Summary of Partner Interviews

Partners for the Connecticut Low-Impact Development and Stormwater General Permit Evaluation

Connecticut

May 25, 2010



146 Hartford Road Manchester, Connecticut 06040



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1 Background and Purpose

1.1 Project Background

The Connecticut Department of Environmental Protection (DEP) has initiated a project to explore inclusion of low impact development (LID) into its four stormwater general permits (SGPs)—construction, municipal separate storm sewer systems (MS4s), industrial, and commercial—as well as the *Soil Erosion and Sediment Control Guidelines* and the *Stormwater Quality Manual*. DEP intends this to be a partner-driven process, that is, DEP wants the regulated community and partners in regulation to assist in defining how to make LID a part of state policies and standards.

As a starting point in this process, DEP is gathering information. In part this information comes from other states, experts in the field of stormwater, and literature. Critically, however, DEP believes this information must also come directly from its partners. This report summarizes attempts to gather direct information from partners through the use of telephone interviews.

1.2 Structure of this Summary Document

This summary includes discussion of the following:

- The process DEP is using to engage its partners in stormwater management and regulation.
- Use of telephone interviews as a way to directly collect ideas and encourage involvement in the process to improve stormwater management.
- Results and findings from the interview process.

1.3 What to Expect Going Forward

The interview process *does not* represent the be-all and end-all in efforts to collect partner ideas. Rather it is just a beginning. On May 26, 2010, Fuss & O'Neill will present this report as part of an overall initiation meeting. Partners will be given an opportunity to address the report results in an open discussion. We also intend to engage partners in interactive workshop activities for the purpose of further developing and discussing how to incorporate LID in state policy.

Four additional workshops will be held to help develop an implementation approach. This is intended to culminate in draft policy and a practicable implementation approach.

2 Informing and Engaging Partners

DEP intends to use a variety of media and methods to engage partners. Partners were initially made aware of the Low-Impact Development and Stormwater General Permit Evaluation initiative through a letter and email sent on May 12, 2010. This letter is provided in *Appendix A*



of this document. In particular, the letter announces an initiation meeting. Four other meetings are also planned for this project and will be announced through email and a project webpage. We intend to use the May 26 meeting to set the schedule for the four additional meetings.

DEP has recently launched the project webpage, which may be accessed at:

http://www.ct.gov/dep/cwp/view.asp?a=2719&q=459488&depNav GID=1654

This webpage will be used to provide important project information, such as:

- Workshop agendas and summaries
- Workshop presentations
- Project reports and other related materials

Beyond the workshops, webpage, and project announcements, DEP intends to engage partners through one-on-one interaction. While this sort of interaction can occur at workshops, individual conversations provide a more personalized opportunity for direct feedback. Therefore, as a starting point to the project, telephone interviews are being conducted for the specific purpose of requesting partner ideas on how to best develop and implement LID policy. The remainder of this report addresses the use and results of these telephone interviews.

3 Telephone Interviews

This section of the report discusses 17 telephone interviews with project partners, which were conducted between May 14 and May 19, 2010. It details:

- The structure of the interview process
- Interview questions and conversation
- Findings from the interviews

3.1 Interview Process

Interviews with partners were conducted following the dissemination of an invitation, sent both by post and email on May 12, 2010, requesting that partners attend a project initiation meeting on May 26, 2010 at Connecticut Department of Environmental Protection headquarters at 79 Elm Street in Hartford. In part the letter also stated:

Fuss & O'Neill, contractor for the project, will be contacting you in advance of the May 26 partner workshop to begin the discussion of LID and SGP amendment process. Your ideas will also be used to guide activities at the workshop.

Interviews were initiated through telephone calls placed by Fuss & O'Neill staff. If staff was unsuccessful in directly reaching a partner (i.e., potential interviewee) a message was left. Follow-up calls were made on subsequent days. In some cases, partners also returned calls, in which case interviews were conducted at that time.



Interviews were based on an interview sheet, which is discussed further in Section 3.2 below.

