
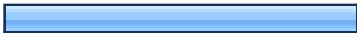

















1. I am employed in the: Check the one which best applies

		Response Percent	Response Count
Private sector		31.9%	81
<b>Public sector</b>		<b>52.8%</b>	<b>134</b>
Education sector		3.9%	10
Non-profit sector		7.9%	20
Other		3.5%	9
	Other (please specify)		13
		<b>answered question</b>	<b>254</b>
		<b>skipped question</b>	<b>3</b>

## 2. In which jurisdiction(s) do you work primarily? Check all that apply

		Response Percent	Response Count
DC	<input type="checkbox"/>	7.8%	20
DE	<input type="checkbox"/>	6.2%	16
MD	<input type="checkbox"/>	34.6%	89
NY	<input type="checkbox"/>	5.8%	15
PA	<input type="checkbox"/>	23.0%	59
VA	<input type="checkbox"/>	<b>39.7%</b>	<b>102</b>
WV	<input type="checkbox"/>	4.7%	12
Baywide	<input type="checkbox"/>	4.3%	11
Other	<input type="checkbox"/>	5.8%	15
	Other (please specify)		14
<b>answered question</b>			<b>257</b>
<b>skipped question</b>			<b>0</b>

### 3. My primary job responsibility is: Check the one which best applies

		Response Percent	Response Count
<b>Design of Stormwater Practices</b>		16.9%	43
Landscape Architecture and Design		5.1%	13
Policy & Planning		16.1%	41
Review of Stormwater Plans		11.0%	28
Construction and/or Project Management		5.5%	14
Inspection and/or Maintenance		5.9%	15
Property Management and/or Environmental Compliance		2.0%	5
Compliance with Municipal Stormwater Permit(s)		10.6%	27
Education & Guidance		8.3%	21
Research and Development		1.6%	4
Watershed or Environmental Advocacy		7.9%	20
Other		9.1%	23
	Other (please specify)		29
<b>answered question</b>			<b>254</b>
<b>skipped question</b>			<b>3</b>












**4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

	Response Average	Response Total	Response Count
Federal	15.83	1,045	66
State	34.26	3,255	95
<b>Local</b>	<b>65.84</b>	<b>7,506</b>	114
Other (e.g. SWCD or Conservation Commission); if you answer other please describe in question #5	33.08	794	24
	<b>answered question</b>		<b>126</b>
	<b>skipped question</b>		<b>131</b>

**5. If you answered other in question #4, please specify here.**

	Response Count
	21
<b>answered question</b>	<b>21</b>
<b>skipped question</b>	<b>236</b>






**6. What organizations do you most rely on to keep on top of stormwater issues? Check off the two sources that you rely most.**

		<b>Response Percent</b>	<b>Response Count</b>
Center for Watershed Protection		40.0%	102
<b>Chesapeake Stormwater Network</b>		<b>43.1%</b>	<b>110</b>
Emails from Stormwater Listserves/email alerts (feel free to specify in comment box below)		23.1%	59
EPA Chesapeake Bay Program		17.6%	45
Local Engineering Committee		9.4%	24
Local SWM Branch		9.4%	24
Low Impact Development Center		3.5%	9
Soil and Water Conservation District		18.0%	46
State Stormwater Agency		42.4%	108
Stormwater-The Journal for Surface Water Quality Professionals		13.3%	34
Other		15.3%	39
		Other (please list)	49
		<b>answered question</b>	<b>255</b>
		<b>skipped question</b>	<b>2</b>

**7. As a Stormwater Professional, how well prepared are you to implement the following Bay Stormwater initiatives? Please select as appropriate.**

	very	somewhat	not at all	not important to me	Response Count
New state stormwater regulations	25.8% (63)	<b>59.4% (145)</b>	12.3% (30)	2.5% (6)	244
New municipal MS4 stormwater permits	18.3% (44)	<b>50.2% (121)</b>	19.5% (47)	12.0% (29)	241
New stormwater requirements for federal facilities	8.4% (20)	<b>30.8% (73)</b>	30.4% (72)	30.4% (72)	237
Local watershed implementation plans under Baywide TMDL	20.2% (49)	<b>52.5% (127)</b>	21.5% (52)	5.8% (14)	242
			Other (please specify)		18
			<b>answered question</b>		<b>245</b>
			<b>skipped question</b>		<b>12</b>

**8. As a Stormwater Professional, which initiative is the single most important to your work?**

		Response Percent	Response Count
<b>New state stormwater regulations</b>		37.7%	92
New municipal MS4 stormwater permits		29.9%	73
New stormwater requirements for federal facilities		2.0%	5
Local watershed implementation plans under Baywide TMDL		25.0%	61
Other		5.3%	13
	Other (please specify)		20
		<b>answered question</b>	<b>244</b>
		<b>skipped question</b>	<b>13</b>

**9. As a Stormwater Professional, what are the biggest barriers you face? Please select all that apply.**

	<b>Biggest</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Smallest</b>	<b>Response Count</b>
Federal Regulations / Permits	13.7% (26)	19.5% (37)	<b>33.7% (64)</b>	14.2% (27)	18.9% (36)	190
State Regulations / Permits	25.4% (54)	<b>31.5% (67)</b>	27.7% (59)	9.9% (21)	5.6% (12)	213
Local Review Process	17.7% (35)	22.2% (44)	<b>25.8% (51)</b>	16.2% (32)	18.2% (36)	198
Baywide TMDL & WIP	19.4% (37)	25.7% (49)	<b>28.8% (55)</b>	13.1% (25)	13.1% (25)	191
Lack of clear design guidance	23.7% (49)	<b>29.5% (61)</b>	21.7% (45)	15.9% (33)	9.2% (19)	207
Maintenance	26.9% (54)	<b>32.8% (66)</b>	19.9% (40)	12.4% (25)	8.0% (16)	201
Increased Costs	<b>38.6% (80)</b>	27.1% (56)	19.8% (41)	6.8% (14)	7.7% (16)	207

Other (please specify) 20

**answered question 238**

**skipped question 19**

**10. Briefly describe the nature of the barrier (for your highest ratings)**

**Response Count**

186

**answered question 186**

**skipped question 71**



**11. Which of the following services would you most likely use in the future? Please select as appropriate.**

	Highest	2	3	4	Lowest	Response Count
Multi-day bay-wide stormwater conference	11.0% (23)	<b>27.1% (57)</b>	24.3% (51)	21.0% (44)	16.7% (35)	210
Networking events to interact with other professionals	15.9% (35)	29.1% (64)	<b>30.5% (67)</b>	17.3% (38)	7.3% (16)	220
Forums to interact with local and/or state stormwater agencies	27.8% (64)	<b>33.0% (76)</b>	24.3% (56)	10.4% (24)	4.3% (10)	230
Updates on the new developments in stormwater research	29.9% (70)	<b>36.3% (85)</b>	23.9% (56)	6.4% (15)	3.4% (8)	234
Stormwater monitoring/research consortium	19.6% (43)	<b>31.1% (68)</b>	27.9% (61)	15.5% (34)	5.9% (13)	219
Regular alerts on pending state and federal regulations	32.9% (74)	<b>36.9% (83)</b>	17.8% (40)	7.6% (17)	4.9% (11)	225
Support for compliance spreadsheets and design tools	27.9% (61)	<b>39.7% (87)</b>	17.8% (39)	8.7% (19)	5.9% (13)	219
Refined design specifications for practices	30.3% (66)	<b>34.9% (76)</b>	22.5% (49)	9.6% (21)	2.8% (6)	218
LID Awards program	3.4% (7)	11.1% (23)	18.8% (39)	27.1% (56)	<b>39.6% (82)</b>	207
				Other (please specify)		16
				<b>answered question</b>		<b>247</b>
				<b>skipped question</b>		<b>10</b>

**12. Which of the following training programs would you most likely use in the future?  
Please select as appropriate.**

