

CRWA Municipal Stormwater Financing Survey Results Memo

Prepared for:

Massachusetts Coastal Zone Management
251 Causeway Street, Suite 800
Boston, MA 02114

Prepared by:

Charles River Watershed Association
190 Park Road
Weston, MA 02493

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Attachment A Email Survey
Attachment B Phone Survey

Introduction

The Charles River Watershed Association (CRWA) conducted a survey of municipalities within the watershed to collect information about their current stormwater management programs, budgets, and needs. The goal of the survey was to assess the willingness and capacities of the Charles River watershed communities to develop a stable, dedicated funding source for stormwater management and the survey questions were designed accordingly. The questions were aimed at gaining an understanding of each municipality's basic stormwater management program, and the assets and gaps in their programs. Questions addressed staffing, capital costs, funding sources and whether communities have other 'utility' type fees, such as solid waste "pay as you throw" fees.

These factors, in addition to questions regarding town governance and public awareness of stormwater, will help CRWA assess the potential political will and public response to a potential new financing system such as a fee or utility. In addition to the potential response to a new fee, survey questions probed the readiness of the municipalities to develop a stormwater utility in-house. These questions were based on the results of the stormwater financing case-study conducted under an earlier phase of this project, and included questions about staff skills and training, GIS capabilities, number of departments involved in stormwater management, and the existence of a stormwater committee.

This survey was also informed by and followed up on the results of a survey conducted in the summer of 2006 by the United States Environmental Protection Agency (EPA) Region 1 office.

The CRWA survey was conducted in two phases. The first phase involved an initial questionnaire of seven general questions, which was emailed to all the municipalities. The second phase involved a longer set of survey questions about the municipalities' stormwater programs. The second set of survey questions served as a guide for follow-up discussion. Unfortunately, the process was often limited by time and lack of information. Due to difficulties in obtaining responses, CRWA often combined both sets of questions into one discussion.

Overall, there is both an interest in and a need to develop stable stormwater funding for the municipalities in the watershed. Most towns feel their current stormwater budgets and programs are not adequate. Ten of the towns surveyed expressed an interest in working with CRWA further. However, many towns also expressed a sense of unwillingness on the part of the public and/or town government to pay more money to meet needed stormwater management program costs. In the current economic and public finance climate, any stormwater financing mechanisms are likely to face difficulties.

Survey Methodology

CRWA divided the survey into two components: an initial email survey, and a longer telephone survey. These are included as Attachments A and B. CRWA designed the

survey questions based on the results of the 2006 EPA survey on municipal stormwater financing, and the results of the CRWA Stormwater Financing Case Study investigations, completed under an earlier phase of this project. From the three case studies, CRWA identified several factors that were useful in the development and creation of a stormwater utility and these were addressed in the longer phone survey. CRWA designed the questions to capture all facets of the current stormwater management program.

The email survey was designed to give an overview of the management program, funding needs, and potential acceptability of a stormwater utility. These questions were designed to take less than five minutes to answer and were used to determine which towns to follow-up with a longer phone survey. The phone survey was more detailed to cover all aspects of the current stormwater program, including staff, budget, governance, and funding sources. Many questions were repetitive to ensure that CRWA might obtain answers to the questions.

The email survey was sent first to the Department of Public Works (DPW) directors of each town. After a poor initial response, the survey was resent to the DPW directors, and when available, the town engineers or town planners.

Due to a poor response from the email surveys, CRWA staff and interns called the DPW offices to identify the stormwater manager or another individual involved in the stormwater program. On the phone, CRWA first asked the questions from the email survey. Depending on the time available, CRWA continued the conversation, by using the questions from the longer phone survey to guide the discussion. However, the discussion was also limited by the information available to the person answering the questions.

When possible, CRWA set up a follow-up phone conversation to discuss the stormwater management program. In these cases, CRWA emailed the longer questionnaire to the respondents so they could gather the necessary information beforehand. However, due to the difficulties in reaching the stormwater manager on the phone, CRWA often combined the two surveys into one phone call. Therefore, not all towns answered all the questions.

The results from CRWA's surveys, as well as the results of the 2006 EPA survey, are discussed in the following section. Each town is summarized individually. There is also a summary section which highlights important trends throughout towns in the watershed.

Results

The results of both surveys were compiled to give an overview of the stormwater management practices within the watershed. These results are based on eighteen towns that answered the general questions and the ten towns that answered additional in-depth questions. The results from the 2006 EPA survey are also incorporated in this results summary.

