

Phase II Questionnaire Results

Introduction

Four questionnaires were sent to New Hampshire communities regarding Phase II. The first went to Town Managers/Administrators and/or Mayor's offices and asked questions related to budgeting and assignment of responsibility. Since most questionnaires by direct mail typically receive only a 1-3% response rate, the response rate was fairly high at 10%.

The second went to Directors of Public Works and/or Town Engineers or Highway Superintendents depending on the community. This questionnaire asked about physical facilities, such as the number and cleaning methods for catch basins, and information about needs and budgeting. CEI received a 6% response rate to this questionnaire.

The third questionnaire went to Town Planners or Planning Board Chairmen, depending on the community. This questionnaire asked about existing bylaws and regulatory issues related to Phase II. The response rate was excellent at 12%.

The final questionnaire went to Boards of Health, typically to the agent/officer, and requested information on illicit discharge handling and on impacts the BOH's had seen on water quality at beaches from storm drain discharges. A very high response rate of 20% was received.

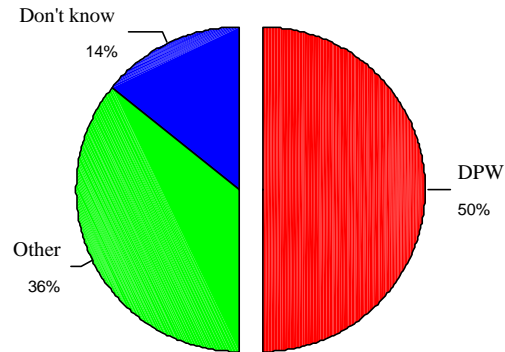
Together, the answers to the questionnaires from each department give a fairly comprehensive picture of the level of understanding and some of the issues related to Phase II implementation. The results are described and shown pictorially below by question.

Questionnaire 2: DPW Directors/Engineers/Highway/Road Agents

Question 1: DPW Directors, what department will take the lead in Phase II implementation?

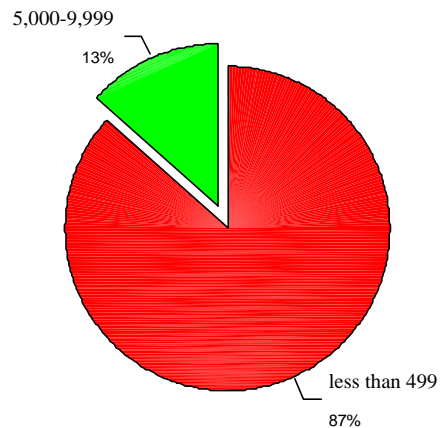
50% of the DPW Directors and Highway Superintendents who responded to the questionnaire felt that the DPW would be the lead agency for Phase II implementation. Similarly, in our survey of Town Administrators 40% of the respondents believed that either engineering or DPW would take the lead.

Lead department in Phase II implementation



Question 2a: DPW Directors, how many catch basins do you have under your jurisdiction?

Number of catch basins under jurisdiction

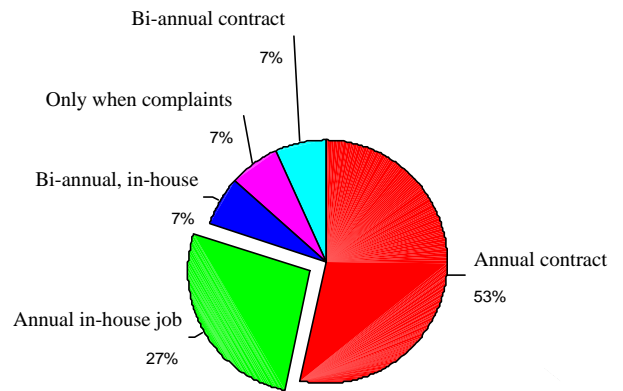


A typical number of catch basins in Phase II communities based on our responses is less than 500. However, 13% of the respondents reported having between 5,000-10,000 catch basins.

Question 2b: How often do you clean these catch basins?

Most of the respondents (53%) contract annually for their catch basin cleaning. This is followed by approximately 27% who annually perform catch basin cleaning through in-house resources. Only 7% reported cleaning catch basins in-house more than once per year while an equal number reported bi-annual cleaning through a contract. Another 7% reported that they clean them only if there is a problem. However, it is likely that in most of the in-house clean outs, only a portion of the basins are cleaned each year.