3.2 Interview Questions and Conversation

As indicated in *Section 3.1* (above), we used an interview sheet or "questionnaire" to structure our conversations with partners and gather their ideas for incorporating LID into state policy. The purpose of the interview sheet was to help us to collect similar and consistent information from each partner. The structure also helped to facilitate our conversations with interviewees. As we were not attempting to conduct a scientific experiment or maintain experimental integrity, we did not necessarily adhere to the interview sheet exactly. A blank interview sheet is provided in *Appendix B*.

The interview sheet includes an introductory statement and a series of questions. The statement makes two key points. It notes:

- DEP's intent to update the four general permits, Stormwater Quality Manual, and Soil Erosion Control Guidelines to include LID.
- DEP's intent to make this initiative partner driven and that DEP is asking partners to define their role in the process.

The interview sheet includes seven questions. Some of the questions are compound. That is to say that they may include more than one actual request for information around a specific thought or idea. *Section 3.3 Findings* addresses general interview responses to each of the seven questions.

3.3 Findings

To date, Fuss & O'Neill has conducted interviews with 17 partners. Although not all of the 50 plus partners have been interviewed, the 17 interviews conducted to date do provide a representative cross-section of partners including municipalities, trade organizations, federal, regional, and state government, utility companies, and environmental organizations.

This section of the summary follows the structure of questions in the interview form. Specifically, each question from the interview sheet is written in italics text followed by a general discussion of the responses received from interviewees.

3.3.1 Are you Familiar with LID Practices?

1. Are you familiar with LID practices? (If not, interviewer should provide some description. Also this is an opportunity to discuss aspects of LID that the interviewee may not be considering)

We included this as a first question for two primary reasons. First, the question serves to orient interviewees on LID. A number of the questions that follow are relatively complex and require interviewees to express philosophical views about the use of regulations, government



intervention, and policy. By contrast, this is a very concrete question and generally generates a "yes" or "no" response.

Secondly, this question reveals a basic level of understanding of the subject matter and gives the interviewee the permission to say "no, I'm not familiar with LID"; or "my organization is interested in this topic, but you should really be speaking to [name of other person]." The interviewer can then gage the approach to further questioning to facilitate answers from the interviewee and to avoid asking questions of the interviewee that, frankly, he or she may not be prepared to answer.

Most interviewees answered the question in the affirmative (13 of 17); however, three respondents answered "a little" or "yes, somewhat"; and one respondent answered in the negative.

3.3.2 Have you been Involved in the Application of LID?

2. Have you been involved in their application on a project or in policy?

The table below provides a basic breakdown of responses to question two.

Table 1
Interviewee Reports of Experience with LID

Type of LID Experience	Number of Responses	Percentage of Responses
At Least Some Experience	13	76%
Policy or Advocacy Only	4	24%
Project Experience Only	2	12%
Both Project and Policy	5	29%

Like Question 1, Question 2 is fairly concrete and tends to generate straight-forward responses; although Question 2 does allow respondents to provide some description of the type of projects they worked on and how LID has been applied. This was also helpful in preparation for later questions.

3.3.3 How Should LID be Incorporated into DEP Policy?

- 3. How do you think they [LID practices] should be incorporated into DEP policy?
 - a. By reference to a document
 - b. Specific standards
 - i. Narrative standard
 - ii. Prescriptive design standard
 - iii. Numeric standard
 - iv. Performance standard



c. Other methods

Question 3 represents the first in a series of "open" questions. That is to say that Question 3 is not a question that lends itself to a simple "yes" or "no" response. To encourage open responses the interviewer tended to present the question as follows:

This is a bit more of an open question. How do you think LID should be incorporated into DEP policy? And I'm going to give you a few suggestions here, but you should not feel a need to limit your response:

By reference to a document? Specific standards? Such as:

Narrative standards; Prescriptive design standards; Numeric standards; or Performance standard (not that the other standards couldn't be performance standards); or

You could suggest other methods

Table 2 (below) provides a summary of responses received. Responses to this question provide no clear consensus on an implementation approach. In fact, many respondents specifically stated that they were unsure, unqualified to answer, or needed to give the matter further consideration.

In reviewing responses as a whole, it is important to consider some apparent—but not generally real—contradictions in terms. For example, some respondents were interested in using combined approaches and specifically suggested the use of flexible, performance-based guidance as well as LID requirements in general permits.