	Highest	2	3	4	Lowest	Response Count
Design Workshops	<b>31.1% (69)</b>	27.5% (61)	26.1% (58)	9.9% (22)	5.4% (12)	222
Training for contractors on practice installation	18.4% (40)	20.7% (45)	<b>29.0% (63)</b>	18.9% (41)	12.9% (28)	217
Training for inspectors on LID maintenance	25.5% (56)	<b>27.7% (61)</b>	20.5% (45)	13.6% (30)	12.7% (28)	220
Field training on retrofit investigation	20.6% (45)	<b>30.3% (66)</b>	<b>30.3% (66)</b>	12.8% (28)	6.0% (13)	218
Short training videos on practice installation and maintenance	<b>30.3% (67)</b>	<b>30.3% (67)</b>	21.7% (48)	13.1% (29)	4.5% (10)	221
Training related to new rules & regulations	33.8% (78)	<b>44.2% (102)</b>	14.7% (34)	4.8% (11)	2.6% (6)	231
Webcasts on new developments in stormwater research	<b>32.7% (74)</b>	31.4% (71)	23.5% (53)	9.3% (21)	3.1% (7)	226
Evening seminars with stormwater leaders from outside the Bay	6.6% (14)	17.1% (36)	<b>30.3% (64)</b>	23.7% (50)	22.3% (47)	211
Education of elected officials on emerging stormwater policy issues	<b>31.5% (69)</b>	25.6% (56)	22.4% (49)	11.9% (26)	8.7% (19)	219
Webcasts on special stormwater topics	30.8% (68)	<b>39.4% (87)</b>	20.8% (46)	6.3% (14)	2.7% (6)	221
					Other (please specify)	14
<b>answered question</b>						<b>248</b>
<b>skipped question</b>						<b>9</b>

**13. Rank the webcast topics you would be most interested in watching? Please select as appropriate.**

	Highest	2	3	4	Lowest	Response Count
Stormwater retrofitting	<b>41.0% (91)</b>	36.0% (80)	18.0% (40)	3.2% (7)	1.8% (4)	222
Design for redevelopment projects	<b>36.7% (80)</b>	34.9% (76)	22.0% (48)	3.2% (7)	3.2% (7)	218
Disconnections and Filter strips	19.7% (40)	29.6% (60)	<b>34.5% (70)</b>	13.3% (27)	3.0% (6)	203
LID maintenance	28.2% (59)	<b>33.0% (69)</b>	25.4% (53)	7.7% (16)	5.7% (12)	209
Green Streets	26.4% (57)	28.2% (61)	<b>29.2% (63)</b>	11.6% (25)	4.6% (10)	216
Nutrient reduction practices	<b>39.6% (86)</b>	27.2% (59)	24.4% (53)	7.4% (16)	1.4% (3)	217
Updates on state stormwater regulations	<b>44.7% (97)</b>	28.1% (61)	20.3% (44)	5.1% (11)	1.8% (4)	217
Green roofs	17.6% (37)	22.4% (47)	<b>28.1% (59)</b>	23.3% (49)	8.6% (18)	210
Bioretention	<b>38.9% (86)</b>	34.8% (77)	19.9% (44)	5.4% (12)	0.9% (2)	221
Regenerative Stormwater Conveyance	29.2% (62)	29.7% (63)	<b>33.0% (70)</b>	5.2% (11)	2.8% (6)	212
Floating Treatment Wetlands	17.8% (38)	21.6% (46)	<b>33.8% (72)</b>	16.0% (34)	10.8% (23)	213
Urban Fertilizer Management	15.3% (32)	25.8% (54)	<b>27.8% (58)</b>	18.2% (38)	12.9% (27)	209
Rainwater harvesting	22.8% (50)	26.5% (58)	<b>32.9% (72)</b>	13.7% (30)	4.1% (9)	219
Use of compost amendments	15.8% (33)	26.8% (56)	<b>32.5% (68)</b>	14.8% (31)	10.0% (21)	209
Stormwater outreach and education	27.9% (60)	<b>33.5% (72)</b>	23.7% (51)	11.6% (25)	3.3% (7)	215
Stream Restoration	28.8% (63)	<b>32.4% (71)</b>	21.9% (48)	10.0% (22)	6.8% (15)	219
Infiltration soil testing	24.1% (51)	<b>33.5% (71)</b>	23.6% (50)	14.2% (30)	4.7% (10)	212
Native landscaping for stormwater practices	<b>32.1% (70)</b>	27.1% (59)	26.6% (58)	10.1% (22)	4.1% (9)	218
Costs of Stormwater Practices	<b>41.6% (91)</b>	32.9% (72)	15.5% (34)	9.1% (20)	0.9% (2)	219
					Other (please specify)	10

answered question 248

skipped question 9

#### 14. If CSN were to offer the following opportunities, which would you be most likely to engage in?

	Highest	2	3	4	Lowest	Rating Average	Response Count
Serve on an expert panel	12.6% (25)	17.2% (34)	<b>29.8%</b> <b>(59)</b>	17.7% (35)	22.7% (45)	3.21	198
Provide peer review of CSN products	9.8% (20)	22.1% (45)	<b>27.0%</b> <b>(55)</b>	22.5% (46)	18.6% (38)	3.18	204
Participate in regional networking events (e.g., happy hours)	13.8% (29)	<b>26.2%</b> <b>(55)</b>	21.0% (44)	23.3% (49)	15.7% (33)	3.01	210
Provide photos and info about your innovative stormwater projects	22.3% (44)	20.3% (40)	<b>26.4%</b> <b>(52)</b>	18.3% (36)	12.7% (25)	2.79	197
Serve on a planning committee for a stormwater conference	7.7% (15)	19.5% (38)	<b>25.6%</b> <b>(50)</b>	23.1% (45)	24.1% (47)	3.36	195
Attend a stormwater conference	31.7% (71)	<b>35.3%</b> <b>(79)</b>	22.8% (51)	7.1% (16)	3.1% (7)	2.15	224
Serve on a "practitioner" roundtable	13.7% (28)	17.6% (36)	<b>26.0%</b> <b>(53)</b>	24.0% (49)	18.6% (38)	3.16	204
Enter an LID design competition	2.6% (5)	10.8% (21)	22.7% (44)	20.1% (39)	<b>43.8%</b> <b>(85)</b>	3.92	194
Join a stormwater technical list serve	28.8% (61)	<b>29.7%</b> <b>(63)</b>	19.3% (41)	13.2% (28)	9.0% (19)	2.44	212
Share your stormwater BMP cost data	10.9% (22)	24.9% (50)	<b>29.9%</b> <b>(60)</b>	16.9% (34)	17.4% (35)	3.05	201
Provide your ideas on how to improve stormwater practices	19.4% (40)	27.7% (57)	<b>28.2%</b> <b>(58)</b>	16.5% (34)	8.3% (17)	2.67	206
Share your stormwater research	13.6% (27)	17.1% (34)	<b>26.1%</b> <b>(52)</b>	18.1% (36)	25.1% (50)	3.24	199
Join a state chapter of the Network to improve stormwater implementation in your state	18.4% (39)	25.5% (54)	<b>31.6%</b> <b>(67)</b>	10.8% (23)	13.7% (29)	2.76	212

Share your favorite stormwater photos	19.7% (39)	<b>28.3%</b> <b>(56)</b>	25.8% (51)	14.6% (29)	11.6% (23)	2.70	198
Serve on a subcommittee to resolve merging technical or policy issues	15.5% (32)	24.8% (51)	<b>30.6%</b> <b>(63)</b>	12.6% (26)	16.5% (34)	2.90	206

Other (please specify) 8

<b>answered question</b>	<b>243</b>
<b>skipped question</b>	<b>14</b>

### 15. Please feel free to offer any additional comments or suggestions

	Response Count
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35

<b>answered question</b>	<b>35</b>
<b>skipped question</b>	<b>222</b>

**Q1. I am employed in the:  
Check the one which best applies**

1	Volunteer	Dec 2, 2012 5:29 PM
2	Federal, research	Nov 28, 2012 10:09 AM
3	local government	Nov 28, 2012 9:36 AM
4	Retired hydrologist USGS and Stormwater engineer..LFSWCD Clarke Co Director	Nov 27, 2012 10:41 PM
5	federal government	Oct 29, 2012 11:48 AM
6	Code Review, assist with MS4 for Facilities. Not on Faculty.	Oct 25, 2012 9:04 AM
7	Municipal board member of a EAC	Oct 25, 2012 7:34 AM
8	Retired, volunteer	Oct 24, 2012 9:08 AM
9	Self-employed/under-employed	Oct 24, 2012 8:39 AM
10	Retired- Director of the Centre County Planning Commission	Oct 23, 2012 1:57 PM
11	Retired	Oct 23, 2012 12:10 PM
12	Retired	Oct 23, 2012 11:10 AM
13	Regional Planning Commission (public/non-profit)	Oct 23, 2012 8:55 AM

