell	SPU	Molly Nichols (phone)	Futurewise
Jeff Killelea	Ecology	Amy Waterman (phone)	Futurewise
Carrie Sanneman	Willamette Partnership	Paul Crane (phone)	City of Everett
Jessica Knickerbocker	City of Tacoma	Jessie Israel (phone)	TNC
Brigid Dean	WSDOT	Ben Thomson (phone)	DNR
Brennon Staley	SPU	Chris Hilton (phone)	TNC
Heidi Segelbaum	WA Stormwater Center	Steven Frye (phone)	2030 District

Other Attendees

Project Team

Name	Affiliation
Charlene Andrade	Department of Commerce
Linda Bentley	Department of Commerce
Erika Harris	PSRC

Consultant Team for Study and Guidance

Name	Affiliation
Gretchen Muller	Cascadia Consulting Group
Jessica Branom-Zwick	Cascadia Consulting Group



Recap of Building Green Cities Project

Commerce summarized the Building Green Cities (BGC) project, and the progress to date, as well as described the role of the Advisory Committee (see handout), and introduced the consultants hired to conduct the social marketing study and develop guidance.

High-level Summary of Literature Review Findings

A summary of the literature review findings was discussed (see Meeting PowerPoint at: www.ezview.wa.gov/site/alias_1965/meetings/37166/meetings.aspx) A final report was made available on 7/25/2018 and can be accessed at the above-mentioned link.

Selection Criteria for Interview Guide

The proposed selection criteria for choosing interviewees was discussed. The main discussion points are listed below by topic area. Jessie Israel recommended that the BGC project coordinate with the existing TNC effort that focuses on developers and LID. Brennon Staley mentioned that the work done around energy efficiency would be a great model to replicate.

Going Above and Beyond the Code

The Advisory Committee discussed the phrase “going above and beyond the code” and further defined what they really want developers to do related to LID BMPs.

- Recommend not using “otherwise under size threshold” (Rebecca Dugopolski)
- Recommend focusing on scale of treatment in terms of volume/ area of impervious – or treating higher level of flow (Carrie Sanneman)
- Recommend inquiring about all of the BMPs instead of splitting them out (for the interviews) (Charlene)
- Developers don’t think about doing one BMP versus another BMP. Instead they think of LID as one technique versus multiple separate BMPs (Rebecca)
- Try to determine why people have gone above and beyond. It would be great to get more insight into the motivators for going above and beyond the code (Brigid Dean)
- What we really want is for developers to use LID versus going above and beyond the code (Jessica Knickerbocker) i.e. use LID when they don’t have to.
- Recommend project focuses on things that are draining to creeks NOT flow control exempt (Jessica)
- We want them to do LID in the creek basins (Jessica)
- Potential case study for voluntary LID project adjacent to the Aurora bridge where redevelopment is treating additional runoff that they are not required to treat (combining retrofit with new building) (Erika Harris)



- Recommend removing “land developers” because there are no land developers in regional centers (Brennon)
- Recommend distinguishing between developers that are going to own and manage the project versus developers that are pulling together funding from investors (Jessie)
- Recommend considering racial equity in this project and engage people of color led firms or areas that are served by people of color (Mindy Roberts)
- Recommend more than Seattle and Eastside voices – need to make sure we engage people in communities like Everett, Bremerton, and Silverdale (Mindy)
- Recommend identifying How the project will address smaller rural town growth – consider how quickly growing (Ben Paulson)
- Recommend including those who work on flow control instead of flow control exempt sites (Erika)
- Recommend distinguishing developers’ answers by density, suburban, and urban (Kevin Burrell)
- Recommend asking a question about where developers would rate themselves on the spectrum – already being a green developer versus traditional developer (Jessie)
- The type of building that a developer builds is more important than whether it is an apartment versus a townhouse, etc. (Brennon)

Regional Growth Center Maps

- Important to capitalize on commercial and mixed-use within urban growth centers (Erika)
- Recommend checking on the usefulness of stormwaterheatmap.com for focusing the study and identifying patterns in the analysis
- Rationale for focusing on urban growth centers is that if LID can be done within these centers, it can be done anywhere (Erika)
- Recommend not using urban growth center language with the developers. Recommend using “max build-out of site (within density range) instead (Rebecca)
- Use terminology “downtown” instead of urban growth center (Erika)

Proposed Topic Areas for Interview Guide and Preliminary Interview Questions:

The following are comments and recommendations for focusing the interview guide and process:

Draft Interview Questions – Changes and Motivators

- Recommend determining their experience level – and consider nesting and following on questions (Charlene)
- Recommend getting to the root of their personal motivations. The current set of questions do not get at this. (Mindy)
- Recommend more fact-based versus emotionally-based questions– the questions really need to get