The results of the initial survey are presented in Figure 1. In general, most of the towns surveyed (83%) considered stormwater management to be an important issue in their town. Stormwater is mostly an issue for the DPW or other departments involved in stormwater management. Three of the towns that completed the phone survey had made presentations to the town government structure on stormwater, to raise the general awareness of the issue. In addition, three towns surveyed were in the process of developing a stormwater related bylaw, which might be the basis for creating a stormwater utility.

Only 24% of towns have dedicated stormwater staff. Of these towns, only one had a dedicated stormwater manager. The other towns had dedicated stormwater laborers, who mainly focused on street sweeping and catch basin cleaning. Two towns surveyed relied on outside contractors for help with their stormwater program, both for management and laborers. Despite the lack of stormwater managers, 94% of the towns surveyed had completed and filed the Annual Stormwater Reports (ASRs) with the U.S. Environmental Protection Agency (EPA). Most towns identified a lack of staff as the biggest problem with their stormwater programs.

From the survey, only 35% of towns had calculated their annual stormwater costs, although the EPA survey results show that in past years sixteen towns did calculate or estimate the costs. Of note, the extremely wide range of estimated costs for the stormwater programs indicates that there is probably not a standard methodology for estimating stormwater program costs.

Only 35% of the towns surveyed felt they had sufficient funds for their entire stormwater management program. Despite the lack of funds, only 31% of towns surveyed had considered a stormwater utility. Many towns felt that the political or public climate would not accept another tax.

An important factor identified in the case study report was a stormwater committee. This group represents a wide range of view points, municipal departments, and greatly aids in the development and implementation of a strong and equitable stormwater utility. Only one town in our survey, Weston, had a stormwater committee, although they met infrequently. The EPA survey identified four other towns, Foxborough, Needham, Milford, and Westwood, as having stormwater committees.

Figure 2 shows the number of towns that have multiple departments or divisions that handle stormwater management. This data was obtained from the EPA survey results. On the x-axis is the number of different departments, and the y-axis is the number of towns with that many departments. Departments involved in stormwater management include: engineering, highway, planning, conservation, water, sewer, and parks. When a municipality has several departments involved in stormwater management, it may be harder to calculate the annual costs and wages associated with stormwater. Also, it may be difficult to coordinate efforts when developing a utility.

Figure 3 shows the percentages of towns that receive stormwater management funds from general/tax funding or enterprise funding. This data was obtained from the EPA survey results. The towns that did not specify whether their funding was from taxes or enterprise are shown as well. Towns with enterprise funding may already have in place some administrative aspects necessary to create a stormwater utility.

Figure 4 shows the types of stormwater management practices conducted by the towns that completed the phone survey. Most of the municipalities surveyed were conducting the bare minimum of stormwater management practices to comply with the Phase II regulations. This is highlighted by the 65% of towns surveyed that do not feel they are adequately funding their stormwater management programs. Many towns do not have the staff or financial resources for a more comprehensive program. In addition, many towns believe that the costs of stormwater management will only increase in the coming years and that they will not have funds to cover the increased expenses.

Figure 5 highlights the GIS capabilities of the towns surveyed. This factor was very important to the development of the stormwater utilities investigated in the case study report, especially the ability to use GIS to calculate the impervious areas of each town parcels. Having the GIS capabilities in-house would greatly ease the time and cost of a stormwater utility development.

Conclusions

Most of the towns feel that stormwater is an important issue. They also feel that they cannot adequately fund their current programs. If they can fund the programs, they worry about being able to fund future needs. Of the towns surveyed, 63% were interested in working with CRWA on a stormwater utility. Many of these towns have factors in place that will aid in the development of a stormwater utility.