**Q2. In which jurisdiction(s) do you work primarily?  
Check all that apply**

1	California; Wiscousin;Texas;Indiana	Nov 28, 2012 8:36 AM
2	Lake of the Ozarks, Missouri	Nov 7, 2012 1:05 PM
3	North Carolina	Nov 6, 2012 9:59 AM
4	Region 4-Georgia	Oct 29, 2012 11:48 AM
5	Midwest	Oct 25, 2012 10:08 AM
6	WA	Oct 24, 2012 7:04 PM
7	In key regions of the U.S. and the world, not including the Chesapeake Bay	Oct 24, 2012 3:09 PM
8	Federal level	Oct 23, 2012 2:02 PM
9	Global	Oct 23, 2012 10:03 AM
10	Vermont - Burlington	Oct 23, 2012 9:58 AM
11	Colorado	Oct 23, 2012 9:36 AM
12	Worldwide interest and projects based from Central NY	Oct 23, 2012 9:23 AM
13	Tennessee	Oct 23, 2012 8:49 AM
14	Nationwide	Oct 23, 2012 8:44 AM





**Q3. My primary job responsibility is:  
Check the one which best applies**

1	My guidance responsibilities extend into compliance and enforcement of permits and local program oversight.	Nov 30, 2012 10:44 AM
2	Floodplain studies	Nov 28, 2012 9:36 AM
3	Compliance with State and Federal stormwater permits	Nov 28, 2012 8:55 AM
4	Design and implementation of Treatment trains for Storm water pollution interception with Nets, Gravity separation and Filters.	Nov 28, 2012 8:36 AM
5	DCS or DCM stands for Design & Construction Services (or Management) including inspection and compliance with various ordinances and regulations.	Nov 28, 2012 7:37 AM
6	Environmental consulting, restoration and mitigation	Nov 27, 2012 9:12 PM
7	stream restoration and wetlands/nepa	Nov 27, 2012 4:30 PM
8	Management of County Stormwater Program	Nov 8, 2012 2:46 PM
9	implement 319 grant with retrofits	Nov 7, 2012 1:05 PM
10	Stormwater retrofit projects	Oct 30, 2012 3:56 PM
11	Environmental Compliance Stormwater Program Manager: Stormwater Industrial, MS4 and Construction Inspections, E&SPCP Construction Plan Reviews and Notice of Intent submittals, and review of Post-Construction BMP designs to ensure meeting state and federal compliance requirements.	Oct 29, 2012 11:48 AM
12	sales	Oct 25, 2012 6:45 PM
13	Management of regional office of state agency	Oct 24, 2012 2:47 PM
14	Aeration systems and engineered wetlands	Oct 24, 2012 9:45 AM
15	TMDLs, watershed restoration and education	Oct 24, 2012 9:36 AM
16	Environmental Consulting	Oct 23, 2012 8:27 PM
17	Stormwater retention is a personal interest. I am a family coach for children 0-3 with developmental disabilities.	Oct 23, 2012 6:50 PM
18	Stream restoration	Oct 23, 2012 3:17 PM
19	Currently associated with four non-profit conservation organizations. Before retiring I was responsible for Stormwater Planning in the Spring Creek Watershed which included State College and Bellefonte.	Oct 23, 2012 1:57 PM
20	master stormwater planning	Oct 23, 2012 1:00 PM
21	None	Oct 23, 2012 12:10 PM
22	stream and wetland restoration and stabilization	Oct 23, 2012 11:19 AM

**Q3. My primary job responsibility is:  
Check the one which best applies**

23	Use practices to properly manage storm water from my property	Oct 23, 2012 11:10 AM
24	Stormwater and landscape design, construction and project management	Oct 23, 2012 10:19 AM
25	Policy/Planning, review of stormwater plans, inspection and maintenance, compliance with Muni StW Permits, Education & Guidance	Oct 23, 2012 9:58 AM
26	Oversight (exuctive) with NGO that does much of the above	Oct 23, 2012 9:23 AM
27	green roofer, design and BUILD stormwater practices	Oct 23, 2012 8:57 AM
28	maintain compliance with TMDLs, industrial permits, etc	Oct 23, 2012 8:54 AM
29	Policy	Oct 23, 2012 8:44 AM



**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

Federal		
1	5	Dec 17, 2012 3:39 PM
3	20	Dec 7, 2012 9:37 AM
7	10	Nov 28, 2012 11:23 AM
8	0	Nov 28, 2012 10:30 AM
12	0	Nov 28, 2012 8:52 AM
14	10	Nov 28, 2012 8:38 AM
15	20	Nov 28, 2012 8:36 AM
16	30	Nov 28, 2012 8:20 AM
17	5	Nov 28, 2012 8:19 AM
18	10	Nov 28, 2012 7:44 AM
19	30	Nov 28, 2012 7:37 AM
24	20	Nov 27, 2012 10:41 PM
25	25	Nov 27, 2012 9:12 PM
26	20	Nov 27, 2012 8:35 PM
33	25	Nov 27, 2012 4:41 PM
34	0	Nov 27, 2012 4:39 PM
35	10	Nov 27, 2012 4:39 PM
36	0	Nov 27, 2012 4:34 PM
38	80	Nov 27, 2012 4:30 PM
40	10	Nov 27, 2012 4:26 PM
41	5	Nov 20, 2012 9:29 AM
42	10	Nov 8, 2012 2:46 PM
47	40	Nov 6, 2012 9:59 AM
48	5	Nov 5, 2012 4:39 PM
49	5	Nov 1, 2012 7:10 AM
50	0	Oct 31, 2012 7:25 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

51	50	Oct 30, 2012 7:38 AM
52	50	Oct 29, 2012 11:48 AM
53	1	Oct 28, 2012 10:29 AM
58	10	Oct 26, 2012 8:52 AM
60	0	Oct 25, 2012 1:29 PM
62	40	Oct 25, 2012 8:21 AM
64	10	Oct 24, 2012 7:04 PM
67	0	Oct 24, 2012 9:45 AM
69	5	Oct 24, 2012 9:42 AM
71	1	Oct 24, 2012 9:12 AM
75	5	Oct 24, 2012 8:17 AM
77	5	Oct 23, 2012 8:13 PM
78	0	Oct 23, 2012 7:08 PM
83	75	Oct 23, 2012 3:17 PM
84	0	Oct 23, 2012 2:45 PM
85	0	Oct 23, 2012 1:00 PM
88	5	Oct 23, 2012 12:13 PM
89	25	Oct 23, 2012 11:45 AM
90	100	Oct 23, 2012 11:41 AM
91	10	Oct 23, 2012 11:37 AM
92	10	Oct 23, 2012 11:27 AM
94	60	Oct 23, 2012 11:19 AM
95	50	Oct 23, 2012 11:18 AM
97	2	Oct 23, 2012 10:33 AM
99	0	Oct 23, 2012 10:19 AM
102	5	Oct 23, 2012 10:03 AM
103	20	Oct 23, 2012 10:01 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

105	20	Oct 23, 2012 9:56 AM
106	1	Oct 23, 2012 9:41 AM
108	10	Oct 23, 2012 9:36 AM
109	5	Oct 23, 2012 9:29 AM
110	0	Oct 23, 2012 9:23 AM
113	0	Oct 23, 2012 9:14 AM
114	10	Oct 23, 2012 9:11 AM
116	20	Oct 23, 2012 9:06 AM
117	10	Oct 23, 2012 9:02 AM
121	25	Oct 23, 2012 8:48 AM
123	0	Oct 23, 2012 8:47 AM
124	0	Oct 23, 2012 8:46 AM
126	10	Oct 23, 2012 8:41 AM
State		
1	35	Dec 17, 2012 3:39 PM
3	30	Dec 7, 2012 9:37 AM
4	5	Nov 30, 2012 4:03 PM
5	25	Nov 30, 2012 9:06 AM
7	20	Nov 28, 2012 11:23 AM
8	0	Nov 28, 2012 10:30 AM
10	20	Nov 28, 2012 9:49 AM
12	0	Nov 28, 2012 8:52 AM
13	50	Nov 28, 2012 8:44 AM
14	20	Nov 28, 2012 8:38 AM
15	40	Nov 28, 2012 8:36 AM
16	40	Nov 28, 2012 8:20 AM
17	5	Nov 28, 2012 8:19 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

18	20	Nov 28, 2012 7:44 AM
19	20	Nov 28, 2012 7:37 AM
20	15	Nov 28, 2012 7:14 AM
23	25	Nov 27, 2012 11:12 PM
24	20	Nov 27, 2012 10:41 PM
25	50	Nov 27, 2012 9:12 PM
26	30	Nov 27, 2012 8:35 PM
27	10	Nov 27, 2012 6:15 PM
28	10	Nov 27, 2012 5:11 PM
29	20	Nov 27, 2012 5:01 PM
30	100	Nov 27, 2012 4:55 PM
32	10	Nov 27, 2012 4:48 PM
33	50	Nov 27, 2012 4:41 PM
34	30	Nov 27, 2012 4:39 PM
36	90	Nov 27, 2012 4:34 PM
38	10	Nov 27, 2012 4:30 PM
39	75	Nov 27, 2012 4:29 PM
40	20	Nov 27, 2012 4:26 PM
41	5	Nov 20, 2012 9:29 AM
42	15	Nov 8, 2012 2:46 PM
43	100	Nov 7, 2012 1:05 PM
45	40	Nov 7, 2012 7:26 AM
46	15	Nov 6, 2012 12:45 PM
47	40	Nov 6, 2012 9:59 AM
48	90	Nov 5, 2012 4:39 PM
49	45	Nov 1, 2012 7:10 AM
50	25	Oct 31, 2012 7:25 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