- May want to think about how these decisions got made – so know if developer is really our ultimate target or is it giving the landscape architect the information to make their business case (Carrie)

Draft Interview Questions – Barriers

- Recommend asking about the types of strategies that each developer might consider – what are they doing versus what things are they considering (Brennon)
- Recommend asking about the developer's standard methodology and/or if they have a standard methodology (Brennon)
- Recommend asking about what LID features give the most value to the property – improving the bottom line of a development is the main driver (Ben)
- Recommend asking about short-term profitability versus long-term asset value (Heidi)

Draft Interview Questions – Incentives

- Recommend considering how robust, innovative, and broad we are thinking about incentives, when drafting interview questions (Kevin). For example, are we considering:
 - Fee-in-lieu (Jessie)
 - Wetland banking (Brigid)
- Infeasibility criteria – physical conditions of site and market conditions don't make it very practical – is there another way to think about this via incentives – fee-in-lieu (Kevin)
- Recommend considering using a checklist to organize the order of questions – do you use this? Why? (Heidi)

Action Items, Wrap-up, & Adjourn

Comments and ideas will be incorporated into the study design, selection criteria for potential participants, and the study guide and questions. The next meeting with the Advisory Committee is expected to occur in late August to discuss the draft of the Interview Guide and selection criteria. Please send ideas for potential participants to Commerce.

Meeting adjourned at 3:10 pm.

The BGC Advisory Committee – Kick-off Meeting Packet can be found at:

https://www.ezview.wa.gov/site/alias_1965/meetings/37166/meetings.aspx

The meeting packet includes:

- Agenda
- Contact List
- Role of Advisory Committee
- Literature Review Document Listing



Summary of Follow-up Emails

The following are summaries of the suggestions following the June 28th meeting with the Advisory Committee on categories of participants for study, the threshold and selection criteria for deciding participants, and start of interview questions (to be covered in next meeting).

From: Mindy Roberts, Washington Environmental Council

Recommends including interviews with developers working in affordable housing. Some suggestions for developers to engage on this:

- Seattle, Tacoma, Everett, Bremerton Housing Authorities
- Affordable Housing Alliance
- Mt Baker Housing Authority

We can help with all but EVT and BREM HAs – let me know what would be helpful.

Input from Commerce/PSRC project team: I remember that talking with developers of subsidized housing was one of our strategies to incorporate equity, so I agree with Mindy. I believe that the housing authorities are directly involved with development. Even if they work with developers, the authority probably makes a lot of the decisions. The Seattle Housing Authority gets a lot of credit for the LID at High Point: <https://www.seattlehousing.org/about-us/redevelopment/high-point-redevelopment/sustainable-design>.

From Jessie Israel, The Nature Conservancy

Here are a few new draft tools that may help support to our efforts. Including the most recent DRAFT of this GSI Retrofit policy paper (attached) that Herrera/Berk helped us to put together.

- Retrofit Paper DRAFT: TNC's accelerating GSI retrofits policy paper - Accelerating Nature-Based Solutions To Overcome Legacy Pollution: Green Stormwater Infrastructure (GSI) Retrofits in the Puget Sound Basin
- (Feel free to offer comments or Example Jurisdictions for the Appendix. Page 10-15 includes other incentives and funding mechanisms to run by developers in the Building Green Cities interviews to get their reaction)
- Developer Interviews: [Box link \(15MB file\)](#) to a research summary we just completed on understanding how the private sector thinks about GSI (same presentation that Chris sent last week)
- Optimizing GSI for Human Benefits: This [new report that covers all types of GSI](#) and optimizing benefits to people.
- Pollution Heatmap: Just expanded to all Puget Sound www.stormwaterheatmap.com

Recommend considering the following kind of “buckets” of developers to cover the full range of opportunities.



From Pam Emerson, City of Seattle

Recommend the project distinguish clearly between:

1) land use incentives “If you develop your site in X way – say, with less impervious cover than the zone allows – we will give you Y...say, more height”

AND

2) stormwater code incentives “If you mitigate for more water quality impact than you are required to by SW Code – say, by managing the adjacent ROW runoff on your site – we will give you Y... say, faster permitting and/or a reduced drainage fee”

If the social marketing approach asks developers what ‘barriers’ they see to implementing green infrastructure, my hunch is you could get mostly answers about not wanting to comply with SW Code (which already requires on-site mngmnt) bc this requirement costs \$\$ to comply with, O+M has a learning curve, etc... OR you could get answers about how local govts could better implement Stormwater Code with alternative compliance schemes like fee-in-lieu or credit trading. All good things for local governments to be in dialogue with developers about and continue to work on, but none of this is really a question about what we should be incentivizing.