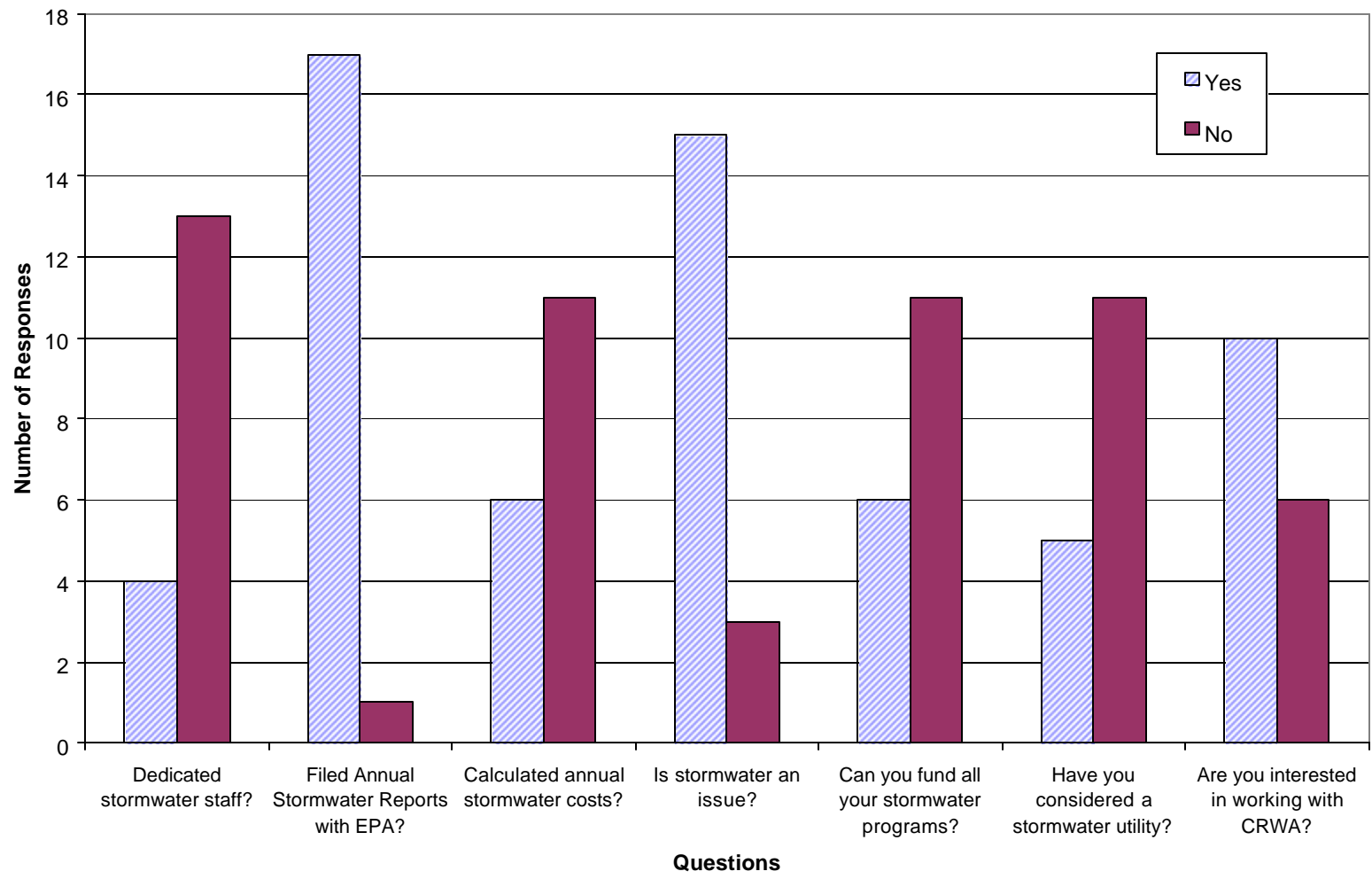


Figure 1. Responses to the Initial Survey Questions

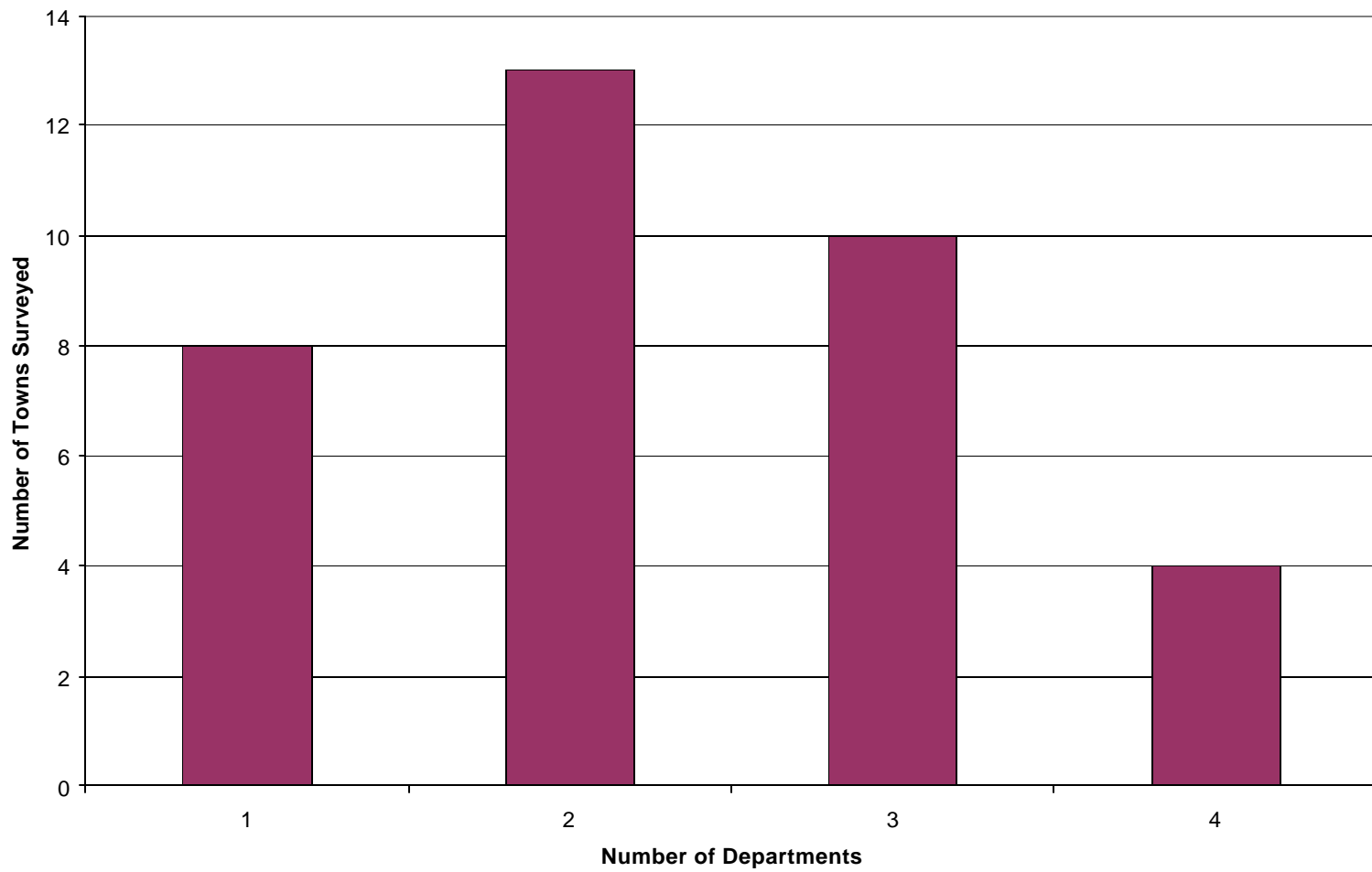


Figure 2. Departments Involved in Stormwater Management

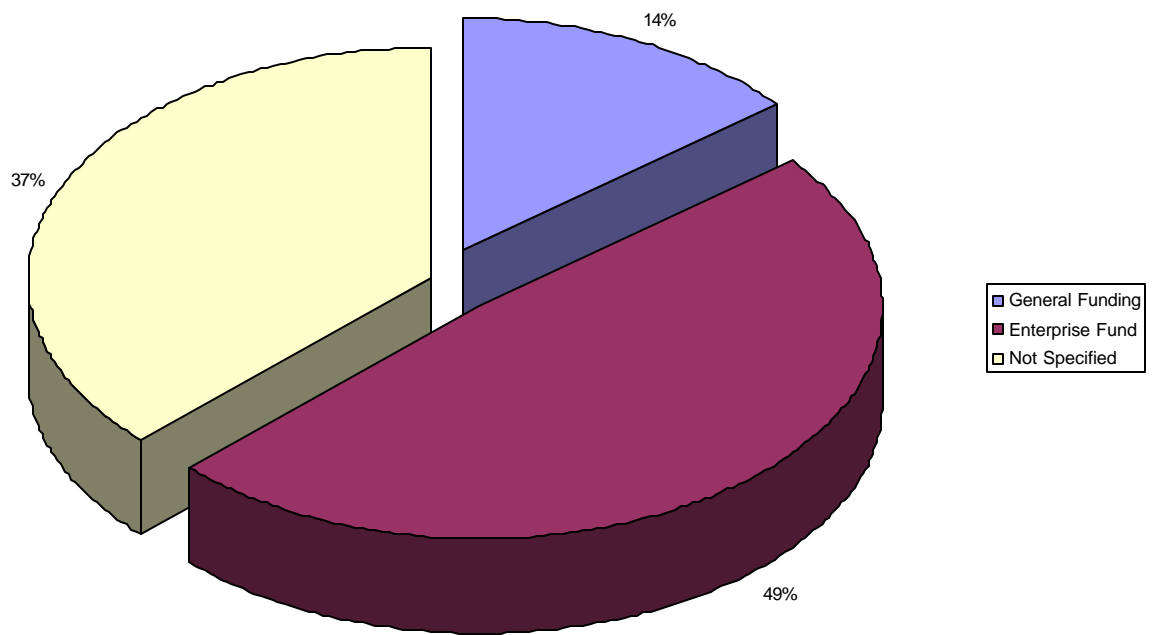


