

APPENDIX B

Detailed Responses by
Permittee Type/Group

To illustrate how weighted scores were determined and how these scores provide more insights on the level of support or strength of a given response, an example is provided below based upon a hypothetical question and hypothetical responses. In this example, two scenarios provide the same level of support in terms of percentage who strongly or very strongly support that response, but the weighted scores differ and illustrate the correlation between this score and the overall strength of support. Tables 1 and 2 provide two different scoring scenarios.

Example Question: “On a scale of 1 to 5, please indicate your level of need for information on topic X with 1 being no need and 5 being a very high need.”

Table 1 - Example Question Response Scenario A

MS4 Permittee Type	Population by Need Level	% by Need Level	Weighted Score by Need Level	Level of Support for High or Very High Need
1 – No Need	15	15%	0.15	0%
2 – Low Need	20	20%	0.40	0%
3 – Moderate Need	20	20%	0.6	0%
4 – High Need	25	25%	1	25%
5 – Very High Need	20	20%	1	20%
Total	100	100%	3.15	45%

Table 2 - Example Question Response Scenario B

MS4 Permittee Type	Population by Need Level	% by Need Level	Weighted Score by Need Level	Level of Support for High or Very High Need
1 – No Need	15	15%	0.15	0%
2 – Low Need	20	20%	0.40	0%
3 – Moderate Need	20	20%	0.6	0%
4 – High Need	25	5%	0.2	5%
5 – Very High Need	20	40%	2	40%
Total	100	100%	3.35	45%

In the example provided, the responses for Scenarios A and B both result in a level of high or very high need of 45%. However, the distribution of this support differs, which results in a differing total weighted score. This helps to discern between overall need and the strength of the need. In this example, Response Scenario B would receive a higher ranking due to the higher weighted score, even though both have the same level of high or very high need in terms of percentage. The value of providing both a weighted score and a percentage of high or very high need is to distinguish responses that may express many high need responses, but relatively little of very high need responses. The weighted score distinguishes those responses that garner the highest overall need, not just those that pass the bar of high need.

All Permittees:

3. What best describes your role for this survey?

804	Total
724	Employee of a municipality, agency, or organization with an MS4 permit
59	Consultant answering on behalf of MS4 permittee
21	Other (please specify)

100%	Total of 804
90%	Employee of a municipality, agency, or organization with an MS4 permit
7%	Consultant answering on behalf of MS4 permittee
3%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	804
Phase I population	186
Phase II population	540
Phase I and II population	726
Phase II Non-traditional population	55
State DOT population	23
Total	100.0%
Phase I percentage	23.1%
Phase II percentage	67.2%
Phase I and II percentage	90.3%
Phase II Non-traditional percentage	6.8%
State DOT percentage	2.9%

5. Please indicate which of the following describes your organization:

726	Total
9	Flood Control and/or Drainage District
96	Stormwater Utility
8	Wastewater Utility
36	Wastewater and Stormwater Utility
34	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
330	Public Works Department
2	Regional Utility/Authority
40	Environmental Services Department
34	Planning Department or Agency
1	Public Health Department
83	Other (please describe)
90%	Total of 804
1%	Flood Control and/or Drainage District
13%	Stormwater Utility
1%	Wastewater Utility
5%	Wastewater and Stormwater Utility
5%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
45%	Public Works Department
0%	Regional Utility/Authority
6%	Environmental Services Department
5%	Planning Department or Agency
0%	Public Health Department
11%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
804
Yes Population
431
No Population
373
Total
100.0%
Yes Percentage
53.6%
No Percentage
46.4%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 804	Total Count 141
Sole Permittee Population 656	Total Co-permittees 2041
Co-Permittee Population 148	
Total 100.0%	
Yes Percentage 81.6%	
No Percentage 18.4%	

8. What is the population that your organization serves?

Total	804
Less than 10,000	142
10,000 to 49,999	346
50,000 to 99,999	121
100,000 to 499,999	142
500,000 to 999,999	25
1 million to 1,999,999	14
2 million or greater	14
Total of 804	100%
Less than 10,000	18%
10,000 to 49,999	43%
50,000 to 99,999	15%
100,000 to 499,999	18%
500,000 to 999,999	3%
1 million to 1,999,999	2%
2 million or greater	2%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.46	89%
2	Aging infrastructure	3.85	66%
3	Funding or availability of capital	3.82	64%
4	Increasing or expanding regulations	3.58	56%
5	Public awareness and support	3.22	39%
6	Political support for program	2.99	33%
7	Cross-departmental coordination	2.90	31%
8	Aging workforce	2.69	24%
9	Technical expertise	2.62	20%
10	Permit requirements are unclear	2.61	24%
11	Information/training on best practices	2.59	19%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Aging Infrastructure	3.63	60%
2	Water quality	3.51	57%
3	Land Development	3.43	51%
4	Watershed management	3.23	42%
5	Illicit Discharges	3.18	41%
6	Other (please rank, and then specify below)	3.16	47%
7	Localized street flooding	3.14	42%
8	Regional compliance needs	3.06	39%
9	TMDL compliance	3.00	39%
10	Habitat restoration	2.61	22%
11	Climate change	2.49	21%
12	Coastal/riverine/lake flooding	2.22	19%
13	Sanitary sewer overflows	2.20	20%
14	Water supply requirements (source water)	1.99	11%
15	Combined sewer overflows	1.78	14%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.73	62%
2	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.37	49%
3	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.37	47%
4	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.30	45%
5	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.28	43%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	2.95	38%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	796
Watershed-based stormwater planning population	58
MS4 program planning, administration, and governance population	353
Asset Management population	169
TMDL compliance population	61
Green infrastructure and other innovative BMPs population	50
Funding and financing population	105
Total	99.0%
Watershed-based stormwater planning percentage	7.3%
MS4 program planning, administration, and governance percentage	44.3%
Asset Management percentage	21.2%
TMDL compliance percentage	7.7%
Green infrastructure and other innovative BMPs percentage	6.3%
Funding and financing percentage	13.2%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.16	44%
2	Monitoring and evaluation	3.09	40%
3	Good housekeeping and pollution prevention	3.00	34%
4	Illicit discharge detection and elimination	2.99	33%
5	Public involvement and participation	2.94	35%
6	Construction site stormwater runoff control	2.92	32%
7	Public education and outreach	2.87	31%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	1.80	18%

14. Do you use watershed-based stormwater planning in your Program?

Total	776
Yes Population	414
No Population	267
I don't know Population	95
Total	96.5%
Yes Percentage	53.4%
No Percentage	34.4%
I don't know Percentage	12.2%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Connecting stormwater investments to other community priorities and plans	3.38	48%
2	Incorporating co-benefits of stormwater controls into decision-making	3.21	42%
3	Planning across municipal departments	3.05	37%
4	Design of flood management projects to include water quality considerations	3.01	37%
5	Conducting watershed scale assessments	3.01	36%
6	Regional planning/coordination	2.96	32%
7	Public private partnership	2.90	31%
8	Water quality trading programs	2.62	24%
9	Integrated water supply planning that includes stormwater capture	2.50	22%
10	Other (please rank, and then specify below)	2.44	24%

16. Do you have a stormwater asset management plan?

Total
761
Yes Population
347
No Population
338
I Don't Know Population
76
Total
94.7%
Yes Percentage
45.6%
No Percentage
44.4%
I Don't Know Percentage
10.0%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Evaluating life-cycle costs of stormwater control measures	3.42	51%
2	Prioritizing stormwater asset maintenance and replacement	3.28	45%
3	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.23	45%
4	Developing a condition assessment of stormwater assets	3.22	45%
5	Using automated information technology to monitor and control operations and maintenance	3.16	42%
6	Asset management software and tools	3.03	37%
7	Mapping private stormwater control structures	2.78	34%
8	Creating an inventory/database of stormwater assets	2.71	31%
9	Mapping your storm sewer system	2.44	24%
10	Other (please rank, and then specify below)	2.41	31%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	BMP life-cycle costs analysis	3.47	53%
2	Policies and incentives to encourage green infrastructure on private property	3.40	52%
3	Opportunities to encourage innovation	3.40	48%
4	Development standards and incentives that encourage innovative BMPs/green infrastructure	3.39	51%
5	Analyzing and valuing stormwater management on a multi-benefit basis	3.39	49%
6	BMP performance data	3.37	49%
7	BMP maintenance requirements	3.36	49%
8	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	3.25	44%
9	Stormwater volume credit trading programs	2.82	34%
10	Other (please rank, and then specify below)	2.47	31%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total	724
Yes Population	378
No Population	279
I don't know Population	67
Total	90.0%
Yes Percentage	52.2%
No Percentage	38.5%
I don't know Percentage	9.3%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost and effectiveness of available treatment (structural) BMPs	3.50	55%
2	Cost and effectiveness of source control (non structural) BMPs	3.46	53%
3	Tracking and accounting for TMDL compliance	3.23	45%
4	Compliance methods for permit load allocations.	3.22	44%
5	Integrating TMDL requirements into stormwater planning	3.14	38%
6	Water quality modeling	3.12	41%
7	Other (please rank, and then specify below)	2.09	18%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total
733
Yes Population
262
No Population
232
Not Sure Population
239
Total
91.2%
Yes Percentage
35.7%
No Percentage
31.7%
Not Sure Percentage
32.6%