Recommend asking developers questions like: Under what conditions/ circumstances would it be a win-win for you to actually go beyond SW Code requirements, especially with respect to on-site stormwater management? or Under what conditions/ circumstances would it be a win-win for you to preserve more open space/ pervious land and mature trees on your site than is required by the zone/ Land Use Code?

From Dave Ward, Kitsap County

Interview questions:

The discussion guide should have a definition of LID handy.

The guide should distinguish stormwater LID practices from other LID practices. This effort is focused on stormwater LID, but LID in a broader sense also includes building-material sourcing, life cycle assessment, energy management, and other things that have little or nothing to do with stormwater.

Questions 1 and 3 are good – should yield useful data.

Question 2 could be rephrased to extract better information. Since the stormwater codes require LID, a respondent could legitimately say all their projects include LID and all their projects manage stormwater through LID. That doesn’t tell us anything useful since they are forced to do so. It would be more useful to understand what they do that is above and beyond what’s required, and why.

The same is true for Question 5. The developers we work with tell us they do it because it’s required.



In the Motivators section, I would be inclined to steer clear of suggesting reduced permit fees because permit authorities have very little ability to reduce or waive those fees. Permit fees are established based on the actual cost of permitting (staff time, plan review, intake meetings, inspections, etc.). Staff time is tracked for each permit application and the developer is invoiced based on actual review and inspection costs – it's not an arbitrary amount. In other words, there is little to no wiggle room. If we reduce permit fees, we can't pay staff to review plans and conduct inspections – it's unsustainable. In addition, I haven't met a developer yet who won't say 'yes' to reduced fees, regardless whether it would actually motivate them to increase LID use.

Commerce input/response: Recommend keeping costs as a question, but just expanding on the topic, and to ask if there are other agency means (say from state or county or region) to help local governments reduce costs, like funding to third party consultants to do processing, or perhaps additional funding to local governments as needed to assist.

Selection Criteria:

#2: I would bump the preference up to 10+ years. We want responses from established developers with a body of experience. Someone with just 5 years experience may have worked on only one or two projects.

#4, #5: Why don't we want to talk to developers of single family residences? On a project by project basis, SFRs are currently about half of all development in Kitsap County and, in aggregate, have a very large stormwater footprint across the landscape.

Commerce input/response: it would be ok to talk to single family residents, to the degree they are associated with regional growth centers.

#9: Why would we care where they are incorporated? I would delete this line.

Otherwise, it all looks good. Thanks!

From Carrie Sanneman, Willamette Partnership

I wanted to share something that might put some meat on my comment about using your interviews to understand decision making structures within the development process in order to target messages and messengers. We put together some diagrams about water quality trading - where pollution reduction from conservation and restoration actions are quantified, verified and used for compliance with NPDES (mostly wastewater) permits. We wanted to make sure we were speaking the right language to the right people at the right time. We used literature review, interviews, and peer review to make these diagrams

LID In-Depth Interviews

#2802

Intv name _____ Date letter sent _____

Date CM _____ Confirmation call made _____

Hold (why) _____

Date and Time recruited for:

DATE _____ TIME _____

LOCATION/PHONE _____

Name _____

Title _____

Company Name: _____

Address _____

Qty/ Zip _____

Phone: _____

Email: _____

Hello, my name is _____ from _____. May I speak with the owner or a project manager who is responsible for making decisions regarding to what extent green building features will be incorporated in to the properties your company develops?

(INTERVIEWER NOTE WE DO NOT WANT ENGINEERS OR ARCHITECTS. WE WANT THE DECISION MAKER.)

Note: Recruiting guidelines are as follows:

Recruit a mix of:

- Type of properties (commercial, mixed-use, multifamily)
- Keep and manage vs. develop and sell
- Own financing vs. bank/investor financing
- Include developers from the housing authority and non-profits (will determine before call to screen/recruit)

To keep the screener short, we will not be addressing:

- Size of firm – because it is not as critical as the financing and ownership
- Development vs redevelopment – because of the focus on urban/ city centers, they will all be doing redevelopment

We heard that the focus of this project is on the hardest places to do LID: in regional growth centers. If we can understand what incentives would motivate developers to go above and beyond with LID in regional growth centers and on commercial and multifamily projects, then those incentives should also work in areas where it is easier to do LID (small towns, rural areas, single-family projects)

Screener Goal: Focus on the decision maker (the developer). While others are involved (architects, engineers, etc.), the developer makes the final decisions about projects and, if motivated to go above and beyond with LID, will direct those others to do so.

Q1. Are you the person who considers recommendations from your team and makes the final decision on what LID storm water management option are put in place on the properties you build buildings?