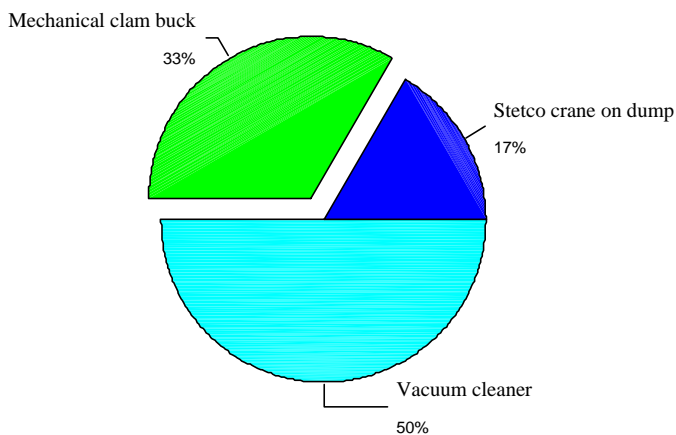
Frequency of catch basin cleanings



*Due to software constraints, figures may not add up to 100%

Question 2c: What equipment do you use for in-house cleaning?

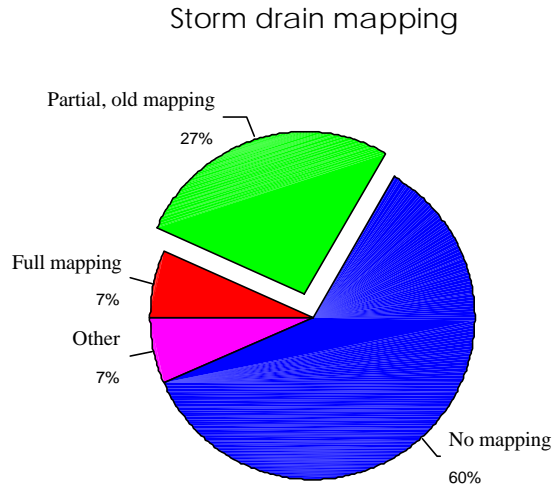
In-house equipment used for cleaning



The most widely used equipment among those performing in-house catch basin cleaning is the mechanical vacuum cleaner truck, used by 50% of the respondents. The next most popular was a mechanical clam bucket at 33%, with a Stetco crane on a dump truck following with 17%.

Question 3: DPW Directors, has your storm drain system been mapped?

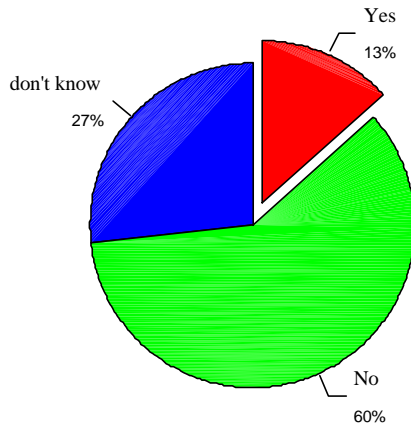
About 60% of the respondents reported having no storm drain mapping. Another 27% have partial, old mapping. Interestingly, only 7% of respondents said they had full mapping, although some reported that they were putting maps on a GIS layer so their “draft” maps must be fairly complete.



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Question 4: DPW Directors, do you have townwide topographic contours or better?

Townwide 2-foot topographic contours or better

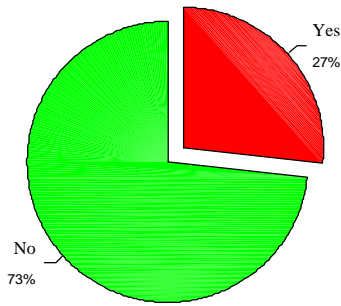


Approximately 60% of the respondents reported that they have no townwide, 2-foot topographic contours, which may be useful in designing Best Management Practices (BMPs) for storm drains. Only about 13%, do have townwide mapping. In many cases, the availability of townwide mapping, while expensive to generate, is highly useful both to the DPW and developers and can save communities money in the long run by reducing survey expenses on each project.

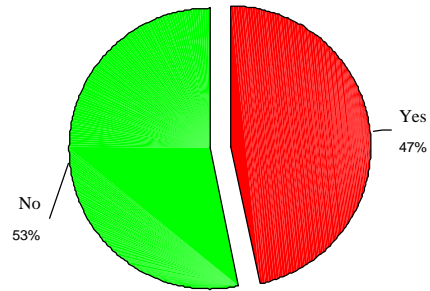
Question 5: DPW Directors, have you used stormwater BMPs before?