Phase I's Only:

3. What best describes your role for this survey?

186	Total
170	Employee of a municipality, agency, or organization with an MS4 permit
10	Consultant answering on behalf of MS4 permittee
6	Other (please specify)

23%	Total of 804
91%	Employee of a municipality, agency, or organization with an MS4 permit
5%	Consultant answering on behalf of MS4 permittee
3%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	186
Phase I population	186
Phase II population	0
Phase I and II population	186
Phase II Non-traditional population	0
State DOT population	0
Total	23.1%
Phase I percentage	100.0%
Phase II percentage	0.0%
Phase I and II percentage	100.0%
Phase II Non-traditional percentage	0.0%
State DOT percentage	0.0%

5. Please indicate which of the following describes your organization:

186	Total
6	Flood Control and/or Drainage District
17	Stormwater Utility
3	Wastewater Utility
12	Wastewater and Stormwater Utility
13	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
75	Public Works Department
1	Regional Utility/Authority
16	Environmental Services Department
7	Planning Department or Agency
0	Public Health Department
19	Other (please describe)
23%	Total of 804
3%	Flood Control and/or Drainage District
9%	Stormwater Utility
2%	Wastewater Utility
6%	Wastewater and Stormwater Utility
7%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
40%	Public Works Department
1%	Regional Utility/Authority
9%	Environmental Services Department
4%	Planning Department or Agency
0%	Public Health Department
10%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
186
Yes Population
72
No Population
114
Total
23.1%
Yes Percentage
38.7%
No Percentage
61.3%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 186	Total Count 63
Sole Permittee Population 120	Total Co-permittees 1167
Co-Permittee Population 66	
Total 23.1%	
Yes Percentage 64.5%	
No Percentage 35.5%	

8. What is the population that your organization serves?

Total	186
Less than 10,000	27
10,000 to 49,999	54
50,000 to 99,999	11
100,000 to 499,999	62
500,000 to 999,999	18
1 million to 1,999,999	10
2 million or greater	4
Total of 804	23%
Less than 10,000	15%
10,000 to 49,999	29%
50,000 to 99,999	6%
100,000 to 499,999	33%
500,000 to 999,999	10%
1 million to 1,999,999	5%
2 million or greater	2%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.48	85%
2	Aging infrastructure	4.04	74%
3	Funding or availability of capital	3.86	64%
4	Increasing or expanding regulations	3.60	54%
5	Public awareness and support	3.29	42%
6	Political support for program	3.00	33%
7	Cross-departmental coordination	2.91	34%
8	Aging workforce	2.77	31%
9	Technical expertise	2.59	21%
10	Information/training on best practices	2.49	18%
11	Permit requirements are unclear	2.45	19%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Aging Infrastructure	3.71	61%
2	Water quality	3.60	62%
3	TMDL compliance	3.41	51%
4	Land Development	3.37	49%
5	Other (please rank, and then specify below)	3.29	50%
6	Watershed management	3.25	49%
7	Illicit Discharges	3.17	42%
8	Localized street flooding	3.15	38%
9	Regional compliance needs	3.08	44%
10	Habitat restoration	2.77	27%
11	Climate change	2.63	24%
12	Sanitary sewer overflows	2.40	22%
13	Coastal/riverine/lake flooding	2.30	20%
14	Water supply requirements (source water)	2.05	15%
15	Combined sewer overflows	1.76	14%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.84	62%
2	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.53	56%
3	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.49	52%
4	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.47	53%
5	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.30	44%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	3.08	42%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	182
Watershed-based stormwater planning population	21
MS4 program planning, administration, and governance population	69
Asset Management population	32
TMDL compliance population	18
Green infrastructure and other innovative BMPs population	15
Funding and financing population	27
Total	22.6%
Watershed-based stormwater planning percentage	11.5%
MS4 program planning, administration, and governance percentage	37.9%
Asset Management percentage	17.6%
TMDL compliance percentage	9.9%
Green infrastructure and other innovative BMPs percentage	8.2%
Funding and financing percentage	14.8%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.19	43%
2	Monitoring and evaluation	3.08	40%
3	Public involvement and participation	3.04	40%
4	Public education and outreach	2.99	38%
5	Good housekeeping and pollution prevention	2.93	32%
6	Construction site stormwater runoff control	2.90	34%
7	Illicit discharge detection and elimination	2.90	30%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	2.86	37%

14. Do you use watershed-based stormwater planning in your Program?

Total	180
Yes Population	109
No Population	51
I don't know Population	20
Total	22.4%
Yes Percentage	60.6%
No Percentage	28.3%
I don't know Percentage	11.1%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Connecting stormwater investments to other community priorities and plans	3.54	53%
2	Incorporating co-benefits of stormwater controls into decision-making	3.39	46%
3	Planning across municipal departments	3.27	43%
4	Regional planning/coordination	3.19	39%
5	Design of flood management projects to include water quality considerations	3.17	43%
6	Conducting watershed scale assessments	3.13	38%
7	Public private partnership	3.03	36%
8	Water quality trading programs	2.82	26%
9	Integrated water supply planning that includes stormwater capture	2.71	27%
10	Other (please rank, and then specify below)	2.64	18%

16. Do you have a stormwater asset management plan?

Total
178
Yes Population
93
No Population
67
I Don't Know Population
18
Total
22.1%
Yes Percentage
52.2%
No Percentage
37.6%
I Don't Know Percentage
10.1%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Evaluating life-cycle costs of stormwater control measures	3.47	53%
2	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.32	48%
3	Using automated information technology to monitor and control operations and maintenance	3.21	45%
4	Prioritizing stormwater asset maintenance and replacement	3.18	43%
5	Developing a condition assessment of stormwater assets	3.17	44%
6	Asset management software and tools	3.03	37%
7	Mapping private stormwater control structures	2.87	35%
8	Other (please rank, and then specify below)	2.80	40%
9	Creating an inventory/database of stormwater assets	2.72	34%
10	Mapping your storm sewer system	2.50	25%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Analyzing and valuing stormwater management on a multi-benefit basis	3.55	54%
2	BMP life-cycle costs analysis	3.53	55%
3	Policies and incentives to encourage green infrastructure on private property	3.52	54%
4	Development standards and incentives that encourage innovative BMPs/green infrastructure	3.51	53%
5	Opportunities to encourage innovation	3.47	48%
6	BMP performance data	3.45	52%
7	BMP maintenance requirements	3.40	52%
8	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	3.34	44%
9	Other (please rank, and then specify below)	3.17	42%
10	Stormwater volume credit trading programs	3.03	41%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total	166
Yes Population	103
No Population	42
I don't know Population	21
Total	20.6%
Yes Percentage	62.0%
No Percentage	25.3%
I don't know Percentage	12.7%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost and effectiveness of source control (non structural) BMPs	3.49	53%
2	Cost and effectiveness of available treatment (structural) BMPs	3.45	51%
3	Compliance methods for permit load allocations	3.21	44%
4	Water quality modeling	3.20	47%
5	Integrating TMDL requirements into stormwater planning	3.20	40%
6	Tracking and accounting for TMDL compliance	3.02	39%
7	Other (please rank, and then specify below)	2.43	29%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total
170
Yes Population
46
No Population
68
Not Sure Population
56
Total
21.1%
Yes Percentage
27.1%
No Percentage
40.0%
Not Sure Percentage
32.9%

Phase II's Only:

3. What best describes your role for this survey?

540	Total
482	Employee of a municipality, agency, or organization with an MS4 permit
45	Consultant answering on behalf of MS4 permittee
13	Other (please specify)

67%	Total of 804
89%	Employee of a municipality, agency, or organization with an MS4 permit
8%	Consultant answering on behalf of MS4 permittee
2%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	540
Phase I population	0
Phase II population	540
Phase I and II population	540
Phase II Non-traditional population	0
State DOT population	0
Total	67.2%
Phase I percentage	0.0%
Phase II percentage	100.0%
Phase I and II percentage	100.0%
Phase II Non-traditional percentage	0.0%
State DOT percentage	0.0%

5. Please indicate which of the following describes your organization:

539	Total
3	Flood Control and/or Drainage District
79	Stormwater Utility
5	Wastewater Utility
24	Wastewater and Stormwater Utility
21	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
255	Public Works Department
1	Regional Utility/Authority
24	Environmental Services Department
27	Planning Department or Agency
1	Public Health Department
63	Other (please describe)
67%	Total of 804
1%	Flood Control and/or Drainage District
15%	Stormwater Utility
1%	Wastewater Utility
4%	Wastewater and Stormwater Utility
4%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
47%	Public Works Department
0%	Regional Utility/Authority
4%	Environmental Services Department
5%	Planning Department or Agency
0%	Public Health Department
12%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
540
Yes Population
323
No Population
217
Total
67.2%
Yes Percentage
59.8%
No Percentage
40.2%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 540	Total Count 68
Sole Permittee Population 469	Total Co-permittees 808
Co-Permittee Population 71	
Total 67.2%	
Yes Percentage 86.9%	
No Percentage 13.1%	