FO
TI

Yes

FO
TI

No – Can you refer me to the person who is responsible for this role in your organization

FO
TI

No – We do not build the buildings, we just deal with the land before the building goes in

→ TERMINATE

FO
TI

No – I'm a consultant, my company doesn't build buildings, we only advise people who are building buildings.

Note: Interviewer

Q2. Do you usually develop buildings in...? (READ LIST) (MARK ALL THAT APPLY) (RECRUIT A MIX FROM THESE CATEGORIES)

Downtowns or city centers (in urban or suburban communities)

Other urban centers in Seattle like Capitol Hill or the University District

Other regional growth centers like Northgate, Tacoma Mall, Southcenter Mall, Puyallup South Hill

Outside city centers of urban or suburban cities

Small towns _____>

Rural areas

TERMINATE IF ONLY THESE AREAS

Q3. Do you usually work on ...? (READ LIST) (MARK ALL THAT APPLY) (RECRUIT A MIX FROM THESE CATEGORIES)

Commercial properties

Mixed-use properties

Multifamily residential properties

Single-family residential properties – TERMINATE IF ONLY SINGLE-FAMILY

High-rise buildings – TERMINATE IF ONLY HIGH-RISE BUILDINGS

Other (specify) _____

(DO NOT READ) None of the above – TERMINATE

Q4. What percentage of your projects do build within **X** miles of Puget Sound (non-flow control areas) versus further inland? (FILL IN PERCENTAGE FOR EACH) (RECRUIT A MIX)

Build _____% of buildings near Puget Sound

Build _____% of the buildings inland (flow control areas)

(DO NOT READ, BUT IF APPLICABLE) Other (specify) _____%

Q5. I understand that some developers keep the building and manage it, some sell the building after they develop it, and others do both depending on the project. What percent of your projects do you... (FILL IN PERCENTAGE FOR EACH) (RECRUIT A MIX)

Keep and manage the building _____%

Your organization finances _____% of the buildings you build

The bank or an investor finances _____% of the buildings build

(DO NOT READ, BUT IF APPLICABLE) Other (specify) _____%

Q7. How long have you been working as a developer?

_____ (MINIMUM 5 YEARS, PREFER 10 YEARS OR LONGER)

IF QUALIFY: (ONLY ONE PARTICIPANT PER COMPANY)

I would like to invite you to participate in a one-on-one research interview to get your thoughts about issues facing developers in the Seattle area. During the discussion, you will have a chance to share your thoughts about LID tools and incentive programs. At the end of the interview, you will receive \$200 to compensate you for your time and opinions.

At no time will we attempt to sell you anything. The information you share will us will remain confidential and your identity anonymous.

The meeting will be held at a time that is convenient for you, and we can either speak over the phone or come to your office or other location.

Are you available on _____ (day) at _____ (time)? (IF NO, ASK WHAT TIME WORKS FOR THEM AND TRY TO ACCOMMODATE) (WRITE DOWN AGREED UPON DATE AND TIME)

DATE: _____

TIME: _____

What location would work best for you?

At their office (ENTER ADDRESS _____)

On the phone (ENTER PHONE NUMBER _____)

Other location (ENTER LOCATION NAME/ ADDRESS _____)

(IF NOTHING WORKS, THANK AND TERMINATE)

Because we are only inviting a limited number of participants, it is vital that you show up for the meeting. However, if for any reason you are unable to attend, please call me _____ to reschedule. Please do not send anyone else in your place.

Building Green Cities
Developers Interviews
Discussion Guide – Draft 8/2/18

Note to Advisory Committee: The information learned during these developer interviews will be used to inform the final deliverable (guidance to help municipalities develop incentives to encourage developers to go above and beyond minimum LID requirements).

Note: This is a discussion GUIDE. Questions will not be read verbatim and at times may be asked out of order based on the flow of conversation.

Thank you for agreeing to speak (or meet) with me. As you know, today we will be talking about stormwater management and LID site design, specifically related to buildings your company is developing in urban and suburban area around Puget Sound.

Note: Timing provided is meant to be a best guess.

Decision Making Process – Managing Stormwater (10 minutes)

Questions Goal: Set the stage understand how they think about and approach stormwater management in general (later questions focus on LID).

- Tell me about the process you go through when deciding how to manage stormwater at your sites...
 - At what point in the development process do you make the decision about how to manage stormwater?
 - Who is involved in making that decision? (engineers, architects, consultants)
 - There are many different options for managing stormwater. How do you decide which option to use?

FO **RI** What factors do you consider? Which is the most important factor?

We will listen for factors such as:

- Regulatory requirements?
- Site constraints [location, project size, building type, land type]?
- Costs? Does LID cost you more or less?
- Permit review periods? Does LID increase or decrease permit review periods?
- Incentives? What incentives motivate you to use LID?
- Market demand? How many and what type of customers are asking for LID?