Respondents typically suggested incentive-based approaches in place of regulatory approaches. One respondent stated "[LID] should be a suggestion, not required. Use [of LID] should be incentivized." Other respondents who suggested use of incentives were less specific about whether or not to regulate. Suggestion to use incentive-based approaches should be viewed as significant as it was not suggested in the interview sheet.



Table 2
Interviewee's Preference for Type of LID Standard

Type of LID Standard	Number of Responses ¹	Percentage of Responses
Guidance	5	29%
No Regulation	5	29%
Incentive-Based Approach	2	12%
Regulation	6	35%
Performance Standard	4	24%
Not sure or no response	3	17%

Note:

3.3.4 Should LID be the BMP of Choice?

4. Should LID be the BMPs of choice over end-of-pipe management practices such as detention ponds? If so, how?

Table 3 provides an overview of responses. It is important to note that many affirmative responses came with qualification such as "yes, but allow flexibility based on site conditions," or "yes, but use demonstration projects to encourage [LID] use." Interestingly, no respondents answered "no" directly. Those respondents who did not answer "yes" or "no" suggested "flexibility" or implementation on a "case-by-case" basis. Generally, respondents appear to favor LID, but may have reservations about using LID as the BMP of choice without consideration of site conditions.

Table 3
Interviewee's Response to the Question
"Should LID be the BMP of Choice?"

Should LID be the BMP of Choice?	Number of Responses	Percentage of Responses
Yes no Qualification	4	24%
Yes with Qualification	8	48%
No Response	1	6%
Other Approach Suggested	3	17%
No	0	0%

3.3.5 What Standards Should we use to Demonstrate the use of LID in Projects?

5. What sort of standards should we use as a way to demonstrate the incorporation of LID?

Total number of responses do not sum to 17 as several respondents suggested use of a combination of approaches.



- i. Runoff volume
- ii. Graduated permit limits for differently sized storms and runoff volumes
- iii. Pollutant levels based on runoff volumes
- iv. Performance criteria

When asking this question, the interviewer generally stated it conversationally, but essentially verbatim with an addition after "performance criteria" stating "or you can suggest an approach."

Table 4 provides an overview of responses to the question "how should we demonstrate LID?" As can be seen by reviewing the responses, no strong consensus emerges for a method to demonstrate the use of LID on projects. Many respondents made a point of suggesting that regardless of the approach taken, it should be simple and allow for flexibility. Several respondents suggested targeting/graduating implementation to a specific industry (e.g., residential development) or through special requirements for geographic areas.

Table 4
Interviewee's Response to the Question
"How Should LID be Demonstrated?"

How Should LID be Demonstrated?	Number of	Percentage of
	Responses	Responses
Runoff Volume	4	24%
Graduated Permit Limits	1	6%
Pollutant Levels Based on Runoff	1	6%
Volume		
Performance Criteria	3	17%
No Response or Not Sure	5	29%
Suggested "Flexibility" in Response	2	12%
Suggested "Simplicity" in Response	3	17%
Other Approach Suggested	3	17%

3.3.6 Should we use Stormwater Utility Districts as a Regulatory Device?

- 6. In some states stormwater utility districts charge a fee for service to oversee BMP design review, installation, operation and maintenance. What do you think of the ideas of using stormwater utility districts as a regulatory device?
 - a. Do you see stormwater utility districts playing a role in permitting?
 - i. Do you think they could reasonably be delegated regulatory functions?
 - ii. Do you think they could reasonably function as qualified local programs? That is programs that are allowed by DEP to implement the Phase II General Permit on behalf of MS4 operators.
 - iii. Do you think they could otherwise be used to facilitate compliance?
 - b. What advantages do you see available through stormwater utility districts?



This question presented some challenges for use in the interview. Interviewees had varying levels of familiarity with the concept of stormwater utilities. This may have biased some responses and in at least two interviews led to responses of "unsure" or "no response." When respondents appeared unfamiliar with stormwater utilities, the interviewer explained their application. Another issue with this question, which may have led to less than clear responses, is the fact that most people, who are familiar with utilities, are familiar with them as revenue generating devices, not regulatory devices. A number of respondents answered the question with a statement such as "I've never considered using utility districts in that way."