Figure 3. Stormwater Management Program Funding

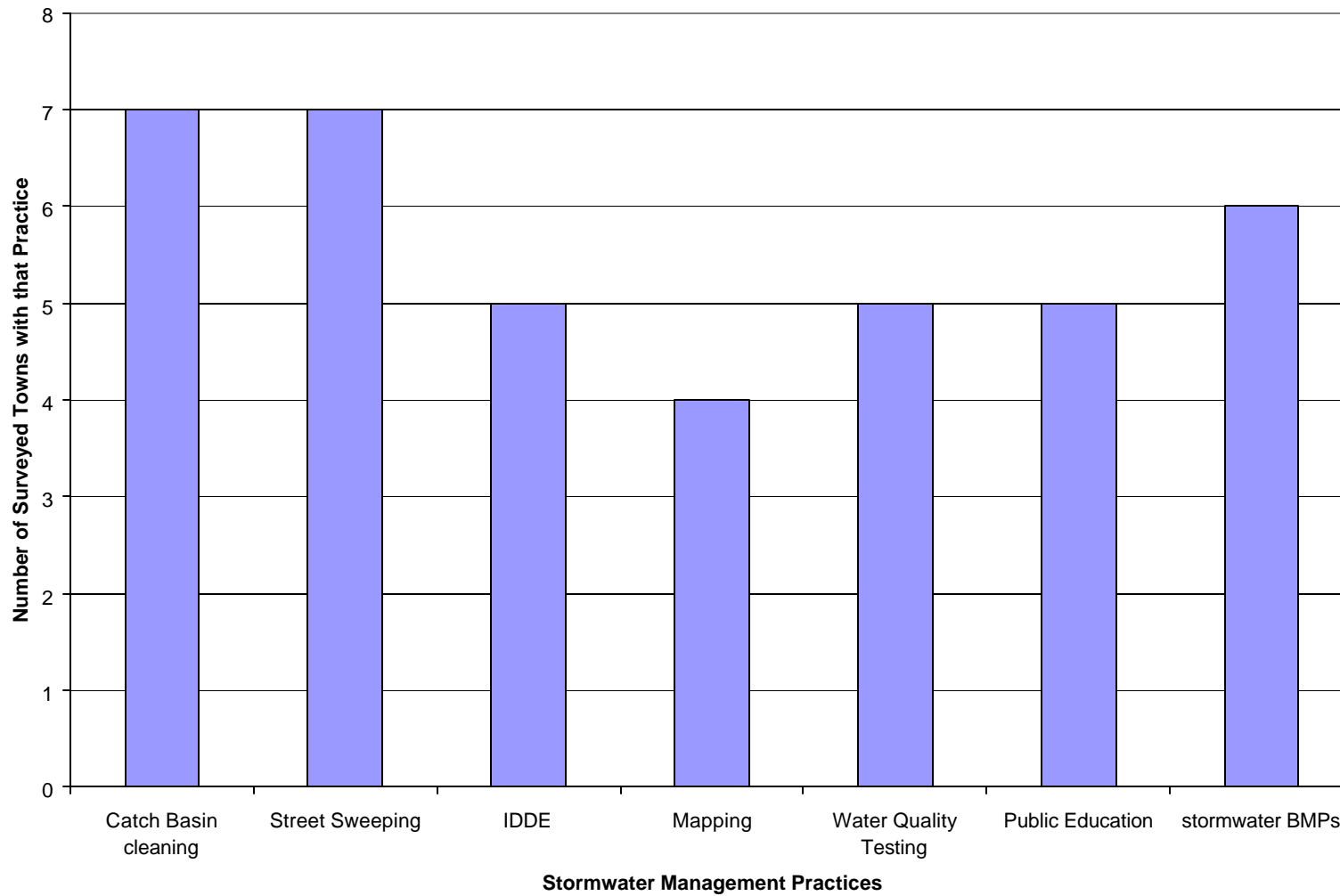


Figure 4. Types of Stormwater Management Practices Conducted by Surveyed Towns

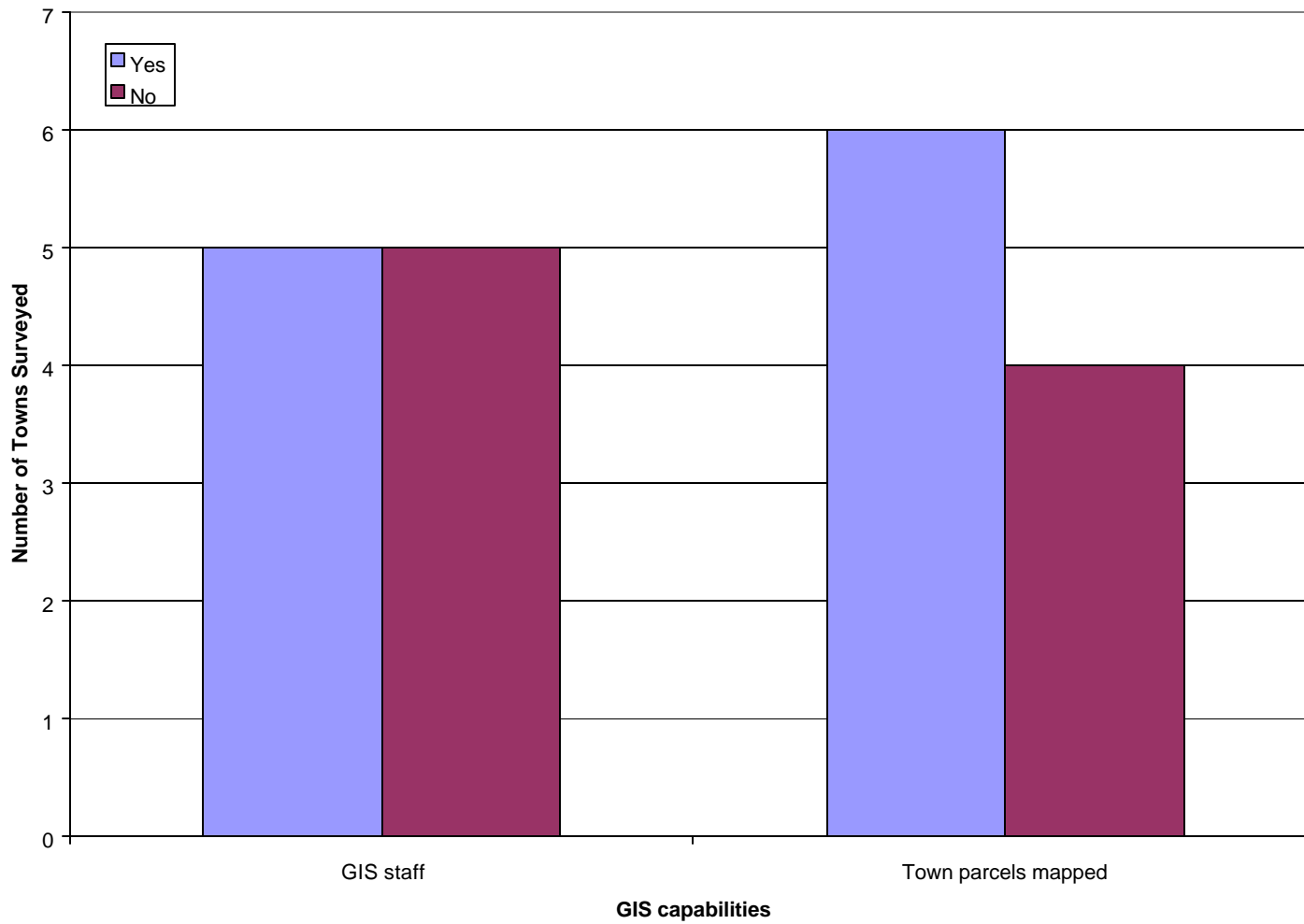


Figure 5. GIS capabilities in the Towns Surveyed

ATTACHMENT A:
EMAIL SURVEY

Dear,

CRWA has received a grant from the Massachusetts Office of Coastal Zone Management to help municipalities in Massachusetts better determine whether establishing a stormwater utility or other stormwater financing mechanism might be helpful for supporting stormwater system maintenance, outreach & education, and pollution prevention efforts.