Note: Any text in light grey is background information for the moderator and will not be read to or shared with respondents.

- Which stormwater management options do you typically use? What causes you to use those options more often?

Questions Goal: Begin to explore how they think about and approach LID as part of stormwater management

- (IF RESPONDENT TALKS ABOUT “LID” AS PART OF THEIR STORMWATER MANAGEMENT PROCESS, THEN ASK QUESTION BELOW, FOLLOWED BY HANDOUT FOR REFERENCE. IF THEY DO NOT MENTION “LID” FIRST PROVIDE HANDOUT AND THEN ASK QUESTION)

Note: Text in ALL CAPS is instructions for

- QUESTION: How does LID stormwater management come into play? Which LID options do you use most often?

In their response, we will listen for them to talk about LID practices such as:


LID Principles:

- Optimize development envelope
- Reduce impervious surfaces as part of the road layout design
- Reduce impervious surfaces for buildings by clustering and reducing footprints
- Preserve open space and native vegetation (BMP T5.40)

LID BMPs required by Washington State for evaluation include (NOTE: some local governments such as Seattle and King County have stricter requirements):

- Amended Soils (BMP T5.13)
- Dispersion (BMP T5.10B, BMP T5.11 BMP T5.12) (Note: Full dispersion (BMP T5.30) is most likely not feasible in the urban and suburban areas that are included in this study)
- Rain Gardens (BMP T5.14A)
- Bioretention (BMP T5.14B, BMP T7.30) (Note: Planters don't count towards MR5, but could be used to provide water quality treatment)
- Permeable Pavement (BMP T5.15)

- Vegetated/ Green Roofs (BMP T5.17) Note: green roof may not be as effective as other measures in the Puget Sound climate.
- Minimal Excavation Foundations (BMP T5.19) Note: sometimes called “pin” foundations.
- Reverse Slope Sidewalks(BMP T5.18)
- Rainwater Harvesting / Re-use(BMP T5.20) Notes: the first decision may limit harvesting, and double-plumbing for reuse add substantial costs.

 **HANDOUT:** As you may know, LID is a term used to describe a type of stormwater management focused on infiltrating water into the ground, capturing rainfall on vegetation and releasing it back into the atmosphere, and reusing stormwater for laundry and flushing toilets. Here’s a handout that we created to provide additional background during this interview.

If additional explanation is needed: LID incorporates managing storm water on site, cleaning and reducing the amount of water that overflows into storm drain systems and streams.

To provide background and ensure we are on the same page about LID practices during the interview, we will share with the participant a handout with different LID options grouped into three categories (LID principles, LID BMPs required to be evaluated, and optional LID BMPs).

- Do you regularly build LEED or other green-certified buildings?
 - Yes/No Answer needed

Current LID Regulations and Practices (10 minutes)

Questions Goal: Assess whether they understand there's a baseline regarding regulations to be able ask about voluntarily going above and beyond. Understand whether the regulations made any difference on the ground.

- I understand that you may rely on team members, including your architect or project engineer, to help keep track of local codes and regulations. In your role, how familiar are you with the state and local regulations related to using LID in urban and suburban areas of Puget Sound?

- In what way does using LID to manage stormwater affect your projects?

We will listen for comments such as:

- Length of design process (including timing of infiltration testing—must be performed in rainy season)
- Design costs
- Construction costs
- Permit review time
- Market/client demand
- Project profitability

Note: If a developer starts to complain at length about the current codes, they will be politely redirected and told that the ultimate goal of the today's discussion is to learn what suggestions they have for incentives.

- How, if at all, have LID regulations changed which stormwater management options you choose?

Questions Goal: Understand how often and begin to understand the consideration factors that motivate or demotivate them to go above and beyond regulatory minimums.

- On what percentage of projects do you go above and beyond the minimum LID requirements for stormwater management?
 - Tell me about those projects where you (are likely to implement / implemented) LID above and beyond the minimum requirements. What caused you to implement LID above and beyond?

We will listen for project factors such as:

- Target customer (luxury/high end, market rate, affordable/subsidized,

- Incentives
 - Market demand (how many and what type of customers asking for LID?)
 - Building types (commercial, multifamily, mixed use, schools)
 - Project size
 - Land type (new vs. redevelopment)
- Are there situations where you meet only the minimum requirements for using LID to manage stormwater? What causes you not to implement LID above and beyond minimum requirements?