52	50	Oct 29, 2012 11:48 AM
53	99	Oct 28, 2012 10:29 AM
58	10	Oct 26, 2012 8:52 AM
59	10	Oct 25, 2012 6:02 PM
60	50	Oct 25, 2012 1:29 PM
61	75	Oct 25, 2012 9:14 AM
62	20	Oct 25, 2012 8:21 AM
64	10	Oct 24, 2012 7:04 PM
67	70	Oct 24, 2012 9:45 AM
68	10	Oct 24, 2012 9:43 AM
69	5	Oct 24, 2012 9:42 AM
70	10	Oct 24, 2012 9:31 AM
71	4	Oct 24, 2012 9:12 AM
75	15	Oct 24, 2012 8:17 AM
76	10	Oct 23, 2012 8:21 PM
77	15	Oct 23, 2012 8:13 PM
78	75	Oct 23, 2012 7:08 PM
80	50	Oct 23, 2012 4:31 PM
81	30	Oct 23, 2012 4:10 PM
82	50	Oct 23, 2012 3:18 PM
83	25	Oct 23, 2012 3:17 PM
84	0	Oct 23, 2012 2:45 PM
85	75	Oct 23, 2012 1:00 PM
86	100	Oct 23, 2012 12:53 PM
87	50	Oct 23, 2012 12:14 PM
88	45	Oct 23, 2012 12:13 PM
89	25	Oct 23, 2012 11:45 AM



**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

91	70	Oct 23, 2012 11:37 AM
92	20	Oct 23, 2012 11:27 AM
94	40	Oct 23, 2012 11:19 AM
95	50	Oct 23, 2012 11:18 AM
97	3	Oct 23, 2012 10:33 AM
98	10	Oct 23, 2012 10:27 AM
99	0	Oct 23, 2012 10:19 AM
100	95	Oct 23, 2012 10:15 AM
102	40	Oct 23, 2012 10:03 AM
103	30	Oct 23, 2012 10:01 AM
104	20	Oct 23, 2012 9:58 AM
105	70	Oct 23, 2012 9:56 AM
106	15	Oct 23, 2012 9:41 AM
107	20	Oct 23, 2012 9:36 AM
108	25	Oct 23, 2012 9:36 AM
109	94	Oct 23, 2012 9:29 AM
110	15	Oct 23, 2012 9:23 AM
112	50	Oct 23, 2012 9:16 AM
113	50	Oct 23, 2012 9:14 AM
114	40	Oct 23, 2012 9:11 AM
115	25	Oct 23, 2012 9:07 AM
116	30	Oct 23, 2012 9:06 AM
117	10	Oct 23, 2012 9:02 AM
121	25	Oct 23, 2012 8:48 AM
122	90	Oct 23, 2012 8:47 AM
123	20	Oct 23, 2012 8:47 AM
124	0	Oct 23, 2012 8:46 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

126	40	Oct 23, 2012 8:41 AM
Local		
1	60	Dec 17, 2012 3:39 PM
2	100	Dec 7, 2012 3:16 PM
3	50	Dec 7, 2012 9:37 AM
4	95	Nov 30, 2012 4:03 PM
5	25	Nov 30, 2012 9:06 AM
6	100	Nov 29, 2012 11:25 AM
7	50	Nov 28, 2012 11:23 AM
8	100	Nov 28, 2012 10:30 AM
9	100	Nov 28, 2012 10:09 AM
10	80	Nov 28, 2012 9:49 AM
11	100	Nov 28, 2012 9:09 AM
12	100	Nov 28, 2012 8:52 AM
13	50	Nov 28, 2012 8:44 AM
14	70	Nov 28, 2012 8:38 AM
15	40	Nov 28, 2012 8:36 AM
16	30	Nov 28, 2012 8:20 AM
17	45	Nov 28, 2012 8:19 AM
18	70	Nov 28, 2012 7:44 AM
19	50	Nov 28, 2012 7:37 AM
20	85	Nov 28, 2012 7:14 AM
22	100	Nov 27, 2012 11:44 PM
23	75	Nov 27, 2012 11:12 PM
24	60	Nov 27, 2012 10:41 PM
25	25	Nov 27, 2012 9:12 PM
26	40	Nov 27, 2012 8:35 PM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

27	90	Nov 27, 2012 6:15 PM
28	90	Nov 27, 2012 5:11 PM
29	40	Nov 27, 2012 5:01 PM
31	100	Nov 27, 2012 4:53 PM
32	90	Nov 27, 2012 4:48 PM
33	25	Nov 27, 2012 4:41 PM
34	70	Nov 27, 2012 4:39 PM
35	90	Nov 27, 2012 4:39 PM
36	10	Nov 27, 2012 4:34 PM
37	100	Nov 27, 2012 4:30 PM
38	10	Nov 27, 2012 4:30 PM
39	25	Nov 27, 2012 4:29 PM
40	70	Nov 27, 2012 4:26 PM
41	90	Nov 20, 2012 9:29 AM
42	75	Nov 8, 2012 2:46 PM
44	100	Nov 7, 2012 7:32 AM
45	60	Nov 7, 2012 7:26 AM
46	85	Nov 6, 2012 12:45 PM
47	20	Nov 6, 2012 9:59 AM
48	5	Nov 5, 2012 4:39 PM
49	50	Nov 1, 2012 7:10 AM
50	75	Oct 31, 2012 7:25 AM
51	50	Oct 30, 2012 7:38 AM
54	100	Oct 28, 2012 8:58 AM
55	100	Oct 27, 2012 6:41 AM
56	100	Oct 26, 2012 1:09 PM
57	100	Oct 26, 2012 9:46 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

58	80	Oct 26, 2012 8:52 AM
59	90	Oct 25, 2012 6:02 PM
60	50	Oct 25, 2012 1:29 PM
61	25	Oct 25, 2012 9:14 AM
62	40	Oct 25, 2012 8:21 AM
64	80	Oct 24, 2012 7:04 PM
65	100	Oct 24, 2012 11:39 AM
66	100	Oct 24, 2012 10:53 AM
67	30	Oct 24, 2012 9:45 AM
68	90	Oct 24, 2012 9:43 AM
69	5	Oct 24, 2012 9:42 AM
70	90	Oct 24, 2012 9:31 AM
71	95	Oct 24, 2012 9:12 AM
72	100	Oct 24, 2012 9:08 AM
73	60	Oct 24, 2012 8:49 AM
74	100	Oct 24, 2012 8:37 AM
75	80	Oct 24, 2012 8:17 AM
76	90	Oct 23, 2012 8:21 PM
77	80	Oct 23, 2012 8:13 PM
78	25	Oct 23, 2012 7:08 PM
80	50	Oct 23, 2012 4:31 PM
81	40	Oct 23, 2012 4:10 PM
82	50	Oct 23, 2012 3:18 PM
84	100	Oct 23, 2012 2:45 PM
85	10	Oct 23, 2012 1:00 PM
87	50	Oct 23, 2012 12:14 PM
88	50	Oct 23, 2012 12:13 PM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

89	50	Oct 23, 2012 11:45 AM
91	20	Oct 23, 2012 11:37 AM
92	70	Oct 23, 2012 11:27 AM
93	50	Oct 23, 2012 11:24 AM
96	100	Oct 23, 2012 10:44 AM
97	60	Oct 23, 2012 10:33 AM
98	90	Oct 23, 2012 10:27 AM
99	100	Oct 23, 2012 10:19 AM
100	5	Oct 23, 2012 10:15 AM
101	90	Oct 23, 2012 10:04 AM
102	55	Oct 23, 2012 10:03 AM
103	40	Oct 23, 2012 10:01 AM
104	80	Oct 23, 2012 9:58 AM
105	10	Oct 23, 2012 9:56 AM
106	70	Oct 23, 2012 9:41 AM
107	80	Oct 23, 2012 9:36 AM
108	65	Oct 23, 2012 9:36 AM
109	1	Oct 23, 2012 9:29 AM
110	85	Oct 23, 2012 9:23 AM
111	100	Oct 23, 2012 9:22 AM
112	50	Oct 23, 2012 9:16 AM
113	50	Oct 23, 2012 9:14 AM
114	50	Oct 23, 2012 9:11 AM
115	75	Oct 23, 2012 9:07 AM
116	50	Oct 23, 2012 9:06 AM
117	80	Oct 23, 2012 9:02 AM
118	100	Oct 23, 2012 8:57 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