The majority of the respondents reported that they have used some stormwater Best Management Practices previously. The most popular BMPs have been grass swales (47% have used this technique), while 40% of respondents reported using infiltration ponds. 27% of respondents reported using leaching or oversized catch basins, and 20% used either check dams or wet ponds. No respondents reported use of proprietary units.

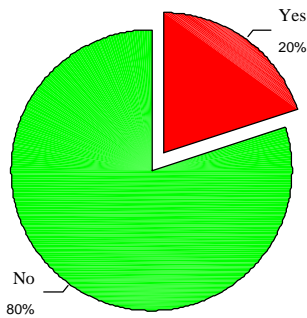
Leaching or oversized catch basins



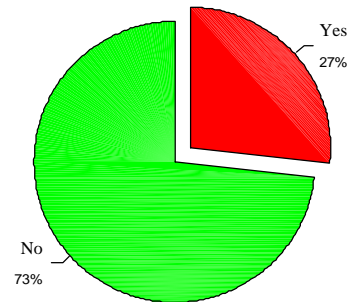
Grass swales



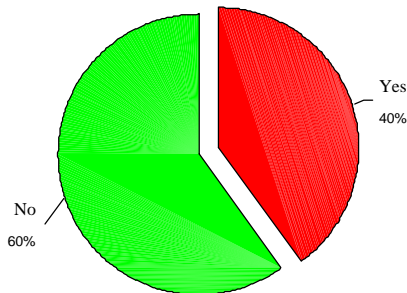
Check dams



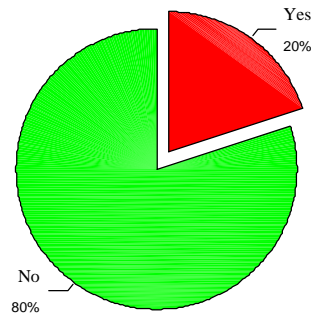
Infiltration trenches/galleries



Infiltration ponds



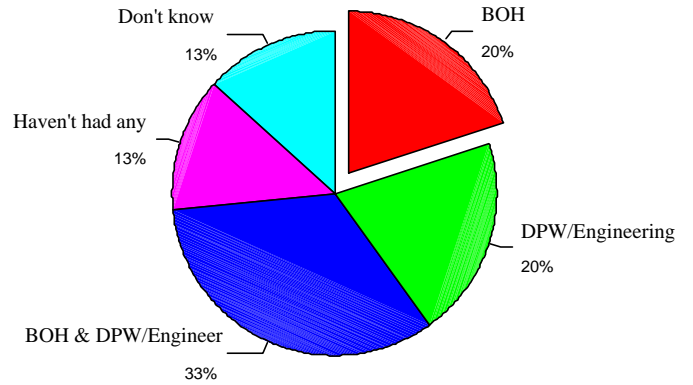
Wet ponds



Question 6: DPW Directors, how do you deal with illicit discharges?

Most respondents reported that a combination of DPW and the Board of Health respond to illicit discharges (33%). Illicit discharges are discharges to the storm drain system that are not composed of stormwater alone. Although there are few exceptions, the predominant “problematic” discharges are bacterial in nature. These often come from sewer surcharges or collapses, illegal connections and the like. They also commonly come from sewer connections to the storm drains in areas with a high failure rate of septic systems. About 20% of the cases noted that the Board of Health investigates these with another 20% noting investigation by DPW/Engineering. Approximately 13% said they have not had any illicit discharges. These are likely to be either in small, undeveloped communities or have just not been identified.

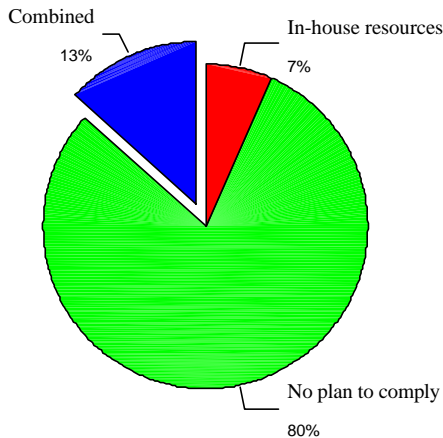
Who investigates illicit discharges?