We will listen for responses such as:

- Site not suitable for LID (steep slopes, lack of infiltration, proximity to drinking water, depth of water table)
 - Cost is prohibitive (how much more?)
 - Customers not willing to pay more
 - Permit inspection issues/risks
 - Local minimum requirement were already stricter than state minimums
- How often are you doing a project where you determine all or most LID methods are infeasible?
- What would it take to make them feasible? (Note: Question is being asked to determine if developers perceive there is wiggle room, rather than to have a list of reasons are infeasible and what changes need to be made to fix the issue.)
- Are there any LID stormwater management options that are more challenging to use than others? Which ones, and what makes them more challenging?

Barriers to Using LID (5 minutes)

Questions Goal: Dig deeper into the barriers that keep them from going above and beyond LID regulations.

- Tell me about what you consider to be the biggest barriers to using LID to manage stormwater on your projects.

We will listen for barriers such as:

- Site constraints (soils, existing utilities)
- Costs to develop
- Additional design time/ effort
- LID increases permit review time/ complexity
- Inspection takes longer
- Local government plan review staff require conventional stormwater system as backup
- Local government plan review staff don't understand proposed LID methods
- Local government codes do not allow the proposed LID methods
- Client won't pay more and doesn't want LID
- Client doesn't want to deal with LID maintenance
- Client doesn't understand LID
- Lack of familiarity with LID methods/ options and which are most effective
- Do certain projects have barriers that others don't? Tell me more about that?
- What specifically would help you overcome these barriers?

Incentives from Cities and Counties (5 minutes)

Questions Goal: Learn about any existing incentives the developers like and how they can be improved. Begin to elicit ideas for other types of incentives or programs that might motivate using LID above and beyond minimums.

- What, if any, city or counties have you worked with that have development incentives/ programs for LID?
 - What incentives do they offer?
 - What worked well?
 - What needs to be improved?
- What other types of incentives or programs could cities and counties offer to encourage you to use LID above and beyond minimum requirements?

We will listen for incentives such as:

- Direct financial incentives (reduced fees, tax rebates, grants)
 - Expedited permitting/ reduced review periods
 - Project design changes (zoning variance, ability to build more units, add height)
 - Ability to stage in right-of-way
 - Ability to cluster development in one area
 - Modify parking
 - Street landscaping standards and set backs
 - Provide standard LID designs
 - Information or technical assistance on LID methods
 - Ability to pay into fund to do it off-site (credit trading, fee-in-lieu)
 - Public recognition/ awards
- What is it about that incentive that makes it so appealing to you?
 - What other incentives or programs could cities and counties offer?

Motivators for Using LID Above and Beyond the Minimum Requirements (10 minutes)

Questions Goal: Dig deeper into the motivators and incentives that would encourage them to go above and beyond regulatory minimums.

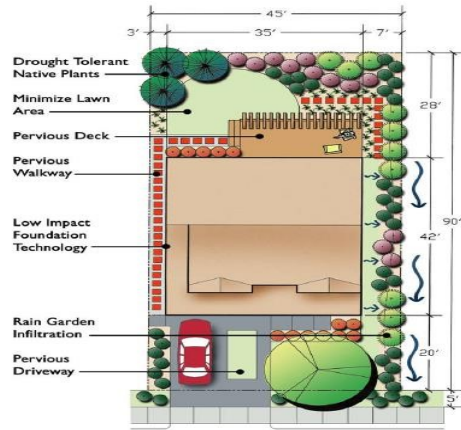
- Which LID features do you find give the most value to the property? (If needed: benefit for the cost spent). What makes you say that?
 - Which do you feel provide the best features for the building?
 - Which create the best “place” for people to gather, interact, work and play?

- Thinking about motivators to use LID above and beyond minimum requirements...
 - Would the motivation change or differ by the type of project you are working on? (If needed: In other words, would the project size, location, type have a role in what incentive would work?)

- Which of the incentives or motivators you mentioned are most attractive to you?
 - Being specific as possible, how do you see a program working that would incorporate that type of incentive to encourage you to manage all or almost all of your stormwater using LID?
 - What else would encourage your organization to go above and beyond minimum requirements for using LID to manage stormwater?

LID Site Assessment and Design Principles

Land use management strategies that emphasize conservation, use of on-site natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.



Optimize development envelope



Road layout

- Narrower streets
- Clustered parking
- Bike lanes & paths



What is low impact development (LID)?

Distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration.

LID Best Management Practices (Required for evaluation)



Amended soils



Dispersion

- Splashbocks
- Diversion trench
- Concentrated flow
- Sheet flow



Rain gardens or
bioretention



Permeable
pavement

- Pervious concrete
- Porous asphalt
- Permeable pavers
- Grass/gravel grids

LID Best Management Practices (Optional)



Building Green Cities
Local Government Interviews
Discussion Guide – Draft 8/14/18

Note: Timing provided is meant to be a best guess.