119	100	Oct 23, 2012 8:53 AM
120	100	Oct 23, 2012 8:52 AM
121	50	Oct 23, 2012 8:48 AM
122	10	Oct 23, 2012 8:47 AM
123	40	Oct 23, 2012 8:47 AM
124	100	Oct 23, 2012 8:46 AM
125	100	Oct 23, 2012 8:43 AM
126	50	Oct 23, 2012 8:41 AM
Other (e.g. SWCD or Conservation Commission); if you answer other please describe in question #5		
5	50	Nov 30, 2012 9:06 AM
7	20	Nov 28, 2012 11:23 AM
17	45	Nov 28, 2012 8:19 AM
21	100	Nov 28, 2012 6:36 AM
26	10	Nov 27, 2012 8:35 PM
29	40	Nov 27, 2012 5:01 PM
34	0	Nov 27, 2012 4:39 PM
63	100	Oct 25, 2012 7:34 AM
69	85	Oct 24, 2012 9:42 AM
73	40	Oct 24, 2012 8:49 AM
79	100	Oct 23, 2012 6:52 PM
81	30	Oct 23, 2012 4:10 PM
84	0	Oct 23, 2012 2:45 PM
85	15	Oct 23, 2012 1:00 PM
88	0	Oct 23, 2012 12:13 PM
93	50	Oct 23, 2012 11:24 AM
97	35	Oct 23, 2012 10:33 AM
101	10	Oct 23, 2012 10:04 AM

**Q4. If you are involved in the Design or Construction of Stormwater Practices, what are the approving authorities for your projects? (give rough percentages of total work - total should sum to 100)**

102	0	Oct 23, 2012 10:03 AM
103	10	Oct 23, 2012 10:01 AM
106	14	Oct 23, 2012 9:41 AM
110	0	Oct 23, 2012 9:23 AM
123	40	Oct 23, 2012 8:47 AM
124	0	Oct 23, 2012 8:46 AM





**Q5. If you answered other in question #4, please specify here.**

1	Conservation Districts	Nov 30, 2012 9:06 AM
2	County Conservation District	Nov 28, 2012 11:23 AM
3	County Conservation Districts	Nov 28, 2012 8:19 AM
4	I work for rural water association; plan to apply for grant to advocate LID and alternative multiple-barrier approach in rural and county stormwater planning	Nov 28, 2012 6:36 AM
5	jnnjnnj	Nov 27, 2012 7:31 PM
6	Soil Conservation District	Nov 27, 2012 5:01 PM
7	Residential properties exclusively	Nov 7, 2012 7:32 AM
8	Local MS4 municipalities must comply with state permit terms and conditions.	Oct 31, 2012 7:25 AM
9	City of Manassas is the approving authority for my projects	Oct 26, 2012 9:46 AM
10	My role is to review plans to ensure nearby property owners and the environment are fully protected.	Oct 25, 2012 6:02 PM
11	not involved in design but survey forced me to fill in something.	Oct 25, 2012 7:34 AM
12	Municipality is a Delegated Agency for DNREC	Oct 24, 2012 10:53 AM
13	Not involved in design nor construction, just providing guidance and attempting to get federal funding for storm water management practices	Oct 24, 2012 9:42 AM
14	County Conservation District	Oct 23, 2012 4:10 PM
15	N/A	Oct 23, 2012 2:45 PM
16	National Parks Service, DOI	Oct 23, 2012 11:41 AM
17	Soil Conservation District	Oct 23, 2012 10:33 AM
18	Local Soil Conservation Service for NDPES permits	Oct 23, 2012 10:04 AM
19	Local Soil Conservation District	Oct 23, 2012 9:41 AM
20	85 + 15 = 100	Oct 23, 2012 9:23 AM
21	County Conservation District	Oct 23, 2012 8:47 AM



**Q6. What organizations do you most rely on to keep on top of stormwater issues?  
Check off the two sources that you rely most.**

1	Hampton Roads Planning District Commission	Dec 7, 2012 3:16 PM
2	engineering society memberships: ASCE, SAME	Dec 7, 2012 9:37 AM
3	EPA and Agency notification systems.	Dec 3, 2012 4:38 PM
4	Planning District	Nov 30, 2012 4:03 PM
5	EPA npsinfo, SWMM-USERS	Nov 29, 2012 12:32 PM
6	VAMSA	Nov 28, 2012 2:16 PM
7	Literature from journals, books	Nov 28, 2012 10:09 AM
8	International Erosion Control Association	Nov 28, 2012 8:55 AM
9	EPA OWOW - stormwater section, NCSU stormwater research and their associated workshops	Nov 28, 2012 7:26 AM
10	VAMSA	Nov 28, 2012 7:18 AM
11	As a beginner, I am attending a SWCD workshop and keep up with the erosion and water efficiency journals	Nov 28, 2012 6:36 AM
12	Universities -- NC State, UNH	Nov 27, 2012 11:12 PM
13	Chesapeake Conservation Landscaping Council, AAWSA	Nov 27, 2012 4:39 PM
14	Other - University reserach websites Listserves - ASCE, chesapeake network	Nov 27, 2012 4:26 PM
15	Town Engineering firm	Nov 9, 2012 12:21 PM
16	MO Dept of Natural Resources and EPA	Nov 7, 2012 1:05 PM
17	M.D.E.	Nov 6, 2012 9:53 AM
18	Colleagues who sit on state level advisory committees.	Oct 26, 2012 8:07 PM
19	Although it is just beginning, the Va Environmental Professionals Organization (VEPO) is likely to be good source of info.	Oct 26, 2012 12:52 PM
20	VA DCR; VA DEQ; Center for Watershed Protection; Chesapeake Stormwater Network, James River Association	Oct 26, 2012 9:42 AM
21	Land and Water Magazine, IECA, LinkedIn articles, etc.	Oct 25, 2012 10:08 AM
22	Urban Stormwater Workgroup	Oct 25, 2012 9:14 AM
23	home builders	Oct 24, 2012 2:08 PM
24	Chesapeake Watershed Forum	Oct 24, 2012 11:07 AM
25	University of Minnesota	Oct 24, 2012 9:31 AM

**Q6. What organizations do you most rely on to keep on top of stormwater issues?  
Check off the two sources that you rely most.**

26	Local watershed agencies and associations	Oct 24, 2012 9:08 AM
27	EPA's NPS listserve	Oct 23, 2012 3:14 PM
28	Since retiring I am responsible for the Watershed Watch Program of the Spring Creek Chapter of Trout Unlimited. We monitor earth disturbances..and assist the Centre County Conservation District	Oct 23, 2012 1:57 PM
29	county swm review	Oct 23, 2012 12:14 PM
30	Robert E. Lee Soil and Water Conservation	Oct 23, 2012 11:27 AM
31	Landscape Architecture programming/publications	Oct 23, 2012 10:44 AM
32	Virginia Dept. of Conservation and Recreation	Oct 23, 2012 10:19 AM
33	County Planning Commission	Oct 23, 2012 10:04 AM
34	Peer sharing, conferences	Oct 23, 2012 9:58 AM
35	Virginia Association of Wetland Professionals	Oct 23, 2012 9:56 AM
36	Linked In- EWRI, Stormwater Professionals, ASABE and ASCE groups	Oct 23, 2012 9:41 AM
37	NVRC Regional SWM Working Group (Norm Goulet), VAMSA-VA Municipal SWM Association	Oct 23, 2012 9:36 AM
38	Stormwater Coalition of Albany County	Oct 23, 2012 9:29 AM
39	Wide variety of sources at home and abroad. Much related to restoration ecology, landscape architecture, EPA regs., etc.	Oct 23, 2012 9:23 AM
40	DPW & City Planning staff	Oct 23, 2012 9:20 AM
41	Staff scientist	Oct 23, 2012 9:07 AM
42	Central Shenandoah Planning District Commission	Oct 23, 2012 9:07 AM
43	trade associations	Oct 23, 2012 9:02 AM
44	city of Philadelphia's Water Department reports and press releases--as a green roofer, not a builder, I don't have to deal with minutiae like an architect or developer	Oct 23, 2012 8:57 AM
45	County staff	Oct 23, 2012 8:53 AM
46	Hampton Roads Planning District Commission	Oct 23, 2012 8:53 AM
47	SHA	Oct 23, 2012 8:47 AM
48	County Planning Commission staff	Oct 23, 2012 8:47 AM
49	none	Oct 23, 2012 8:46 AM