8. What is the population that your organization serves?

Total	540
Less than 10,000	95
10,000 to 49,999	269
50,000 to 99,999	102
100,000 to 499,999	69
500,000 to 999,999	3
1 million to 1,999,999	1
2 million or greater	1
Total of 804	67%
Less than 10,000	18%
10,000 to 49,999	50%
50,000 to 99,999	19%
100,000 to 499,999	13%
500,000 to 999,999	1%
1 million to 1,999,999	0.2%
2 million or greater	0.2%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.47	89%
2	Funding or availability of capital	3.86	66%
3	Aging infrastructure	3.81	64%
4	Increasing or expanding regulations	3.60	57%
5	Public awareness and support	3.26	40%
6	Political support for program	2.98	33%
7	Cross-departmental coordination	2.87	30%
8	Permit requirements are unclear	2.67	25%
9	Aging workforce	2.66	22%
10	Information/training on best practices	2.65	20%
11	Technical expertise	2.62	20%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Aging Infrastructure	3.64	61%
2	Land Development	3.48	53%
3	Water quality	3.47	55%
4	Watershed management	3.25	40%
5	Other (please rank, and then specify below)	3.24	50%
6	Localized street flooding	3.23	47%
7	Illicit Discharges	3.21	42%
8	Regional compliance needs	3.04	37%
9	TMDL compliance	2.85	34%
10	Habitat restoration	2.53	19%
11	Climate change	2.44	20%
12	Coastal/riverine/lake flooding	2.23	20%
13	Sanitary sewer overflows	2.21	20%
14	Water supply requirements (source water)	2.00	11%
15	Combined sewer overflows	1.81	15%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.74	64%
2	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.35	48%
3	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.33	45%
4	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.32	46%
5	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.20	40%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	2.92	37%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	537
Watershed-based stormwater planning population	33
MS4 program planning, administration, and governance population	252
Asset Management population	120
TMDL compliance population	35
Green infrastructure and other innovative BMPs population	26
Funding and financing population	71
Total	66.8%
Watershed-based stormwater planning percentage	6.1%
MS4 program planning, administration, and governance percentage	46.9%
Asset Management percentage	22.3%
TMDL compliance percentage	6.5%
Green infrastructure and other innovative BMPs percentage	4.8%
Funding and financing percentage	13.2%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.15	44%
2	Monitoring and evaluation	3.13	41%
3	Illicit discharge detection and elimination	3.04	34%
3	Good housekeeping and pollution prevention	3.04	34%
5	Public involvement and participation	2.93	35%
6	Construction site stormwater runoff control	2.92	31%
7	Public education and outreach	2.83	28%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	1.47	13%

14. Do you use watershed-based stormwater planning in your Program?

Total	520
Yes Population	274
No Population	184
I don't know Population	62
Total	64.7%
Yes Percentage	52.7%
No Percentage	35.4%
I don't know Percentage	11.9%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Connecting stormwater investments to other community priorities and plans	3.39	48%
2	Incorporating co-benefits of stormwater controls into decision-making	3.19	41%
3	Conducting watershed scale assessments	3.04	36%
4	Design of flood management projects to include water quality considerations	3.01	36%
5	Planning across municipal departments	3.01	35%
6	Public private partnership	2.94	32%
7	Regional planning/coordination	2.90	30%
8	Water quality trading programs	2.57	23%
9	Integrated water supply planning that includes stormwater capture	2.46	21%
10	Other (please rank, and then specify below)	2.43	29%

16. Do you have a stormwater asset management plan?

Total	508
Yes Population	225
No Population	234
I Don't Know Population	49
Total	63.2%
Yes Percentage	44.3%
No Percentage	46.1%
I Don't Know Percentage	9.6%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Evaluating life-cycle costs of stormwater control measures	3.39	50%
2	Prioritizing stormwater asset maintenance and replacement	3.32	46%
3	Developing a condition assessment of stormwater assets	3.26	46%
4	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.21	44%
5	Using automated information technology to monitor and control operations and maintenance	3.15	41%
6	Asset management software and tools	2.99	36%
7	Mapping private stormwater control structures	2.85	36%
8	Creating an inventory/database of stormwater assets	2.68	30%
9	Mapping your storm sewer system	2.40	23%
10	Other (please rank, and then specify below)	2.35	30%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Policies and incentives to encourage green infrastructure on private property	3.51	55%
2	Development standards and incentives that encourage innovative BMPs/green infrastructure	3.44	52%
3	BMP life-cycle costs analysis	3.44	52%
4	Opportunities to encourage innovation	3.38	48%
5	Analyzing and valuing stormwater management on a multi-benefit basis	3.35	47%
6	BMP maintenance requirements	3.33	48%
6	BMP performance data	3.33	48%
8	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	3.28	46%
9	Stormwater volume credit trading programs	2.77	32%
10	Other (please rank, and then specify below)	2.12	29%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total
484
Yes Population
236
No Population
206
I don't know Population
42
Total
60.2%
Yes Percentage
48.8%
No Percentage
42.6%
I don't know Percentage
8.7%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost and effectiveness of available treatment (structural) BMPs	3.50	56%
2	Cost and effectiveness of source control (non structural) BMPs	3.45	54%
3	Tracking and accounting for TMDL compliance	3.26	46%
4	Compliance methods for permit load allocations.	3.19	43%
5	Integrating TMDL requirements into stormwater planning	3.09	37%
6	Water quality modeling	3.07	39%
7	Other (please rank, and then specify below)	2.00	17%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total	488
Yes Population	194
No Population	141
Not Sure Population	153
Total	60.7%
Yes Percentage	39.8%
No Percentage	28.9%
Not Sure Percentage	31.4%

Phase I and Phase IIs:

3. What best describes your role for this survey?

726	Total
652	Employee of a municipality, agency, or organization with an MS4 permit
55	Consultant answering on behalf of MS4 permittee
19	Other (please specify)

90%	Total of 804
90%	Employee of a municipality, agency, or organization with an MS4 permit
8%	Consultant answering on behalf of MS4 permittee
3%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	726
Phase I population	186
Phase II population	540
Phase I and II population	726
Phase II Non-traditional population	0
State DOT population	0
Total	90.3%
Phase I percentage	25.6%
Phase II percentage	74.4%
Phase I and II percentage	100.0%
Phase II Non-traditional percentage	0.0%
State DOT percentage	0.0%

5. Please indicate which of the following describes your organization:

725	Total
9	Flood Control and/or Drainage District
96	Stormwater Utility
8	Wastewater Utility
36	Wastewater and Stormwater Utility
34	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
330	Public Works Department
2	Regional Utility/Authority
40	Environmental Services Department
34	Planning Department or Agency
1	Public Health Department
82	Other (please describe)
90%	Total of 804
1%	Flood Control and/or Drainage District
13%	Stormwater Utility
1%	Wastewater Utility
5%	Wastewater and Stormwater Utility
5%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
46%	Public Works Department
0%	Regional Utility/Authority
6%	Environmental Services Department
5%	Planning Department or Agency
0%	Public Health Department
11%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
726
Yes Population
395
No Population
331
Total
90.3%
Yes Percentage
54.4%
No Percentage
45.6%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 726	Total Count 131
Sole Permittee Population 589	Total Co-permittees 1975
Co-Permittee Population 137	
Total 90.3%	
Yes Percentage 81.1%	
No Percentage 18.9%	