Note: This is a discussion GUIDE
Questions will not be read verbatim and at times may be asked out of order.

Note to Advisory Committee: The information learned during these local government interviews will be used to inform the developers discussion guide. We are interviewing representatives from 3-5 local governments who work directly with developers and are responsible for overseeing/ reviewing permits.

Thank you for agreeing to speak/meet with me. As you know, we are contacting you on behalf of the Washington State Department of Commerce and Puget Sound Regional Council. We will be conducting research with developers regarding their inclusion of Low Impact Development, or LID, stormwater practices in their projects. Before we speak with them, we wanted to talk with you to gather any insights you can share on developers. It's my understanding that you work closely with developers on LID stormwater practices/regulations. I'd like to learn about your experience working with them.

Developer's Current Understanding of LID (5 minutes)

Questions Goal: Learn from permit reviewers what their impressions are of the level of knowledge developers have when it comes to LID practices. We are aware that the architects are very knowledgeable in this area. We assumed that developers are not nearly as knowledgeable, but is this really the case. We want to understand what, if any, knowledge gaps the developers have.

- How much do you think developers know about stormwater management and LID? What makes you say that?
 - What do you think they need to know that they don't?
 - Do most of them understand the minimum requirements?
 - Do they also understand that there are some voluntary LID practices that they can also implement?
 - What percentage of developers in your jurisdiction has chosen to add in the voluntary LID practices?

We will listen for responses such as:

Voluntary: LID Principles during design

- Optimize development envelope
- Reduce impervious surfaces as part of the road layout design
- Reduce impervious surfaces for buildings by clustering and reducing footprints
- Preserve open space and native vegetation (BMP T5.40)

Voluntary: Optional LID BMPs:

- Trees (retained and newly planted) (BMP T5.16) (Note that Tree protection during construction is covered in the construction volume of the SWMMWW)
- Vegetated/ Green Roofs (BMP T5.17) Note: green roof may not be as effective as other measures in the Puget Sound climate.
- Minimal Excavation Foundations (BMP T5.19) Note: sometimes called "pin"

Note: Any text in light grey is background information for the moderator and will not be read to or shared with respondents.

LID Programs – Current Practices (5 minutes)

Questions Goal: Learn which practices are typically being installed and which options they are shying away from.

- Which voluntary LID practices are developers in your jurisdiction installing most often? (IF RESPONDENT SAYS “NONE,” THEN REFRAME TO ASK ABOUT LID PRACTICES IN GENERAL)

In their response, we will listen for them to talk about LID practices such as:

LID Principles:

- Optimize development envelope
- Reduce impervious surfaces as part of the road layout design
- Reduce impervious surfaces for buildings by clustering and reducing footprints
- Preserve open space and native vegetation (BMP T5.40)

LID BMPs required by Washington State for evaluation include (NOTE: some local governments such as Seattle and King County have stricter requirements):

- Amended Soils (BMP T5.13)
- Dispersion (BMP T5.10B, BMP T5.11 BMP T5.12) (Note: Full dispersion (BMP T5.30) is most likely not feasible in the urban and suburban areas that are included in this study)
- Rain Gardens (BMP T5.14A)
- Bioretention (BMP T5.14B, BMP T7.30) (Note: Planters don't count towards MR5, but could be used to provide water quality treatment)
- Permeable Pavement (BMP T5.15)
- Perforated stub-out connections (BMP T5.10C)

Optional LID BMPs:

- Trees (retained and newly planted) (BMP T5.16) (Note that Tree protection during construction is covered in the construction volume of the SWMMWW)
- Vegetated/ Green Roofs (BMP T5.17) Note: green roof may not be as

- Rainwater Harvesting / Re-use(BMP T5.20) Notes: the First decision may limit harvesting, and double-plumbing for reuse add substantial costs.
- What makes those the most popular?
- What's going on that the other options are not being installed?

Barriers to Using LID and Handling of Exemptions (10 minutes)

Questions Goal: Understand where developers are running into issues and how, if at all, local governments are pushing back/ assisting them.

- What do you think are the barriers developers face when it comes installing LID stormwater management tools?