**Q7. As a Stormwater Professional, how well prepared are you to implement the following Bay Stormwater initiatives? Please select as appropriate.**

1	At the state level where we work, we are have severely insufficient resources to implement our existing programs due to a lack of support from the administration and upper management. Without some substantial change to management of our stormwater programs, mainly in the areas of personnel and leadership by the administration, our ability to advance our programs in the future (as required by law) is doubtful.	Nov 30, 2012 10:44 AM
2	I do source water protection and promote stormwater "green" practices in our grassroots-inspired plans	Nov 28, 2012 6:36 AM
3	Local and regional TMDLs are easy to understand. The Bay TMDL is more complex and there is a great deal of uncertainty surrounding it. Throw out the SW rules in MD, as they seem to make things up as they go.	Nov 20, 2012 9:29 AM
4	local municipal regulations/ordinance	Nov 9, 2012 12:21 PM
5	we are implementing a 319 for individual home retrofits around a large lake - we don't even have a TMDL yet! local watershed implementation plans would be the closest fit to us.	Nov 7, 2012 1:05 PM
6	Not geographically relevant, but interested in how it may affect us land-locked states down the road.	Oct 25, 2012 10:08 AM
7	We are an advisory committee therefore not directly involved in implementation.	Oct 25, 2012 7:34 AM
8	We still do a lot of demonstration projects and introductory work with watershed groups and non-MS4 local governments.	Oct 24, 2012 11:07 AM
9	I work with our local MS4 group..and am somewhat involved with them. However..I really have no way of keeping up on new inovations and federal, State or Cheseapeake Bay requirements. I am strictly involved at the local grass roots level.	Oct 23, 2012 1:57 PM
10	Financial resources are not always available	Oct 23, 2012 12:29 PM
11	N/A	Oct 23, 2012 11:10 AM
12	MDE's issuance of the new General Permit for Discharges from SW from Industrial Activities - stay tuned here this one is going to be interesting.	Oct 23, 2012 10:15 AM
13	Not an "implementer."	Oct 23, 2012 10:15 AM
14	I am involved in watershed water quality monitoring, but not stormwater regulation or implementation except indirectly in raising awareness through our watershed organization.	Oct 23, 2012 10:14 AM
15	NA - not in Chesapeake Bay	Oct 23, 2012 9:58 AM
16	As an NGO we wouldnot implement, but might design and inform	Oct 23, 2012 9:23 AM
17	Others in agency are responsible.	Oct 23, 2012 9:20 AM
18	not applicable--I know you have new Draconian rules and I think they are terrific!	Oct 23, 2012 8:57 AM



**Q8. As a Stormwater Professional, which initiative is the single most important to your work?**

1	not sure	Dec 7, 2012 9:37 AM
2	as they apply to drinking water sources where I am working	Nov 28, 2012 6:36 AM
3	Initiatives of small watershed organizations	Nov 27, 2012 11:12 PM
4	Both new state SW rules and MS4 permits. They have equal weight for us.	Nov 20, 2012 9:29 AM
5	local & state regulations & ordinances	Nov 9, 2012 12:21 PM
6	as in #7	Nov 7, 2012 1:05 PM
7	1-3	Oct 29, 2012 11:48 AM
8	developing a local swm program, including the VSMP permitting requirements.	Oct 26, 2012 12:52 PM
9	Volume-based TMDLs. Their development, implementation and enforcement. It currently varies from region to region.	Oct 25, 2012 10:08 AM
10	getting funding to do any of it	Oct 25, 2012 8:21 AM
11	Willingness of regulators to look at passive engineered wetlands or floating island technology in lieu of brick and mortar solutions. These are low energy and they are carbon neutral solutions.	Oct 24, 2012 9:45 AM
12	Local Watershed Implementation activities	Oct 24, 2012 9:31 AM
13	Local stormwater initiatives	Oct 24, 2012 9:08 AM
14	TMDLs have yet to be established for Spring Creek. It's not clear to me if EPA, DEP, and CBProgram are coordinating their efforts. We at the grass roots level are not well informed.	Oct 23, 2012 1:57 PM
15	I am not working on it anymore	Oct 23, 2012 12:10 PM
16	N/A	Oct 23, 2012 11:10 AM
17	NYC Green Infrastructure Plan	Oct 23, 2012 10:44 AM
18	epa stormwater rulemaking is most problematic for future.	Oct 23, 2012 10:29 AM
19	Would depend on "clients."	Oct 23, 2012 9:23 AM
20	Mayor Nutter's Office of Sustainability's set of initiatives to deal with stormwater	Oct 23, 2012 8:57 AM





**Q9. As a Stormwater Professional, what are the biggest barriers you face? Please select all that apply.**

1	Lack of Engineering Professionals with review agencies. How you can review a plan signed and sealed by a PE (requirement) when you have not taken a single Engineering course? But this stupid and dumbing it down only happens in USA.....	Dec 17, 2012 3:39 PM
2	Our state construction permit program, still under development, is under-resourced and may be moved to another state agency with little real experience at managing stormwater construction programs.	Nov 30, 2012 10:44 AM
3	NA... not involved directly	Nov 28, 2012 10:09 AM
4	What are the most cost effective alternatives to bring the water mismanagement back into ballance ? Clearly define the problem(s), then arrive at a clear solution. (Pun intended)	Nov 28, 2012 5:47 AM
5	Enforcement	Nov 27, 2012 8:35 PM
6	Inconsistent stages of client decision-making	Oct 29, 2012 3:17 PM
7	too much focus on 'requirements on paper' and not enough flexibility to efficiently and effectively get the desired results (that is, actually protect the environmental/water quality).	Oct 26, 2012 12:52 PM
8	the biggest barrier to overcome is the lack of enforcement !	Oct 26, 2012 8:52 AM
9	Quality control on design/installation, state and local enforcement of existing policy and law. Lack of technical knowledge among designers, regulators and property owners.	Oct 25, 2012 10:08 AM
10	This is what we do.	Oct 25, 2012 7:34 AM
11	Agriculture faces little to no federal regulation yet municipalities will be squeezed the hardest to try and make up for it.	Oct 24, 2012 2:25 PM
12	internal politics & stubbornness	Oct 24, 2012 12:46 PM
13	insufficient locality funding and staff	Oct 24, 2012 6:56 AM
14	Our Watershed Watch Program has difficulties distinguishing between responsibilities under DEP and the Conservation District for Sedimentation Control during construction and the municipal responsibilities under their Stormwater Ordinances. There needs to be a better way to coordinate these efforts.	Oct 23, 2012 1:57 PM
15	None	Oct 23, 2012 12:10 PM
16	N/A	Oct 23, 2012 11:10 AM
17	see answer to 7 above	Oct 23, 2012 10:14 AM
18	Educating public about why we must control stormwater	Oct 23, 2012 10:04 AM
19	Incomplete training of submitters	Oct 23, 2012 9:25 AM

**Q9. As a Stormwater Professional, what are the biggest barriers you face? Please select all that apply.**

20 n/a

Oct 23, 2012 9:23 AM



**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

1	Nobody wants to spend money to maintain	Dec 17, 2012 3:39 PM
2	Unclear how to make individual property owners maintain stormwater structures and provide reliable inspection documentation and to keep up with the data	Dec 10, 2012 12:27 PM
3	every local City or County (and VDCR and VDOT) reviews stormwater differently and has different emphasis and forms/formats	Dec 7, 2012 9:37 AM
4	The construction group (designers and project manager) has access to guidance and are responsible for transferring the maintenance requirements to the maintenance group. The maintenance team does not have insight or input into the design criteria, and the requirements for maintenance and recordkeeping are poorly communicated.	Dec 3, 2012 4:38 PM
5	Not enough staff	Dec 3, 2012 1:51 PM
6	funding for the implementation to meet the TMDL's in the times specified. Budgets are tight now and you are expecting more to be spent	Nov 30, 2012 4:03 PM
7	A total lack of leadership and support from our executive administration. Nobody above the level of program manager is doing any heavy lifting and seem perfectly satisfies to let the programs flounder and atrophy.	Nov 30, 2012 10:44 AM
8	The BMP manual is often vague about it requirements especially concerning non-structural BMP's, which are arguably the most important. It is often left up to the whim of the reviewer at the conservation district and decisions can vary widely from county to county, especially when meeting water quality as opposed to volume.	Nov 30, 2012 9:06 AM
9	Uncertainty in the practical impact of the State WIP on day to day new and re-development plans and property management	Nov 30, 2012 12:36 AM
10	It is becoming apparent that MDE-TMDL, MDE-Stormwater, MDE-Industrial, and the Bay Program don't talk to each other or coordinate as much as they should. There are too many conflicting requirements and confusing directions. There are at least 3 lists of official, approved BMPs for compliance.	Nov 29, 2012 12:32 PM
11	Several local jurisdictions in ChesBay have different "interpretations" and means of implementing the same regulations.	Nov 29, 2012 11:25 AM
12	difficulty giving guidance of the best ways to implement tmdl. where exactly to locate a cost effective bmp when municipality owns very little land and locations found only drain the smallest portion of the watershed. Planting of trees does not give you enough credit in wasteload reduction.	Nov 29, 2012 10:08 AM
13	Local governing body not fully aware of the importance of stormwater, therefore, limited funding	Nov 28, 2012 2:16 PM
14	The biggest driver, more than barrier... My work will be guided by the Bay TMDL and WIP, in the creation and implementation of small watershed action plans. Costs will clearly affect everyone's ability to move forward at the needed pace.	Nov 28, 2012 2:15 PM
15	Unfunded Federal and State requirements are increasingly stringent with no clear guidance and unattainable end results using current technology.	Nov 28, 2012 11:23 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