8. What is the population that your organization serves?

Total	726
Less than 10,000	122
10,000 to 49,999	323
50,000 to 99,999	113
100,000 to 499,999	131
500,000 to 999,999	21
1 million to 1,999,999	11
2 million or greater	5
Total of 804	90%
Less than 10,000	17%
10,000 to 49,999	44%
50,000 to 99,999	16%
100,000 to 499,999	18%
500,000 to 999,999	3%
1 million to 1,999,999	2%
2 million or greater	1%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.47	88%
2	Aging infrastructure	3.87	67%
3	Funding or availability of capital	3.86	65%
4	Increasing or expanding regulations	3.60	56%
5	Public awareness and support	3.27	40%
6	Political support for program	2.99	33%
7	Cross-departmental coordination	2.88	31%
8	Aging workforce	2.69	24%
9	Permit requirements are unclear	2.62	24%
10	Technical expertise	2.61	20%
11	Information/training on best practices	2.61	20%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Aging Infrastructure	3.66	61%
2	Water quality	3.50	57%
3	Land Development	3.45	52%
4	Other (please rank, and then specify below)	3.26	50%
5	Watershed management	3.25	42%
6	Localized street flooding	3.21	44%
7	Illicit Discharges	3.20	42%
8	Regional compliance needs	3.05	39%
9	TMDL compliance	2.99	39%
10	Habitat restoration	2.59	21%
11	Climate change	2.49	21%
12	Sanitary sewer overflows	2.26	21%
13	Coastal/riverine/lake flooding	2.25	20%
14	Water supply requirements (source water)	2.01	12%
15	Combined sewer overflows	1.79	14%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.76	63%
2	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.38	49%
3	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.38	48%
4	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.31	46%
5	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.28	43%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	2.96	39%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	719
Watershed-based stormwater planning population	54
MS4 program planning, administration, and governance population	321
Asset Management population	152
TMDL compliance population	53
Green infrastructure and other innovative BMPs population	41
Funding and financing population	98
Total	89.4%
Watershed-based stormwater planning percentage	7.5%
MS4 program planning, administration, and governance percentage	44.6%
Asset Management percentage	21.1%
TMDL compliance percentage	7.4%
Green infrastructure and other innovative BMPs percentage	5.7%
Funding and financing percentage	13.6%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.16	44%
2	Monitoring and evaluation	3.12	41%
3	Good housekeeping and pollution prevention	3.01	34%
4	Illicit discharge detection and elimination	3.01	33%
5	Public involvement and participation	2.96	36%
6	Construction site stormwater runoff control	2.92	32%
7	Public education and outreach	2.87	31%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	1.84	19%

14. Do you use watershed-based stormwater planning in your Program?

Total	700
Yes Population	383
No Population	235
I don't know Population	82
Total	87.1%
Yes Percentage	54.7%
No Percentage	33.6%
I don't know Percentage	11.7%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Connecting stormwater investments to other community priorities and plans	3.43	50%
2	Incorporating co-benefits of stormwater controls into decision-making	3.24	42%
3	Planning across municipal departments	3.08	37%
4	Conducting watershed scale assessments	3.06	37%
5	Design of flood management projects to include water quality considerations	3.05	38%
6	Regional planning/coordination	2.98	32%
7	Public private partnership	2.96	33%
8	Water quality trading programs	2.63	24%
9	Integrated water supply planning that includes stormwater capture	2.53	22%
10	Other (please rank, and then specify below)	2.50	25%

16. Do you have a stormwater asset management plan?

Total
686
Yes Population
318
No Population
301
I Don't Know Population
67
Total
85.3%
Yes Percentage
46.4%
No Percentage
43.9%
I Don't Know Percentage
9.8%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Evaluating life-cycle costs of stormwater control measures	3.41	51%
2	Prioritizing stormwater asset maintenance and replacement	3.28	45%
3	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.24	45%
4	Developing a condition assessment of stormwater assets	3.23	45%
5	Using automated information technology to monitor and control operations and maintenance	3.17	42%
6	Asset management software and tools	3.00	36%
7	Mapping private stormwater control structures	2.86	36%
8	Creating an inventory/database of stormwater assets	2.69	31%
9	Other (please rank, and then specify below)	2.50	33%
10	Mapping your storm sewer system	2.43	24%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Policies and incentives to encourage green infrastructure on private property	3.51	55%
2	BMP life-cycle costs analysis	3.47	53%
3	Development standards and incentives that encourage innovative BMPs/green infrastructure	3.46	52%
4	Analyzing and valuing stormwater management on a multi-benefit basis	3.40	49%
5	Opportunities to encourage innovation	3.40	48%
6	BMP performance data	3.36	49%
7	BMP maintenance requirements	3.35	49%
8	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	3.29	46%
9	Stormwater volume credit trading programs	2.84	34%
10	Other (please rank, and then specify below)	2.55	34%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total	650
Yes Population	339
No Population	248
I don't know Population	63
Total	80.8%
Yes Percentage	52.2%
No Percentage	38.2%
I don't know Percentage	9.7%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost and effectiveness of available treatment (structural) BMPs	3.48	54%
2	Cost and effectiveness of source control (non structural) BMPs	3.46	53%
3	Compliance methods for permit load allocations.	3.20	43%
4	Tracking and accounting for TMDL compliance	3.19	44%
5	Integrating TMDL requirements into stormwater planning	3.13	38%
6	Water quality modeling	3.11	41%
7	Other (please rank, and then specify below)	2.16	21%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total
658
Yes Population
240
No Population
209
Not Sure Population
209
Total
81.8%
Yes Percentage
36.5%
No Percentage
31.8%
Not Sure Percentage
31.8%

Phase II Non-Traditionals Only:

3. What best describes your role for this survey?

55	Total
50	Employee of a municipality, agency, or organization with an MS4 permit
3	Consultant answering on behalf of MS4 permittee
2	Other (please specify)

7%	Total of 804
91%	Employee of a municipality, agency, or organization with an MS4 permit
5%	Consultant answering on behalf of MS4 permittee
4%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	55
Phase I population	0
Phase II population	0
Phase I and II population	0
Phase II Non-traditional population	55
State DOT population	0
Total	6.8%
Phase I percentage	0.0%
Phase II percentage	0.0%
Phase I and II percentage	0.0%
Phase II Non-traditional percentage	100.0%
State DOT percentage	0.0%

5. Please indicate which of the following describes your organization:

0	Total
0	Flood Control and/or Drainage District
0	Stormwater Utility
0	Wastewater Utility
0	Wastewater and Stormwater Utility
0	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
0	Public Works Department
0	Regional Utility/Authority
0	Environmental Services Department
0	Planning Department or Agency
0	Public Health Department
0	Other (please describe)
0%	Total of 804
0%	Flood Control and/or Drainage District
0%	Stormwater Utility
0%	Wastewater Utility
0%	Wastewater and Stormwater Utility
0%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
0%	Public Works Department
0%	Regional Utility/Authority
0%	Environmental Services Department
0%	Planning Department or Agency
0%	Public Health Department
0%	Other (please describe)

55	Total
1	Laboratory/Research Center
2	Military Base
16	Other (please describe)
6	School District
30	University/College
7%	Total of 804
2%	Laboratory/Research Center
4%	Military Base
29%	Other (please describe)
11%	School District
55%	University/College

6. Is your community or organization covered by a statewide or regional general permit?

Total	55
Yes Population	25
No Population	30
Total	6.8%
Yes Percentage	45.5%
No Percentage	54.5%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total	55	Total Count	6
Sole Permittee Population	49	Total Co-permittees	45
Co-Permittee Population	6		
Total	6.8%		
Yes Percentage	89.1%		
No Percentage	10.9%		

8. What is the population that your organization serves?

Total	55
Less than 10,000	20
10,000 to 49,999	20
50,000 to 99,999	6
100,000 to 499,999	8
500,000 to 999,999	0
1 million to 1,999,999	0
2 million or greater	1
Total of 804	7%
Less than 10,000	36%
10,000 to 49,999	36%
50,000 to 99,999	11%
100,000 to 499,999	15%
500,000 to 999,999	0%
1 million to 1,999,999	0%
2 million or greater	2%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.36	100%
2	Aging infrastructure	3.65	60%
3	Funding or availability of capital	3.42	49%
4	Increasing or expanding regulations	3.33	45%
5	Cross-departmental coordination	2.95	29%
6	Political support for program	2.95	27%
7	Public awareness and support	2.65	20%
8	Technical expertise	2.63	24%
9	Permit requirements are unclear	2.58	24%
10	Aging workforce	2.56	18%
11	Information/training on best practices	2.38	7%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Aging Infrastructure	3.43	51%
2	Water quality	3.40	51%
3	Land Development	3.29	44%
4	Regional compliance needs	3.25	44%
5	Watershed management	3.02	36%
6	TMDL compliance	3.00	43%
7	Illicit Discharges	3.00	35%
8	Habitat restoration	2.70	30%
9	Climate change	2.61	24%
10	Other (please rank, and then specify below)	2.43	29%
11	Localized street flooding	2.36	19%
12	Coastal/riverine/lake flooding	1.76	11%
13	Sanitary sewer overflows	1.73	15%
14	Water supply requirements (source water)	1.73	7%
15	Combined sewer overflows	1.67	13%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.42	53%
2	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.31	45%
3	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.18	40%
4	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.16	44%
5	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.16	42%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	2.73	33%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	54
Watershed-based stormwater planning population	3
MS4 program planning, administration, and governance population	23
Asset Management population	8
TMDL compliance population	5
Green infrastructure and other innovative BMPs population	8
Funding and financing population	7
Total	6.7%
Watershed-based stormwater planning percentage	5.6%
MS4 program planning, administration, and governance percentage	42.6%
Asset Management percentage	14.8%
TMDL compliance percentage	9.3%
Green infrastructure and other innovative BMPs percentage	14.8%
Funding and financing percentage	13.0%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.02	39%
2	Public education and outreach	3.02	35%
3	Good housekeeping and pollution prevention	3.00	37%
4	Public involvement and participation	2.91	35%
5	Illicit discharge detection and elimination	2.89	35%
6	Construction site stormwater runoff control	2.83	31%
7	Monitoring and evaluation	2.81	31%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	1.30	9%