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Question 7: DPW Directors, how do you plan to comply with the February 2003 deadline for a stormwater program and Notice of Intent?

Plans for compliance

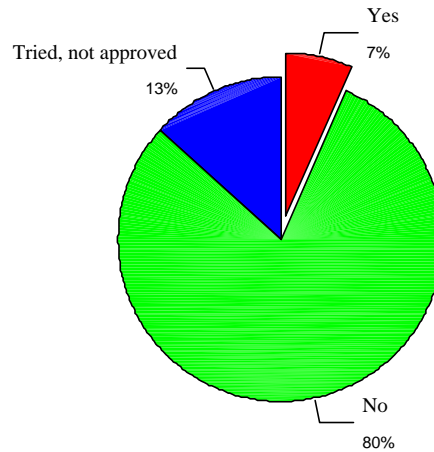


About 13% of the respondents believe they will use a combination of in-house resources, consultants and non-profits to meet Phase II requirements. Another 7% plan to do the work entirely in-house. 80% have not yet decided how to meet the requirements.

Question 8: DPW Directors, have you budgeted for compliance?

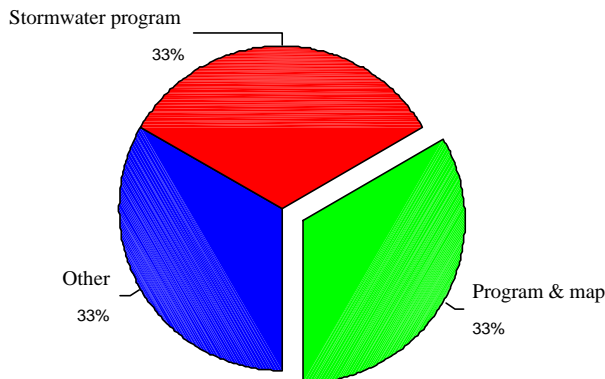
About 80% of the DPW/Engineering/Highway respondents said they had not budgeted for Phase II compliance. Only 20% have either already budgeted or are currently requesting funds for Phase II.

Have you budgeted for compliance?



Question 9: DPW Directors, if you did budget, was it for the stormwater program only or did it include mapping or investigation costs also?

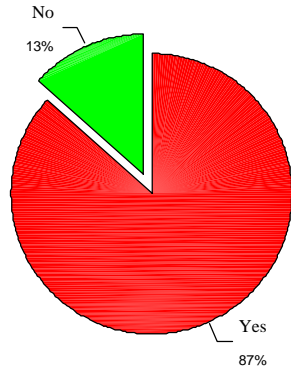
Scope of budgeting



Of those respondents who have budgeted for compliance, about 33% reported budgeting for both the program and the mapping. This is a good move in that the mapping step is important in developing a more complete program. An equal 33% reported budgeting for the program only or for other compliance methods.

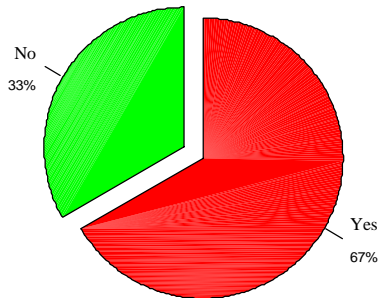
Question 10: DPW Directors, what type of assistance would be helpful?

Would assistance be helpful?

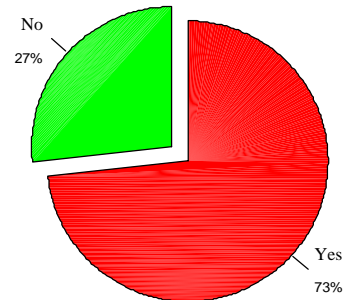


87% of the respondents said they would like more technical assistance. Technical workshops on implementation (67%) and examples of stormwater management programs (73%) were the most popular with respondents. 33% of DPW directors stated that general workshops would be helpful, while 27% believe one-on-one technical assistance would be beneficial.

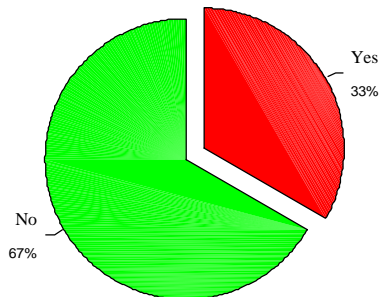
Phase II workshops



Examples of stormwater management programs



General workshops



One-on-one technical assistance