16	Still new enough that I haven't ranked them.	Nov 28, 2012 10:45 AM
17	Initially it is very difficult to explain to customers why permits cost are going up so drastically. There are instances where the cost has to be eaten by the company to stay competitive.	Nov 28, 2012 10:30 AM
18	Am in research.. barrier here is enough interdisciplinary, deocumented, centralized sources for optimization of SW control designs and lack of information related to designing systems of watershed controls.	Nov 28, 2012 10:09 AM
19	local jurisdictions must have clear guidance and regulations and that they do not conflict with there existing code.	Nov 28, 2012 9:49 AM
20	As the local "leading" agency it is difficult to do our job in assisting the local municipalities due to the conflicting and/or lack of information we receive from the state and federal agencies.	Nov 28, 2012 9:36 AM
21	infinite maintenance is tough to enforce	Nov 28, 2012 9:20 AM
22	The SWM regulations and permit requirements have come fast upon us over the past couple of years. The SWM design workload has been significantly down over the past couple of years due to the economy. I am a one person shop and have not had the variety of design challenges over the past couple of years that I had 10 years ago, so I have not been able to experience all of the new requirements, regulations and permit processes. It will be difficult for me to give my client an accurate estimate of the work until I have worked with and understand the new requirements. There have been times when I feel the local plan reviewers are also having problems understanding the new SWM requirements and can not clearly advise me on what will be an acceptable design. The three step process(concept/preliminary/final) is also very time consuming and in my opinion, unnecessary on most smaller projects. I have been out of the loop on the Baywide TMDL & WIP and the municipal MS4 stormwater permits so I can not comment on those issues. Hope to learn more with your help.	Nov 28, 2012 9:09 AM
23	Creating a stormwater utility (once passed by legislation at the state level).	Nov 28, 2012 8:57 AM
24	There is no hard and fast way to ensure continued maintenance of stormwater BMPs on priate property.	Nov 28, 2012 8:55 AM
25	USACE Joint Permit	Nov 28, 2012 8:52 AM
26	information on design frequently changing	Nov 28, 2012 8:44 AM
27	I don't believe there has been sufficient training of engineers in the private sector to implement the new regulations. When the new regulations are implemented in Virginia they are likely to add significant design cost.	Nov 28, 2012 8:38 AM
28	Few reliable sources of funding are available for stormwater retrofitting, and the quantity of dollars available is insufficient. Mechanisms to fund and implement long-term maintenance are lacking in many areas and are not consistently utilized, and incentives to better manage stormwater are impeded by lack of enabling legislation for a stormwater utility in NY.	Nov 28, 2012 8:32 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

29	Not always sure of where to turn for guidance in the design phase	Nov 28, 2012 8:20 AM
30	Determining runoff discharge quality and complying with a TMDL.	Nov 28, 2012 8:19 AM
31	Implementation of new regulation (s) while training/understanding/process/local requirements are still under development	Nov 28, 2012 8:11 AM
32	Resistance from board to accept the disgust with the new regs	Nov 28, 2012 8:09 AM
33	Too many BMPs. Not enough money to maintain them to their design volumes.	Nov 28, 2012 7:37 AM
34	Conflicted guidance based on flawed science.	Nov 28, 2012 7:18 AM
35	Not sure the state agents knows their own regulations	Nov 28, 2012 7:14 AM
36	small systems/municipalities usually balk at different approaches because they fear change and equate that with cost and public inertia	Nov 28, 2012 6:36 AM
37	State & local municiple regulatory structure hinders cost effective solutions. Ordinances, Permits & Design Criteria make the right thing to do an exception to the rule. Must encourage inovation.	Nov 28, 2012 5:47 AM
38	stringency of permit requirements and the timeframe to accomplish	Nov 27, 2012 11:44 PM
39	Lack of knowledge of local reviewers	Nov 27, 2012 11:12 PM
40	the clearing house does not have info ionpropriary stormwater BMPs	Nov 27, 2012 10:41 PM
41	Lack of coordination, consistency and compatibility among various regulatory agencies and regulations/policies	Nov 27, 2012 9:12 PM
42	Accountability and implementation in a timely manner	Nov 27, 2012 8:35 PM
43	funding	Nov 27, 2012 7:31 PM
44	Many time State reviewers comment on preferences rather than regulations. Methods that are acceptable to Local and County reviewers differ from the State reviewers.	Nov 27, 2012 6:15 PM
45	Uncertainty	Nov 27, 2012 5:56 PM
46	The economy and environmental regulation have been the 1-2 combination punches that have nearly killed new construction. The true costs of environmental regulations have not yet come to light because the industry is still staggering under the economy. When someone wises up to the cost that is being extracted under new environmental regulations to remove a relatively small amount of contaminants, I regret that the consequences will not fall entirely upon the environmental community. Especially the Center for Watershed Protection which is being funded by my tax dollars.	Nov 27, 2012 5:11 PM
47	Lack of enforcement of maintenance requirements.	Nov 27, 2012 4:48 PM
48	Time to get permits is too long.	Nov 27, 2012 4:41 PM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

49	Project funding is always pushed to the max and often reduced to bare bones.	Nov 27, 2012 4:39 PM
50	It is difficult to ensure long term success of stormwater LID to administrators because they don't trust that these features will be maintained.	Nov 27, 2012 4:39 PM
51	It is difficult to determine how and what exactly I need to report.	Nov 27, 2012 4:30 PM
52	money	Nov 27, 2012 4:30 PM
53	Increased need for stormwater management and treatment that requires very specific and timely maintenance to ensure function as engineered. Its not just a matter of getting the work done correctly and in a timely fashion (which is a big hurdle in itself), but also the costs to maintain the ever-growing list of facilities coming on board is a major barrier.	Nov 27, 2012 4:29 PM
54	Lack of consistency in review process, also some reviewers that are too "By the Book" and don't acknowledge sometimes better or more practical designs. Also, outdated SWM design specifications	Nov 27, 2012 4:26 PM
55	There is a tremendous amount of uncertainty associated with various state stormwater regs; especially associated with the Maryland Dept. of Env. administration of the program. Rules seem to constantly change in MD resulting in inconsistent administration of the program and a lack of regulatory clarity. Increased costs for implementing the new stormwater regulations are of increasing concern. The elephant in the room is that there is little to no enforcement of BMP maintenance, resulting in a lot of money being spent on BMPs that fail after 7 years max.	Nov 20, 2012 9:29 AM
56	In MD, with emphasis on small-scale, vegetated, infiltration practices, many unknowns for how to maintain, frequency of maintenance, and costs for maintenance.	Nov 12, 2012 9:37 PM
57	small jurisdiction faced with limited monetary resources in light of overall responsibilities.	Nov 9, 2012 12:21 PM
58	getting projects through the permitting process	Nov 8, 2012 2:46 PM
59	not enough research has been done in the heartland of the US so our biggest barrier is trying to determine what are the most effective BMPs for our needs in our area	Nov 7, 2012 1:05 PM
60	On the local level (Richmond) the inspectors really know little to nothing about the BMP's for stormwater runoff. Their big idea is to make sure the ditches are clean - which they aren't, and to collect a stormwater runoff fee from the population - which they do not use for stormwater problems.	Nov 7, 2012 7:32 AM
61	No funding for the maintenance of SW Facilities	Nov 7, 2012 7:26 AM
62	Time consuming bureaucracy at State Levels	Nov 6, 2012 12:45 PM
63	My locality is tasked with adopting a local stormwater ordinance and starting an inspection, plan review, and enforcement program with a staff of one (that would be me). The second most important barrier is funding stormwater maintenance that needs to be done on old facilities already in place. I see separated pipes	Nov 6, 2012 10:18 AM