14. Do you use watershed-based stormwater planning in your Program?

Total	54
Yes Population	22
No Population	22
I don't know Population	10
Total	6.7%
Yes Percentage	40.7%
No Percentage	40.7%
I don't know Percentage	18.5%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Connecting stormwater investments to other community priorities and plans	2.91	37%
2	Incorporating co-benefits of stormwater controls into decision-making	2.85	35%
3	Regional planning/coordination	2.76	31%
4	Planning across municipal departments	2.72	30%
5	Design of flood management projects to include water quality considerations	2.61	28%
6	Conducting watershed scale assessments	2.54	30%
7	Water quality trading programs	2.37	28%
8	Integrated water supply planning that includes stormwater capture	2.28	26%
9	Public private partnership	2.17	15%
10	Other (please rank, and then specify below)	2.13	25%

16. Do you have a stormwater asset management plan?

Total	53
Yes Population	18
No Population	30
I Don't Know Population	5
Total	6.6%
Yes Percentage	34.0%
No Percentage	56.6%
I Don't Know Percentage	9.4%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Evaluating life-cycle costs of stormwater control measures	3.41	48%
2	Prioritizing stormwater asset maintenance and replacement	3.19	39%
3	Asset management software and tools	3.15	41%
4	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.07	43%
5	Developing a condition assessment of stormwater assets	3.04	39%
6	Using automated information technology to monitor and control operations and maintenance	3.00	35%
7	Creating an inventory/database of stormwater assets	2.65	28%
8	Mapping your storm sewer system	2.44	24%
9	Mapping private stormwater control structures	2.13	22%
10	Other (please rank, and then specify below)	1.57	14%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	BMP life-cycle costs analysis	3.45	57%
2	BMP performance data	3.38	53%
3	BMP maintenance requirements	3.36	47%
4	Analyzing and valuing stormwater management on a multi-benefit basis	3.26	47%
5	Opportunities to encourage innovation	3.25	45%
6	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	2.89	36%
7	Development standards and incentives that encourage innovative BMPs/green infrastructure	2.79	42%
8	Stormwater volume credit trading programs	2.51	34%
9	Policies and incentives to encourage green infrastructure on private property	2.45	32%
10	Other (please rank, and then specify below)	2.00	17%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total	52
Yes Population	21
No Population	27
I don't know Population	4
Total	6.5%
Yes Percentage	40.4%
No Percentage	51.9%
I don't know Percentage	7.7%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost and effectiveness of available treatment (structural) BMPs	3.68	64%
2	Tracking and accounting for TMDL compliance	3.55	55%
3	Cost and effectiveness of source control (non structural) BMPs	3.50	55%
4	Integrating TMDL requirements into stormwater planning	3.23	36%
5	Compliance methods for permit load allocations	3.23	45%
6	Water quality modeling	3.09	41%
7	Other (please rank, and then specify below)	1.00	0%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total
53
Yes Population
16
No Population
15
Not Sure Population
22
Total
6.6%
Yes Percentage
30.2%
No Percentage
28.3%
Not Sure Percentage
41.5%

DOT's Only:

3. What best describes your role for this survey?

23	Total
22	Employee of a municipality, agency, or organization with an MS4 permit
1	Consultant answering on behalf of MS4 permittee
0	Other (please specify)

3%	Total of 804
96%	Employee of a municipality, agency, or organization with an MS4 permit
4%	Consultant answering on behalf of MS4 permittee
0%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	23
Phase I population	0
Phase II population	0
Phase I and II population	0
Phase II Non-traditional population	0
State DOT population	23
Total	2.9%
Phase I percentage	0.0%
Phase II percentage	0.0%
Phase I and II percentage	0.0%
Phase II Non-traditional percentage	0.0%
State DOT percentage	100.0%

5. Please indicate which of the following describes your organization:

1	Total
0	Flood Control and/or Drainage District
0	Stormwater Utility
0	Wastewater Utility
0	Wastewater and Stormwater Utility
0	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
0	Public Works Department
0	Regional Utility/Authority
0	Environmental Services Department
0	Planning Department or Agency
0	Public Health Department
1	Other (please describe)
0%	Total of 804
0%	Flood Control and/or Drainage District
0%	Stormwater Utility
0%	Wastewater Utility
0%	Wastewater and Stormwater Utility
0%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
0%	Public Works Department
0%	Regional Utility/Authority
0%	Environmental Services Department
0%	Planning Department or Agency
0%	Public Health Department
100%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
23
Yes Population
11
No Population
12
Total
2.9%
Yes Percentage
47.8%
No Percentage
52.2%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 23	Total Count 4
Sole Permittee Population 18	Total Co-permittees 21
Co-Permittee Population 5	
Total 2.9%	
Yes Percentage 78.3%	
No Percentage 21.7%	

8. What is the population that your organization serves?

Total	23
Less than 10,000	0
10,000 to 49,999	3
50,000 to 99,999	2
100,000 to 499,999	3
500,000 to 999,999	4
1 million to 1,999,999	3
2 million or greater	8
Total of 804	3%
Less than 10,000	0%
10,000 to 49,999	13%
50,000 to 99,999	9%
100,000 to 499,999	13%
500,000 to 999,999	17%
1 million to 1,999,999	13%
2 million or greater	35%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.43	86%
2	Aging infrastructure	3.70	57%
3	Increasing or expanding regulations	3.57	61%
4	Cross-departmental coordination	3.57	48%
5	Funding or availability of capital	3.43	48%
6	Political support for program	3.13	35%
7	Public awareness and support	2.96	26%
8	Aging workforce	2.87	26%
9	Technical expertise	2.70	17%
10	Information/training on best practices	2.61	13%
11	Permit requirements are unclear	2.57	13%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Water quality	4.00	70%
2	TMDL compliance	3.39	52%
3	Aging Infrastructure	3.22	43%
4	Land Development	3.18	45%
5	Illicit Discharges	3.17	43%
6	Regional compliance needs	3.13	48%
7	Watershed management	3.09	39%
8	Habitat restoration	2.87	26%
9	Localized street flooding	2.70	30%
10	Coastal/riverine/lake flooding	2.30	13%
11	Climate change	2.22	4%
12	Other (please rank, and then specify below)	2.00	0%
13	Water supply requirements (source water)	1.83	4%
14	Sanitary sewer overflows	1.61	0%
15	Combined sewer overflows	1.57	0%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.48	48%
2	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.43	48%
3	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.35	39%
4	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.30	39%
5	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.26	35%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	3.17	43%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	23
Watershed-based stormwater planning population	1
MS4 program planning, administration, and governance population	9
Asset Management population	9
TMDL compliance population	3
Green infrastructure and other innovative BMPs population	1
Funding and financing population	0
Total	2.9%
Watershed-based stormwater planning percentage	4.3%
MS4 program planning, administration, and governance percentage	39.1%
Asset Management percentage	39.1%
TMDL compliance percentage	13.0%
Green infrastructure and other innovative BMPs percentage	4.3%
Funding and financing percentage	0.0%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.30	52%
2	Construction site stormwater runoff control	3.18	45%
3	Monitoring and evaluation	2.96	30%
4	Illicit discharge detection and elimination	2.74	22%
5	Good housekeeping and pollution prevention	2.70	35%
6	Public involvement and participation	2.57	17%
7	Public education and outreach	2.43	17%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	1.77	0%

14. Do you use watershed-based stormwater planning in your Program?

Total
22
Yes Population
9
No Population
10
I don't know Population
3
Total
2.7%
Yes Percentage
40.9%
No Percentage
45.5%
I don't know Percentage
13.6%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Incorporating co-benefits of stormwater controls into decision-making	3.24	43%
2	Regional planning/coordination	3.05	33%
3	Connecting stormwater investments to other community priorities and plans	3.00	33%
4	Other (please rank, and then specify below)	3.00	0%
5	Planning across municipal departments	2.81	33%
6	Water quality trading programs	2.81	29%
7	Design of flood management projects to include water quality considerations	2.76	24%
8	Public private partnership	2.71	14%
9	Conducting watershed scale assessments	2.67	24%
10	Integrated water supply planning that includes stormwater capture	2.29	14%

16. Do you have a stormwater asset management plan?

Total	22
Yes Population	11
No Population	7
I Don't Know Population	4
Total	2.7%
Yes Percentage	50.0%
No Percentage	31.8%
I Don't Know Percentage	18.2%