Table 5 presents a summary of interviewee responses to the idea of using stormwater utility districts as regulatory devices. Virtually all interviewee responses were qualified in some way. This included all the "yes" responses, all but two "maybe" responses, and all but one "no" response. One respondent noted that there was specific interest for implementation of a utility district in that respondent's region, but that actual implementation was unlikely due to political issues.

Table 5
Interviewee's Response to the Question
"Should we use Stormwater Utility Districts as a Regulatory Device?"

Should we use Utility Districts as a Regulatory Device?	Number of Responses	Percentage of Responses
Yes	4	24%
Maybe, Not Sure, etc.	6	6%
No	7	6%
Politically Unlikely	6	17%
Unnecessary Government	5	29%

3.3.7 What would you like your Role to be in Implementing LID?

- 7. What would you like your role to be in implementing LID as part of the SGP?
 - a. Developing and reviewing technical standards
 - b. Developing policy
 - c. Engaging the involvement of a constituency
 - d. Public education
 - e. Training
 - f. As a qualified local program
 - g. Implementation of a stormwater utility district
 - h. Other
 - i. Are you willing to participate as a partner in this project by attending partner meetings and reviewing work products?
 - i. Are you the appropriate contact person for this project?
 - ii. Provide contact information



In order to facilitate responses, this question was asked by grouping role opportunities as follows:

- Technical standards and policy.
- Engaging involvement of a constituency.
- Education and training of other.
- Qualified local programs and utility districts.
- Participation as a partner.

Interviewees generally responded positively to the opportunity to participate and indicated that either they or another representative of their organization would participate as partner and/or other capacities.

Table 6 provides a summary of responses.

Table 6
Interviewee's Response to the Question
"What Role would you like to Play?"

What Role would you like to Play?	Number of Affirmative Responses	Percent of Affirmative Responses
Develop and/or Review Policy and Standards	15	88%
Engage a Constituency	12	71%
Education and Training of Others	14	82%
Qualified Local Program and Utility Districts	7	40%
Participation as a Partner	15	88%



Appendix A

Letter to Partners from Paul Stacey May 12, 2010

STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



May 12, 2010



The Connecticut Department of Environmental Protection (DEP) has initiated a project to explore opportunities to add low impact development (LID) concepts and planning into four stormwater general permits (SGPs)—construction, municipal separate storm sewer systems (MS4s), industrial, and commercial. The project will also make recommendations for modifications of the *Soil Erosion and Sediment Control Guidelines* and the *Stormwater Quality Manual* to better incorporate LID principles. DEP intends for this to be a partner-driven process. A stakeholder group is being formed that will participate in the review of current DEP policies and standards and offer strategies to incorporate LID into DEP's programs.

We will hold a workshop at our 79 Elm Street Offices in the Phoenix Auditorium on May 26, 2010 from 9:15 to 11:45 a.m. to begin the process. You are invited and an agenda for the meeting is attached. This meeting will be the first in a series of five meetings to be held over the course of the next eight months. Fuss & O'Neill, contractor for the project, will be contacting you in advance of the May 26 partner workshop to begin the discussion of LID and the SGP amendment process. Your ideas will also be used to guide activities at the workshop.

Using American Reinvestment and Recovery Act funding, DEP entered into a contract with Fuss & O'Neill Consultants, who assisted us with the most recent update to the *Stormwater Quality Manual*. They will conduct a study of general permits around the country, LID policy, and the potential for stormwater utility districts. This information will be provided to you to form the basis for your decision making on this project. The Fuss & O'Neill team will include Larry Coffman, who originated the LID method in Prince George's County, MD and authored *Low-Impact Development Design Strategies* (2000), which was the very first LID manual.

A web page has been created on DEP's web site at: http://www.ct.gov/dep/cwp/view.asp?a=2719&q=459488&depNav_GID=1654

The website represents a node of communication for this project and will efficiently put project materials at your fingertips while avoiding unnecessary printouts, mailings, etc. It will include project materials such as workshop agendas, workshop summaries, and technical reports.

Why are we making this partner driven? We recognize that whatever policy is established will ultimately be implemented at the ground level by Connecticut's regulated sector and community organizations. Thus, the approach we take to regulation must be practicable for everyone. DEP hopes everyone will be fully engaged in implementation.