We will listen for barriers such as:

- Confused about LID codes
- Insufficient cost data from other projects
- Site constraints (geology, hydrology, existing paving systems)
- Development costs
- Current LID incentives don't help offset the development cost
- Lack of access to properly trained staff
- Additional design time/ effort
- Increased permit review time/ complexity
- Developers don't have time to obtain the geotechnical information that is required to be obtained in the rainy season
- Inspection takes longer
- Municipal codes require conventional stormwater system as backup anyway
- Municipal inspectors don't understand LID technologies
- Municipal codes not aligned with LID methods
- Client won't pay more or don't want LID

- How often do developers building in your jurisdiction request exemptions or identify infeasibility criteria to avoid using LID practices near the top of Ecology's BMP list?
 - When developers cite infeasibility, what are the most common reasons (infeasibility criteria) they give?
 - How often do you question with skepticism the infeasibility criteria they have cited?
 - Do you ever counter their infeasibility requests with alternative suggestions, offers of incentives or assistance? Tell me more about that. How do developers respond?
 - We will listen for responses such as:
 - Improving perviousness of the site outside of footprint
 - Redesign assistance by staff or call in a third party
 - Engineering support by staff or call in a third party
 - Technical assistance by staff or call in a third party
 - Use of BMPs on other portions of existing site not being redeveloped
 - When they cite infeasibility, how often does your jurisdiction grant the exemption?
 - I realize you are not required to track what's infeasible, only what's installed. However, do you have a tracking system that records this exemptions/infeasibility? (look for Yes/ No response)

LID Programs – Current Incentives (10 minutes)

Questions Goal: Delve into the details surround incentive offered to developers and which developers find most appealing.

- (IF INCENTIVES NOT DISCUSSED/ NOT DISCUSSED IN ENOUGH DETAIL IN PREVIOUS SECTION, ASK)
What, if any, incentives are you using to help encourage developers to incorporate additional LID stormwater management practices above and beyond minimum requirements?

We will listen for factors incentives such as:

- Direct financial incentives (reduced fees charged during development, tax credits or rebates,

- Ability to do taller buildings, smaller setbacks or increased density
- Ability to modify parking
- Street landscaping standards and set backs
- Ability to pay into fund to install LID to install LID off site (e.g., fee-in-lieu)
- Public recognition
- Grants for demonstration projects
- What's your impression regarding how well these incentives are working?
 - In what percent of the situations are they effective?
 - How long have the incentives been available?
 - How are the incentives advertised / promoted?
 - Are the incentives used?
- What feedback have you received from developers regarding the incentives?
 - In your jurisdiction, which incentives do developers find most appealing? What do you think makes those particularly appealing to them?

Motivators and New Incentives for Using LID (5 minutes)

Questions Goal: Learn from the permitting staff what incentives they think might motivate developers.

- What suggestions do you have regarding your jurisdiction's LID incentives? What makes you say that?
 - What changes would you make if you could to the incentive program"
- Earlier you said that ____% of developers in your jurisdiction are going above and beyond the minimum LID requirements and voluntarily installing additional LID features. (IF NOT COVERED EARLIER, ASK) What types of features are they choosing to install?
 - What do you think would motivate a developer to go above and beyond the current LID

- Market demand (how many and what type of customers asking for LID?)
 - Cultural norms and mission within the organization
- What other incentives or programs could your jurisdiction offer to encourage developers to use LID stormwater management practices above and beyond minimum requirements?

We will listen for incentives/ programs such as:

- Incentives listed above
- Through existing or new policies
- Through existing or new programs (what specifically)
- Help with the removal of barriers (what specifically)
- Add incentives (what specifically)
- Star ratings, certifications, recognition
- Dedicated LID inspector(s) who are trained in LID; a clear and streamlined process for approving LID designs and installations
- Technical assistance (access to permitting for collaborative problem solving early in the process; personalized site assessment with list of options suitable for site conditions)
- Information (database of more general site info [soil permeability, slope, aspect] with list of options suitable for site conditions; database of LID costs, LID inventory, ready-to-use LID designs); project design changes, such as zoning variance, ability to build more units, add height, density bonus)
- Information on LID practices
- Provide LID design templates
- Stormwater Credit Trading (be sure that this is defined before asking)
- Provide cost estimates for methods
- Facilitating partnerships with other developers/ nonprofits/ brokers

What do Local Governments Need (2 minutes)

- At the end of this research, we will be developing guidance for jurisdictions on effective incentives and tools they can use to increase the use of LID by developers. What format for that guidance would be most helpful for your jurisdiction?
 - Guidebook / report
 - Case studies

Suggestions for Talking with Developers (2 minutes)

- Finally, I'd appreciate any suggestions you would have for me as I try to contact and recruit developers to speak with me about LID stormwater practices.
 - What would you suggest I keep in mind?
 - Do you have any suggestions for developers I should reach out to or projects that are good examples of above-and-beyond use of LID?



Building Green Cities – Draft Developer Contact List

Developers/ Participants	Developers/ Participants (continued)
Cooper Engst	Wright Runstadt
katrina scarlett	Wright Runstadt
Brett Phillips	Unico
Carolyn Geise	Geise Architects
Mark Grey	Stephen C. Grey and Associates, LLC, Real Estate Management and Consulting
Steven Gray and Associates	
Developers/ Participants	
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Polygon Northwest	
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