Question 17			
<p>Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.</p>			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Other (please rank, and then specify below)	4.00	50%
2	Evaluating life-cycle costs of stormwater control measures	3.59	55%
3	Asset management software and tools	3.59	59%
4	Using automated information technology to monitor and control operations and maintenance	3.50	50%
5	Prioritizing stormwater asset maintenance and replacement	3.41	45%
6	Developing a condition assessment of stormwater assets	3.27	55%
7	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.27	45%
8	Creating an inventory/database of stormwater assets	3.18	50%
9	Mapping your storm sewer system	3.00	45%
10	Mapping private stormwater control structures	1.95	14%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Opportunities to encourage innovation	3.76	62%
2	BMP life-cycle costs analysis	3.67	67%
3	BMP maintenance requirements	3.62	57%
3	BMP performance data	3.62	57%
5	Analyzing and valuing stormwater management on a multi-benefit basis	3.38	57%
6	Stormwater volume credit trading programs	3.05	43%
7	Other (please rank, and then specify)	3.00	0%
8	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	2.76	29%
9	Development standards and incentives that encourage innovative BMPs/green infrastructure	2.52	29%
10	Policies and incentives to encourage green infrastructure on private property	2.05	19%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total	22
Yes Population	18
No Population	4
I don't know Population	0
Total	2.7%
Yes Percentage	81.8%
No Percentage	18.2%
I don't know Percentage	0.0%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Tracking and accounting for TMDL compliance	3.71	59%
2	Cost and effectiveness of available treatment (structural) BMPs	3.65	65%
3	Compliance methods for permit load allocations.	3.59	59%
4	Water quality modeling	3.47	41%
5	Cost and effectiveness of source control (non structural) BMPs	3.41	47%
6	Integrating TMDL requirements into stormwater planning	3.35	35%
7	Other (please rank, and then specify below)	3.00	0%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total	22
Yes Population	6
No Population	8
Not Sure Population	8
Total	2.7%
Yes Percentage	27.3%
No Percentage	36.4%
Not Sure Percentage	36.4%

All Permittees – EPA Region 3 Only:

3. What best describes your role for this survey?

69	Total
59	Employee of a municipality, agency, or organization with an MS4 permit
6	Consultant answering on behalf of MS4 permittee
4	Other (please specify)

9%	Total of 804
86%	Employee of a municipality, agency, or organization with an MS4 permit
9%	Consultant answering on behalf of MS4 permittee
6%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	69
Phase I population	17
Phase II population	40
Phase I and II population	57
Phase II Non-traditional population	8
State DOT population	4
Total	8.6%
Phase I percentage	24.6%
Phase II percentage	58.0%
Phase I and II percentage	82.6%
Phase II Non-traditional percentage	11.6%
State DOT percentage	5.8%

5. Please indicate which of the following describes your organization:

58	Total
0	Flood Control and/or Drainage District
7	Stormwater Utility
0	Wastewater Utility
4	Wastewater and Stormwater Utility
2	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
22	Public Works Department
0	Regional Utility/Authority
5	Environmental Services Department
4	Planning Department or Agency
0	Public Health Department
9	Other (please describe)
7%	Total of 804
0%	Flood Control and/or Drainage District
12%	Stormwater Utility
0%	Wastewater Utility
7%	Wastewater and Stormwater Utility
3%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
38%	Public Works Department
0%	Regional Utility/Authority
9%	Environmental Services Department
7%	Planning Department or Agency
0%	Public Health Department
16%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
69
Yes Population
32
No Population
37
Total
8.6%
Yes Percentage
46.4%
No Percentage
53.6%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 69	Total Count 3
Sole Permittee Population 64	Total Co-permittees 41
Co-Permittee Population 5	
Total 8.6%	
Yes Percentage 92.8%	
No Percentage 7.2%	

8. What is the population that your organization serves?

Total	69
Less than 10,000	17
10,000 to 49,999	27
50,000 to 99,999	5
100,000 to 499,999	13
500,000 to 999,999	3
1 million to 1,999,999	2
2 million or greater	2
Total of 804	9%
Less than 10,000	25%
10,000 to 49,999	39%
50,000 to 99,999	7%
100,000 to 499,999	19%
500,000 to 999,999	4%
1 million to 1,999,999	3%
2 million or greater	3%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.50	83%
2	Funding or availability of capital	4.17	75%
3	Aging infrastructure	4.12	75%
4	Increasing or expanding regulations	3.88	68%
5	Public awareness and support	3.07	36%
6	Political support for program	3.06	33%
7	Cross-departmental coordination	2.86	25%
8	Aging workforce	2.77	25%
9	Information/training on best practices	2.74	25%
10	Technical expertise	2.68	20%
11	Permit requirements are unclear	2.67	26%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Other (please rank, and then specify below)	5.00	100%
2	TMDL compliance	3.80	70%
3	Water quality	3.61	62%
4	Aging Infrastructure	3.61	61%
5	Regional compliance needs	3.21	44%
6	Watershed management	3.14	38%
7	Illicit Discharges	2.96	30%
8	Land Development	2.94	32%
9	Localized street flooding	2.91	35%
10	Habitat restoration	2.52	18%
11	Climate change	2.49	22%
12	Sanitary sewer overflows	2.19	22%
13	Coastal/riverine/lake flooding	1.85	12%
14	Water supply requirements (source water)	1.65	7%
15	Combined sewer overflows	1.46	6%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	4.04	70%
2	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.54	57%
3	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.49	51%
4	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.46	50%
5	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	3.35	51%
6	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.25	41%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	69
Watershed-based stormwater planning population	4
MS4 program planning, administration, and governance population	27
Asset Management population	9
TMDL compliance population	18
Green infrastructure and other innovative BMPs population	3
Funding and financing population	8
Total	8.6%
Watershed-based stormwater planning percentage	5.8%
MS4 program planning, administration, and governance percentage	39.1%
Asset Management percentage	13.0%
TMDL compliance percentage	26.1%
Green infrastructure and other innovative BMPs percentage	4.3%
Funding and financing percentage	11.6%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Monitoring and evaluation	3.24	49%
2	Good housekeeping and pollution prevention	3.00	37%
3	Illicit discharge detection and elimination	2.91	30%
4	Post-construction and new development stormwater runoff control	2.90	35%
5	Public involvement and participation	2.90	35%
6	Public education and outreach	2.77	29%
7	Construction site stormwater runoff control	2.54	20%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	1.70	15%

14. Do you use watershed-based stormwater planning in your Program?

Total
69
Yes Population
33
No Population
29
I don't know Population
7
Total
8.6%
Yes Percentage
47.8%
No Percentage
42.0%
I don't know Percentage
10.1%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Connecting stormwater investments to other community priorities and plans	3.51	58%
2	Incorporating co-benefits of stormwater controls into decision-making	3.14	38%
3	Conducting watershed scale assessments	3.09	36%
4	Regional planning/coordination	3.04	38%
5	Other (please rank, and then specify below)	3.00	33%
6	Design of flood management projects to include water quality considerations	2.99	36%
7	Planning across municipal departments	2.93	33%
8	Water quality trading programs	2.90	28%
9	Public private partnership	2.87	26%
10	Integrated water supply planning that includes stormwater capture	2.31	16%

16. Do you have a stormwater asset management plan?

Total
69
Yes Population
31
No Population
32
I Don't Know Population
6
Total
8.6%
Yes Percentage
44.9%
No Percentage
46.4%
I Don't Know Percentage
8.7%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.59	58%
2	Evaluating life-cycle costs of stormwater control measures	3.57	57%
3	Using automated information technology to monitor and control operations and maintenance	3.43	58%
4	Prioritizing stormwater asset maintenance and replacement	3.28	46%
5	Asset management software and tools	3.25	41%
6	Developing a condition assessment of stormwater assets	3.16	41%
7	Other (please rank, and then specify below)	3.00	33%
8	Mapping your storm sewer system	2.65	30%
9	Creating an inventory/database of stormwater assets	2.59	32%
10	Mapping private stormwater control structures	2.38	26%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Opportunities to encourage innovation	3.54	54%
2	BMP life-cycle costs analysis	3.54	52%
3	Analyzing and valuing stormwater management on a multi-benefit basis	3.43	51%
4	BMP maintenance requirements	3.41	46%
5	Other (please rank, and then specify below)	3.33	67%
6	BMP performance data	3.28	46%
7	Development standards and incentives that encourage innovative BMPs/green infrastructure	3.20	46%
8	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	3.20	39%
9	Policies and incentives to encourage green infrastructure on private property	3.00	41%
10	Stormwater volume credit trading programs	2.91	36%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total	66
Yes Population	43
No Population	18
I don't know Population	5
Total	8.2%
Yes Percentage	65.2%
No Percentage	27.3%
I don't know Percentage	7.6%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost and effectiveness of available treatment (structural) BMPs	3.96	73%
2	Tracking and accounting for TMDL compliance	3.75	59%
3	Cost and effectiveness of source control (non structural) BMPs	3.69	60%
4	Water quality modeling	3.62	60%
5	Compliance methods for permit load allocations.	3.60	64%
6	Integrating TMDL requirements into stormwater planning	3.56	53%
7	Other (please rank, and then specify below)	3.00	33%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total	67
Yes Population	17
No Population	25
Not Sure Population	25
Total	8.3%
Yes Percentage	25.4%
No Percentage	37.3%
Not Sure Percentage	37.3%