As part of this project, CRWA recently completed a Case Studies Report on three Stormwater Utilities that have been established recently in New England: South Burlington, Vermont; Reading, Massachusetts, and Newton Massachusetts. The report provides significant detail about how each of those communities went about establishing their utility program, including rate setting, billing, public outreach and legal issues. This Case Studies Report is available on our website, www.charlesriver.org.

As the next phase of this project, CRWA is reaching out to municipalities through the Charles River watershed to learn more about their stormwater management programs, and to help identify whether establishing a stormwater utility might make sense for them.

The final phase of this project will be for CRWA to establish a work plan for interested communities to help move forward with the establishment of a stormwater utility or other financing mechanism.

This email contains a brief set of questions to help us identify Cities and Towns that are interested in working with CRWA to investigate the possibility of establishing a stormwater utility or other financing mechanism.

We estimate that it will take less than 5 minutes to respond to these questions, and thank you in advance for your reply. If you are not the correct person to address these questions, can you please forward this email to the appropriate person.

1. Does your town have a stormwater manager or dedicated staff with stormwater program responsibilities?
2. Has your town filed Annual Stormwater Reports with EPA for 2005? For 2006?
3. Has your town calculated your annual stormwater management program costs?
4. Is stormwater management a major issue of importance in your City/Town? At what level of City/Town government is it an issue of note (DPW Director; Town Administrator; Board of Selectmen/Mayor's Office; other Boards and Committees in the City/Town such as Conservation Commission, Planning, Zoning, Finance Committees, etc.); general public?
5. Is your town able to fund all of the stormwater management programs it would like or needs?
6. Has your town considered a stormwater utility or another dedicated financing mechanism to pay for stormwater?

7. Would you be interested in working with CRWA to determine whether a stormwater utility is feasible for your community?

Thank you for your time and help,

Kate Bowditch
CRWA Project Manager
781-788-0007 x 227

Talia Chalew
Environmental Scientist
781-788-0007 x 228

ATTACHMENT B:
PHONE SURVEY

Municipal Stormwater Financing Survey Questions

Community Profile

[CRWA may utilize information on the City/Town website, and ask for confirmation during the interview]

1. What is the City/Town's population?
2. What is the City/Town's total size in acres?
3. What percentage of your City/Town is developed land?
4. What percentage of your City/Town is built out based on current zoning?
5. What is the land use breakout of your City/Town (please list percentages of land area by major land use type)
6. What rate of growth/ development is your City/Town experiencing?
7. What percentage of the City/Town is served by a public
 - a. Wastewater system?
 - b. Water supply system?
 - c. Stormwater system?
8. Do municipal departments (schools, DPW, library, Parks, etc.) pay for services such as water supply and sewer?

Structure and Staffing

1. Which city/town departments have stormwater management responsibilities and what major services do each provide? Describe the hierarchy.
 - DPW/Highway
 - Parks Department
 - Water & Sewer
 - Engineering
 - Inspectional Services
 - Planning
 - Conservation
 - Health
 - Others...
2. Which department has overall responsibility for stormwater management? Does that department also handle NPDES compliance and permitting?
3. Does your town have dedicated stormwater staff?
4. Specifically, how many full-time, part-time, or volunteer positions do you maintain for stormwater activities?
5. If you don't have specific numbers or employees have multiple responsibilities, estimates of the number of full-time equivalents is fine (e.g. $\frac{1}{4}$ engineer's time + $\frac{1}{4}$ utility foreman's time + $\frac{1}{4}$ inspector's time = 0.75 FTE).
6. Does staff track their time on each activity? If so, how?
7. If available, break-down amongst responsibilities

- a. administrative
 - b. engineering
 - c. public works/maintenance
 - d. stormwater coordinator
 - e. inspectors
 - f. education/outreach
8. What departments handle water or sewer utility billing?
 9. Are there strong connections between the engineering and billing departments?
 10. Have you hired new staff or re-assigned existing staff specifically for stormwater management activities?
 11. Have you hired any new staff specifically for compliance with the MS4 Permit?
 12. If so, how many and for what purpose(s)?
 13. What is your City/Town total labor cost for stormwater management activities (actual or estimated)?
 14. Has it increased as a result of the MS4 Permit requirements? If so, by how much?
 15. Do you employ any GIS technicians?
 16. If so, how many?
 17. What are the duties of the GIS staff?
 18. Is your town tax information digitized?
 19. Are your town parcels digitized?
 20. What other GIS capabilities do you have in your department?