We very much look forward to working with you on this important project and look forward to seeing you May 26.

Sincerely,

Paul E. Stacey

Director

Bureau of Water Protection and Land Reuse

Planning and Standards Division

AGENDA

Stormwater General Permits and Incorporation of Low Impact Development Evaluation

May 26, 2010; 9:15 – 11:45 am CTDEP—79 Elm Street, Hartford; Phoenix Auditorium

- 1. Introductions
 - a. Opening Remarks
 - b. Introductions Around the Table
 - c. Future Meeting Dates and Locations
 - d. Web Page: (http://www.ct.gov/dep/cwp/view.asp?a=2719&q=459488&depNav GID=1654)
- 2. Project Overview
 - a. Project Objectives
 - b. Points of Contact
 - c. Deliverables and Schedule
 - d. Partners
- 3. Overview of Low Impact Development (LID) and Stormwater General Permits (SGP)
 - a. What's LID?
 - b. Summary of Other States
 - c. Summary of Interviews with Partners
- 4. Identifying Alternatives and Criteria
- 5. Partner Involvement in Implementation
- 6. Next Steps



Appendix B

Blank Partner Interview Questionnaire



Questionnaire Project Partners March 2010

The purpose of using this questionnaire is to gather data to inform CTDEP's LID and SGP approach. These questions are expected to be asked in conversation; therefore, the results should not be considered "experimentally valid."

Introduction

DEP is conducting a project that will begin the process of including low-impact development, or LID, into the following policy and guidance documents:

- o General permits (MS4, construction, industrial, commercial)
- o Stormwater Quality Manual
- o Soil Erosion Control Guidelines

The project will be partner driven. That is to say, members of the regulated community, non-governmental organizations, as well as representatives of regulatory agencies (the partners) are being asked to provide direction to the DEP to initiate the development of LID guidance and regulatory policy through workshops and review of work products. Partners will also be given the opportunity to help implement policy by developing and participating in an implementation work plan. In other words, DEP is asking you to define your own role in the process.

Questions

Fuss & O'Neill, as the consultant assisting the DEP, is contacting you for two reasons—to request your participation in the partnership and to discuss your initial ideas about how to build LID into DEP policy. This is intended to be a starting point so that we can plan a first partner workshop.

- 1. Are you familiar with LID practices? (If not, interviewer should provide some description. Also this is an opportunity to discuss aspects of LID that the interviewee may not be considering)
- 2. Have you been involved in their application on a project or in policy?
- 3. How do you think they should be incorporated into DEP policy?
 - a. By reference to a document
 - b. Specific standards
 - i. Narrative standard
 - ii. Prescriptive design standard
 - iii. Numeric standard
 - iv. Performance standard
 - c. Other methods
- 4. Should LID be the BMPs of choice over end-of-pipe management practices such as detention ponds? If so, how?



- 5. What sort of standards should we use as a way to demonstrate the incorporation of LID?
 - i. Runoff volume
 - ii. Graduated permit limits for differently sized storms and runoff volumes
 - iii. Pollutant levels based on runoff volumes
 - iv. Performance criteria
- 6. In some states stormwater utility districts charge a fee for service to oversee BMP design review, installation, operation and maintenance. What do you think of the ideas of using stormwater utility districts as a regulatory device?
 - a. Do you see stormwater utility districts playing a role in permitting?
 - i. Do you think they could reasonably be delegated regulatory functions?
 - ii. Do you think they could reasonably function as qualified local programs? That is programs that are allowed by DEP to implement the Phase II General Permit on behalf of MS4 operators.
 - iii. Do you think they could otherwise be used to facilitate compliance?
 - b. What advantages do you see available through stormwater utility districts?
- 7. What would you like your role to be in implementing LID as part of the SGP?
 - a. Developing and review technical standards
 - b. Developing policy
 - c. Engaging the involvement of a constituency
 - d. Public education
 - e. Training
 - f. As a qualified local program
 - g. Implementation of a stormwater utility district
 - h. Other
 - i. Are you willing to participate as a partner in this project by attending partner meetings and reviewing work products?
 - i. Are you the appropriate contact person for this project?
 - ii. Provide contact information