All Permittees – EPA Region 5 Only:

3. What best describes your role for this survey?

197	Total
172	Employee of a municipality, agency, or organization with an MS4 permit
23	Consultant answering on behalf of MS4 permittee
2	Other (please specify)

25%	Total of 804
87%	Employee of a municipality, agency, or organization with an MS4 permit
12%	Consultant answering on behalf of MS4 permittee
1%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	197
Phase I population	38
Phase II population	146
Phase I and II population	184
Phase II Non-traditional population	11
State DOT population	2
Total	24.5%
Phase I percentage	19.3%
Phase II percentage	74.1%
Phase I and II percentage	93.4%
Phase II Non-traditional percentage	5.6%
State DOT percentage	1.0%

5. Please indicate which of the following describes your organization:

184	Total
4	Flood Control and/or Drainage District
19	Stormwater Utility
4	Wastewater Utility
14	Wastewater and Stormwater Utility
12	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
91	Public Works Department
0	Regional Utility/Authority
5	Environmental Services Department
4	Planning Department or Agency
0	Public Health Department
17	Other (please describe)
23%	Total of 804
2%	Flood Control and/or Drainage District
10%	Stormwater Utility
2%	Wastewater Utility
8%	Wastewater and Stormwater Utility
7%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
49%	Public Works Department
0%	Regional Utility/Authority
3%	Environmental Services Department
2%	Planning Department or Agency
0%	Public Health Department
9%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
197
Yes Population
93
No Population
104
Total
24.5%
Yes Percentage
47.2%
No Percentage
52.8%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 197	Total Count 31
Sole Permittee Population 165	Total Co-permittees 373
Co-Permittee Population 32	
Total 24.5%	
Yes Percentage 83.8%	
No Percentage 16.2%	

8. What is the population that your organization serves?

Total	197
Less than 10,000	45
10,000 to 49,999	86
50,000 to 99,999	36
100,000 to 499,999	25
500,000 to 999,999	3
1 million to 1,999,999	2
2 million or greater	0
Total of 804	25%
Less than 10,000	23%
10,000 to 49,999	44%
50,000 to 99,999	18%
100,000 to 499,999	13%
500,000 to 999,999	2%
1 million to 1,999,999	1%
2 million or greater	0%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.38	86%
2	Aging infrastructure	3.93	71%
3	Funding or availability of capital	3.89	65%
4	Increasing or expanding regulations	3.76	61%
5	Public awareness and support	3.13	36%
6	Permit requirements are unclear	2.87	32%
7	Political support for program	2.87	29%
8	Aging workforce	2.65	22%
9	Cross-departmental coordination	2.62	19%
10	Information/training on best practices	2.55	15%
11	Technical expertise	2.54	19%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Other (please rank, and then specify below)	3.85	69%
2	Aging Infrastructure	3.63	60%
3	Water quality	3.41	58%
4	Land Development	3.23	41%
5	Watershed management	3.17	36%
6	Localized street flooding	3.11	42%
7	TMDL compliance	3.08	38%
8	Illicit Discharges	3.05	37%
9	Regional compliance needs	2.94	36%
10	Climate change	2.60	26%
11	Habitat restoration	2.59	21%
12	Coastal/riverine/lake flooding	2.45	25%
13	Sanitary sewer overflows	2.24	23%
14	Combined sewer overflows	2.08	24%
15	Water supply requirements (source water)	2.05	12%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.78	67%
2	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.35	51%
3	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.25	44%
4	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.21	37%
5	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.19	41%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	3.14	48%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	196
Watershed-based stormwater planning population	10
MS4 program planning, administration, and governance population	88
Asset Management population	38
TMDL compliance population	15
Green infrastructure and other innovative BMPs population	16
Funding and financing population	29
Total	24.4%
Watershed-based stormwater planning percentage	5.1%
MS4 program planning, administration, and governance percentage	44.9%
Asset Management percentage	19.4%
TMDL compliance percentage	7.7%
Green infrastructure and other innovative BMPs percentage	8.2%
Funding and financing percentage	14.8%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.13	42%
2	Good housekeeping and pollution prevention	3.06	33%
3	Monitoring and evaluation	3.05	36%
4	Illicit discharge detection and elimination	2.96	32%
5	Public education and outreach	2.90	27%
6	Public involvement and participation	2.89	31%
7	Construction site stormwater runoff control	2.88	27%
8	Industrial and commercial facilities oversight for Phase I municipal permittees	1.68	16%

14. Do you use watershed-based stormwater planning in your Program?

Total	189
Yes Population	116
No Population	54
I don't know Population	19
Total	23.5%
Yes Percentage	61.4%
No Percentage	28.6%
I don't know Percentage	10.1%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Connecting stormwater investments to other community priorities and plans	3.29	41%
2	Other (please rank, and then specify below)	3.17	50%
3	Incorporating co-benefits of stormwater controls into decision-making	3.10	41%
4	Public private partnership	3.01	38%
5	Design of flood management projects to include water quality considerations	2.97	35%
6	Regional planning/coordination	2.93	28%
7	Conducting watershed scale assessments	2.90	30%
8	Planning across municipal departments	2.85	27%
9	Integrated water supply planning that includes stormwater capture	2.46	15%
10	Water quality trading programs	2.43	21%

16. Do you have a stormwater asset management plan?

Total
186
Yes Population
86
No Population
88
I Don't Know Population
12
Total
23.1%
Yes Percentage
46.2%
No Percentage
47.3%
I Don't Know Percentage
6.5%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Prioritizing stormwater asset maintenance and replacement	3.28	44%
2	Evaluating life-cycle costs of stormwater control measures	3.26	47%
3	Developing a condition assessment of stormwater assets	3.20	47%
4	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.11	41%
5	Using automated information technology to monitor and control operations and maintenance	2.95	35%
6	Asset management software and tools	2.92	34%
7	Mapping private stormwater control structures	2.84	32%
8	Creating an inventory/database of stormwater assets	2.68	34%
9	Mapping your storm sewer system	2.19	18%
10	Other (please rank, and then specify below)	1.75	25%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Policies and incentives to encourage green infrastructure on private property	3.44	49%
2	BMP life-cycle costs analysis	3.42	56%
3	BMP maintenance requirements	3.36	49%
4	BMP performance data	3.36	51%
5	Development standards and incentives that encourage innovative BMPs/green infrastructure	3.32	45%
6	Analyzing and valuing stormwater management on a multi-benefit basis	3.28	42%
7	Opportunities to encourage innovation	3.28	42%
8	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	3.22	41%
9	Other (please rank, and then specify below)	3.00	25%
10	Stormwater volume credit trading programs	2.82	33%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total	178
Yes Population	101
No Population	55
I don't know Population	22
Total	22.1%
Yes Percentage	56.7%
No Percentage	30.9%
I don't know Percentage	12.4%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Cost and effectiveness of available treatment (structural) BMPs	3.42	55%
2	Cost and effectiveness of source control (non structural) BMPs	3.40	52%
3	Tracking and accounting for TMDL compliance	3.31	54%
4	Compliance methods for permit load allocations.	3.19	39%
5	Integrating TMDL requirements into stormwater planning	3.17	37%
6	Water quality modeling	2.88	32%
7	Other (please rank, and then specify below)	1.00	0%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total
178
Yes Population
83
No Population
42
Not Sure Population
53
Total
22.1%
Yes Percentage
46.6%
No Percentage
23.6%
Not Sure Percentage
29.8%

All Permittees – EPA Region 9 Only:

3. What best describes your role for this survey?

38	Total
35	Employee of a municipality, agency, or organization with an MS4 permit
2	Consultant answering on behalf of MS4 permittee
1	Other (please specify)

5%	Total of 804
92%	Employee of a municipality, agency, or organization with an MS4 permit
5%	Consultant answering on behalf of MS4 permittee
3%	Other (please specify)

4. What is your organization's MS4 regulatory status?

Total	38
Phase I population	18
Phase II population	16
Phase I and II population	34
Phase II Non-traditional population	1
State DOT population	3
Total	4.7%
Phase I percentage	47.4%
Phase II percentage	42.1%
Phase I and II percentage	89.5%
Phase II Non-traditional percentage	2.6%
State DOT percentage	7.9%

5. Please indicate which of the following describes your organization:

34	Total
2	Flood Control and/or Drainage District
1	Stormwater Utility
1	Wastewater Utility
0	Wastewater and Stormwater Utility
1	Water, Wastewater, and Stormwater Utility
0	Water, Wastewater, and Stormwater Department (or any combination)
14	Public Works Department
0	Regional Utility/Authority
4	Environmental Services Department
1	Planning Department or Agency
0	Public Health Department
4	Other (please describe)
4%	Total of 804
6%	Flood Control and/or Drainage District
3%	Stormwater Utility
3%	Wastewater Utility
0%	Wastewater and Stormwater Utility
3%	Water, Wastewater, and Stormwater Utility
0%	Water, Wastewater, and Stormwater Department (or any combination)
41%	Public Works Department
0%	Regional Utility/Authority
12%	Environmental Services Department
3%	Planning Department or Agency
0%	Public Health Department
12%	Other (please describe)