Stormwater Activities

[CRWA may obtain information from Annual Stormwater Reports and verify during the interview]

1. Which of the following stormwater related issues are priority problems for your City/Town? Please describe any specific issues.
 - a. Flooding
 - b. Eroding stream channels
 - c. Clogged ditches and culverts
 - d. Lack of fish and other aquatic species
 - e. Groundwater problems (quality or quantity)
 - f. Downstream sediment problems
 - g. Poor water quality in surface water bodies
 - h. Increased pollution in runoff
 - i. Aging infrastructure
 - j. Increased demand for maintenance of stormwater practices
2. Describe your current stormwater management practices regarding:
 - a. Erosion control
 - b. Water quality testing
 - c. Catch basin maintenance
 - d. Detention basin maintenance
 - e. Stormwater BMP construction

- f. Street sweeping
 - g. Stormwater infrastructure mapping
 - h. Illicit discharge detection and elimination (IDDE)
 - i. Public education
 - j. Vehicle maintenance
 - k. Ditch cleaning
3. Have you received federal warnings in regards to your water quality?
 4. If so, when? How many?
 5. How many new stormwater BMPs are on the capital plan for the next 5 years?
 6. What BMPs are you considering?
 7. Are there other stormwater related projects on the capital plan for the next 5 years?
 8. If so, what are they?
 9. Are there stormwater equipment needs on the capital plan for the next 5 years?

Budget

1. What is the City/Town Annual budget (both capital and operating) for your stormwater management programs (actual or estimated)?
2. Has it increased as a result of MS4 Permit requirements?
3. If so, by how much?
4. What are your anticipated Capital Expenditures in the coming 1 – 5 years? Is a Capital Improvement Plan available? If possible, please break capital costs down by:
 - a. Infrastructure projects
 - b. equipment
 - c. professional/contractual services (e.g. studies/investigations/permitting/O&M)
5. What are your Operational Costs? If possible, please break down by:
 - (1) street sweeping
 - (2) infrastructure O&M
 - (3) screenings disposal
 - (4) infrastructure mapping
 - (5) compliance inspections
 - (6) illicit connection identification & removal
6. What do you anticipate having to add to your stormwater management program in the next few years?
 - 1) Review stormwater management plans
 - 2) Erosion control
 - 3) Water quality monitoring
 - 4) Capital improvements
 - 5) Citizen complaints
 - 6) Routine maintenance
 - 7) Watershed planning and implementation
 - 8) Public education
 - 9) Additional staff

- 10) Flood control
 - 11) Detection of illicit connections and illegal dumping
 - 12) Formulate new stormwater management activities
 - 13) Inspection and enforcement activities
3. Have you budgeted for any of these additional activities?
 4. Does the city have adequate funding for your stormwater management program?
 5. Is it fully protective of the environment and meets the requirements of Phase II?
 6. Do you feel there are certain areas that are routinely understaffed?
 7. Do you have stormwater management projects in mind that you would do with unlimited funds?

Funding

1. How does your City/Town fund its stormwater management program and activities?
 - General Revenue/Taxes
 - how much
 - which tax pool (property, sales, income taxes)
 - Enterprise Funds
 - Revolving Fund
 - Utility
 - Betterments
 - State Revolving Funds (via Clean Water or Drinking Water SRF Programs)
 - Bonds or Loans
 - Fee
 - Fee/Rate structure: (who is charged, how much, how frequently, based on what criteria? Flat rates, equivalent residential units (ERUs), % impervious area, land use, residential v. commercial, etc...)
 - Application/permitting
 - design review
 - site inspection
 - other
2. Have you applied for, or received, any relevant grants?
 - Federal, State, local, or private sources?
 - Purpose and amount
3. Has your town recently passed any other fees/ utilities? (for example, ‘pay as you throw’)
4. If not, have they tried?
5. What was the response to these fees/ programs?

Possible Start Up Strategy and Approach

1. What form of governance does your town have?

2. What is the political process in your town to change ordinances? (i.e. Town Meeting, Council, Board of Alderman, Board of Selectmen)
3. Have you made presentations to these boards on stormwater?
4. How would you assess the political climate in regards to stormwater management?
5. What is the political climate towards accepting a new fee?
6. How do you think the public would accept a new fee?
7. Can you think of any vocal minorities that would strongly oppose a fee?
8. Is there any public education and outreach conducted to raise awareness for stormwater management?
9. Have you considered developing a stormwater utility?
10. Have you considered an outside consultant to assist you with developing the SFM?
11. Does your staff have time to develop a utility in-house?