6. Is your community or organization covered by a statewide or regional general permit?

Total
38
Yes Population
23
No Population
15
Total
4.7%
Yes Percentage
60.5%
No Percentage
39.5%

7. How many co-permittees are there on your community's or organization's MS4 permit?

Total 38	Total Count 11
Sole Permittee Population 27	Total Co-permittees 374
Co-Permittee Population 11	
Total 4.7%	
Yes Percentage 71.1%	
No Percentage 28.9%	

8. What is the population that your organization serves?

Total	38
Less than 10,000	1
10,000 to 49,999	9
50,000 to 99,999	10
100,000 to 499,999	9
500,000 to 999,999	1
1 million to 1,999,999	3
2 million or greater	5
Total of 804	5%
Less than 10,000	3%
10,000 to 49,999	24%
50,000 to 99,999	26%
100,000 to 499,999	24%
500,000 to 999,999	3%
1 million to 1,999,999	8%
2 million or greater	13%

Question 9			
On a scale of 1 to 5, please indicate the extent to which the following factors present a challenge to your stormwater program, 1 being not a challenge and 5 being an extremely significant challenge.			
Score Rank	Topic	Weighted Rank Score	Significant or Very Significant Challenge
1	Other (please rank, and then specify below)	4.78	100%
2	Funding or availability of capital	3.76	66%
3	Increasing or expanding regulations	3.61	58%
4	Public awareness and support	3.58	50%
5	Cross-departmental coordination	3.58	53%
6	Aging infrastructure	3.45	53%
7	Political support for program	3.24	39%
8	Information/training on best practices	2.66	21%
9	Permit requirements are unclear	2.58	16%
10	Technical expertise	2.50	18%
11	Aging workforce	2.35	19%

Question 10			
On a scale of 1 to 5, please indicate the importance of the following drivers for your stormwater planning and investment decisions, 1 being not a driver and 5 being an extremely important driver.			
Score Rank	Topic	Weighted Rank Score	Significant or Extreme Driver
1	Other (please rank, and then specify below)	4.00	75%
2	Regional compliance needs	3.61	58%
3	Water quality	3.45	50%
4	Land Development	3.35	46%
5	Illicit Discharges	3.30	41%
6	Aging Infrastructure	3.18	42%
7	Localized street flooding	3.11	37%
8	Watershed management	3.08	42%
9	TMDL compliance	2.92	50%
10	Habitat restoration	2.64	19%
11	Climate change	2.53	18%
12	Water supply requirements (source water)	2.13	8%
13	Sanitary sewer overflows	1.89	8%
14	Coastal/riverine/lake flooding	1.79	13%
15	Combined sewer overflows	1.24	3%

Question 11			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources for each of the following stormwater topic areas, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Funding and financing. Includes analysis of funding needs, identification of current funding sources, and innovative financing approaches.	3.97	68%
2	Green infrastructure and other innovative BMPs. Includes innovative policies and incentives; BMP performance, cost, and maintenance requirements; multi-benefit stormwater management; and quantifying BMP effectiveness.	3.66	53%
3	Watershed-based stormwater planning. Includes cross-departmental coordination, inter-jurisdictional and long-range planning, integrated planning, and addressing stormwater issues across land uses.	3.58	58%
4	MS4 program planning, administration, and governance. Includes program management, audits and evaluation, performance-based permitting, stormwater utility setup, and building political support.	3.47	55%
5	Asset management. Includes mapping, condition assessment, and prioritization; operations, replacement and maintenance; use of automated technology; and lifecycle cost analysis.	3.35	51%
6	TMDL compliance. Includes tracking/accounting for TMDL compliance and performance and cost-effectiveness of best management practices.	2.74	34%

12. Which of the areas identified in the previous question requires the most program resources to operate (labor and capital)?

Total	38
Watershed-based stormwater planning population	1
MS4 program planning, administration, and governance population	21
Asset Management population	6
TMDL compliance population	3
Green infrastructure and other innovative BMPs population	4
Funding and financing population	3
Total	4.7%
Watershed-based stormwater planning percentage	2.6%
MS4 program planning, administration, and governance percentage	55.3%
Asset Management percentage	15.8%
TMDL compliance percentage	7.9%
Green infrastructure and other innovative BMPs percentage	10.5%
Funding and financing percentage	7.9%

Question 13			
On a scale of 1 to 5, please indicate your level of need for information and/or technical resources related to each of the minimum control measures or other aspects of permit compliance, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Post-construction and new development stormwater runoff control	3.16	47%
2	Monitoring and evaluation	2.95	34%
3	Illicit discharge detection and elimination	2.89	29%
4	Construction site stormwater runoff control	2.89	35%
5	Good housekeeping and pollution prevention	2.79	32%
6	Public involvement and participation	2.71	29%
7	Industrial and commercial facilities oversight for Phase I municipal permittees	2.44	22%
8	Public education and outreach	2.42	21%

14. Do you use watershed-based stormwater planning in your Program?

Total	38
Yes Population	18
No Population	14
I don't know Population	6
Total	4.7%
Yes Percentage	47.4%
No Percentage	36.8%
I don't know Percentage	15.8%

Question 15			
On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Other (please rank, and then specify below)	4.00	100%
2	Incorporating co-benefits of stormwater controls into decision-making	3.55	58%
3	Planning across municipal departments	3.55	55%
3	Connecting stormwater investments to other community priorities and plans	3.55	55%
5	Integrated water supply planning that includes stormwater capture	3.08	45%
6	Regional planning/coordination	3.08	37%
7	Design of flood management projects to include water quality considerations	3.00	37%
8	Public private partnership	2.87	34%
9	Conducting watershed scale assessments	2.82	37%
10	Water quality trading programs	2.58	26%

16. Do you have a stormwater asset management plan?

Total
37
Yes Population
19
No Population
14
I Don't Know Population
4
Total
4.6%
Yes Percentage
51.4%
No Percentage
37.8%
I Don't Know Percentage
10.8%

Question 17			
Please provide us with your information needs related to operations & maintenance and stormwater asset management. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Other (please rank, and then specify below)	5.00	100%
2	Evaluating life-cycle costs of stormwater control measures	3.58	58%
3	Cost estimating/cash flow analysis for capital expenditure/system improvement	3.37	50%
4	Developing a condition assessment of stormwater assets	3.13	37%
5	Using automated information technology to monitor and control operations and maintenance	3.11	37%
6	Asset management software and tools	2.92	37%
7	Prioritizing stormwater asset maintenance and replacement	2.84	29%
8	Mapping private stormwater control structures	2.79	39%
9	Creating an inventory/database of stormwater assets	2.37	21%
10	Mapping your storm sewer system	2.18	21%

Question 18			
Please provide us with your information needs related to green infrastructure and other innovative BMPs. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Other (please rank, and then specify below)	5.00	100%
2	Development standards and incentives that encourage innovative BMPs/green infrastructure	3.61	53%
3	Need for certification requirements for workers that install, construct, inspect, and maintain green infrastructure	3.58	56%
4	Opportunities to encourage innovation	3.51	54%
5	BMP performance data	3.44	53%
6	Analyzing and valuing stormwater management on a multi-benefit basis	3.39	50%
7	Policies and incentives to encourage green infrastructure on private property	3.36	53%
8	BMP maintenance requirements	3.31	50%
9	BMP life-cycle costs analysis	3.22	44%
10	Stormwater volume credit trading programs	2.64	31%

19. Do you have TMDL requirements you are responsible for under your NPDES Permit?

Total
33
Yes Population
16
No Population
16
I don't know Population
1
Total
4.1%
Yes Percentage
48.5%
No Percentage
48.5%
I don't know Percentage
3.0%

Question 20			
Please provide us with more detail on your TMDL compliance. On a scale of 1 to 5, indicate your level of need for information and/or technical resources for each of the following, 1 being no need and 5 being a very high need.			
Score Rank	Topic	Weighted Rank Score	High or Very High Need
1	Other (please rank, and then specify below)	5.00	100%
2	Cost and effectiveness of source control (non structural) BMPs	3.89	58%
3	Cost and effectiveness of available treatment (structural) BMPs	3.74	47%
4	Compliance methods for permit load allocations	3.32	37%
5	Water quality modeling	3.16	37%
6	Integrating TMDL requirements into stormwater planning	2.79	16%
7	Tracking and accounting for TMDL compliance	2.74	16%

25. In general, do you think the overall federal stormwater program is sufficient to meet clean water goals in the longterm?

Total	36
Yes Population	11
No Population	16
Not Sure Population	9
Total	4.5%
Yes Percentage	30.6%
No Percentage	44.4%
Not Sure Percentage	25.0%