**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

	and eroding conveyance channels in our older neighborhoods, but we are a rural county with no equipment and minimal engineering support.	
64	We only have two plan reviewers for a	Nov 6, 2012 10:12 AM
65	Communication between Engineers, Reviewers, and Inspectors because they are all in different divisions.	Nov 6, 2012 9:53 AM
66	Too many changes occurring too fast to kep track of it all.	Nov 5, 2012 4:39 PM
67	Funding for not only design and construction, but also maintenance and inspections, is a constant barrier. Our traditional cost-share structure cannot fill the need with growing stormwater management demands and a slowing economy. We need innovative financing initiatives. Utilizing infrastructure upgrades with stormwater management is one opportunity to pay for BMPs.	Nov 2, 2012 12:47 PM
68	Actually determining what requirements apply, where they come from, and how to address them in a manner to suit all agencies as well as our clients. There is plenty of design guidance, but which agencies accept various methods varies greatly. Agencies and regulations conflict with each other.	Nov 1, 2012 7:10 AM
69	It's easy to get stormwater BMPs in the ground, but getting people to properly maintain them is the single biggest issue we face!	Oct 31, 2012 9:45 AM
70	Local authorities consider new stormwater management requirements an unfunded mandate from state and federal governments. Cannot justify increased costs/benefits to constituents regarding raising taxes to pay for it. Additionally, wet weather trends of recent years far exceed new 2-year stormwater management goal.	Oct 31, 2012 7:25 AM
71	The lack of clearly defined maintenance standards and practices for each stormwater facility type creates all kinds of barriers regarding facility performance and opportunities for stormwater retrofits.	Oct 30, 2012 3:56 PM
72	Some clients are ready to plan for budget increase and nutrient reduction needs, others aren't fully addressing those issues or generally unsure about how to move forward.	Oct 29, 2012 3:17 PM
73	funding is always an issue, even with federal facilities. although it may be justified, economic impacts are also associated with federal facilities.	Oct 29, 2012 11:48 AM
74	Lack of available funding; understanding the compliance requirements for new permits/WIPs/regulations	Oct 29, 2012 10:24 AM
75	Linear projects which require taking Right Of Way to meet current regulations	Oct 28, 2012 10:29 AM
76	That new regulations are coming and I have yet to absorb them all.	Oct 28, 2012 8:58 AM
77	As a residential developer for profit, the new regulations translate into lower residential unit density that will make the development of some properties unfeasible. As a conservationist, the properties that are developed can be designed in a manner that appeals to the environmentally aware consumer. Local municipalities charged with site plan approval are still grappling with how to implement the program and as of April: We are still trying to understand the	Oct 27, 2012 6:41 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

stormwater laws enacted last September and how those changes will affect our development plan review process. Please keep in mind that there are additional changes to the September law passed during the 2012 General Assembly. DCR is in the process of creating model ordinances for localities and developing packages of information to aid localities with the new laws and regulations. And, on the subject of implementation: Implementation Date according to the NEW REGS: "The technical criteria Part IIA and Part IIB (new criteria) shall be implemented by a stormwater administrative authority when a VSMP General Permit for Discharges for Construction Activities has been issued that incorporates such criteria. Until that time, the required technical criteria shall be found in Part IIC (old criteria)." That's why there is so much confusion because the current VSMP general permit does not expire until 2014. So if you get coverage under the existing general permit, the old criteria apply. The old criteria are in the new regs as an interim measure. So between 2012 – 2014, you fall under the new regs but use the old criteria.

78	WIP implementation in a changing (ie. not urbanized but developing) landscape	Oct 26, 2012 8:07 PM
79	TMDL work load will be enormous. State SWM design manual needs more detailed design guidance.	Oct 26, 2012 1:09 PM
80	lack of reliable info, too many changes at once	Oct 26, 2012 12:52 PM
81	There are regulations and standards stated in several manuals but the various field conditions are difficult to apply them.	Oct 26, 2012 9:46 AM
82	New Virginia stormwater management regulations will require significant investments of staff time and county resources to develop and implement a locally-administered SWM program, to be in compliance with the VSMP. This will require training and, potentially, new staff -- both of which create difficulty for our small county staff.	Oct 26, 2012 9:42 AM
83	We can continue to design and implement new measures for reduction, however throwing the costs on homeowners and non-enforcement by municipalities leads to failure everywhere! Whats the use, if no one cares for this system?	Oct 26, 2012 8:52 AM
84	Decline in local budgets has reduced inspection capabilities, leading to increased BMP failure due to lack of maintenance.	Oct 25, 2012 6:02 PM
85	Our learning as we go and also reviewers and regulators and county funders learning as they go leads to no one who fully understands and can get things done smoothly. Everything seems to change under each project.	Oct 25, 2012 1:29 PM
86	We are in Region 7, so it doesn't necessarily apply to local concerns in the CB area. But I can't imagine we are unique. We have regulators at the state and federal level who contradict one another depending on who you talk to or what is discussed. Enforcement of any regulation is purely complaint-driven only and any design standards are purely voluntary -- unless it's tied to funding. Even then we are still running into problems. I guess all we can do is look east and wait for what is to come.	Oct 25, 2012 10:08 AM
87	Federal Regulations and Permits seem to have everyone on edge about what they can or cannot do, so many times people are opting to do the minimum.	Oct 25, 2012 9:46 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

88	Well intentioned laws that are passed can lead to (unfunded) mandates that are passed down the line to the local counties to implement/resolve. These are challenging issues with a number of consequences.	Oct 25, 2012 9:14 AM
89	working in historically underserved EJ communities the responsiveness to our local initiatives is not comparable to the support that higher income neighborhoods get	Oct 25, 2012 8:21 AM
90	Politics. Anti-UN Agenda 21 and tea party people are very active in area and oppose all types of environmental regulations and sustainability concepts (ie riparian buffers).	Oct 25, 2012 7:34 AM
91	Different opinions regarding Stormwater Design	Oct 24, 2012 7:04 PM
92	Funds will be diverted to provide for regulatory compliance rather than restoring water quality to local streams.	Oct 24, 2012 2:25 PM
93	long term effectiveness of small facilities, liability	Oct 24, 2012 2:08 PM
94	enough said.	Oct 24, 2012 12:46 PM
95	Lack of provision for natural growth in population and development	Oct 24, 2012 11:39 AM
96	As in all EPA regulations there is no common sense applied. Relatively rural area are treated the same as the highly developed areas.	Oct 24, 2012 11:16 AM
97	Political influences	Oct 24, 2012 11:10 AM
98	Invasive species taking over bioretention areas.	Oct 24, 2012 11:07 AM
99	Trickle down recession problems, so stormwater is not seen as a high priority. New Sediment and Stormwater Regulations coming with limited personnel to implement.	Oct 24, 2012 10:53 AM
100	Lack of willingness to adopt new "natural" treatment technologies	Oct 24, 2012 9:45 AM
101	Just not too knowledgeable about it all as of yet	Oct 24, 2012 9:42 AM
102	how to prioritize retrofit opportunities in subwatersheds for each locality	Oct 24, 2012 9:36 AM
103	Properly maintained facilities especially the smaller facilities. The cost of repairing older existing ponds	Oct 24, 2012 9:12 AM
104	Impact of regulations on local administration: Complex, conflictive, unclear, time demanding, costly. Overregulation is a disincentive.	Oct 24, 2012 9:08 AM
105	The review process varies between objective and subjective and does not provide for performance based designs to get approved by M-NCPPC and Local Agencies.	Oct 24, 2012 8:17 AM
106	Inconsistent review, ambiguous design specifications, too much left to "professional judgement", NO follow up on identified problems.	Oct 24, 2012 8:00 AM
107	insufficient locality funding and staff	Oct 24, 2012 6:56 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

108	With a wide variety of LID facilities and the fact that many will be placed on private property, proper maintenance will be difficult.	Oct 23, 2012 8:21 PM
109	Lack of enforcement for maintenance.	Oct 23, 2012 8:21 PM
110	moving target	Oct 23, 2012 6:52 PM
111	Reluctance on the part of local govts to embrace the tmdl/wip process; fear of increased costs for implementation; lack of knowledge about which practices work best and cost the least	Oct 23, 2012 5:09 PM
112	High cost combined with unwillingness at local level to pay for what by and large are invisible effects.	Oct 23, 2012 3:18 PM
113	The EPA Region 3 has become unbelievably difficult in their review of stream restoration projects. They seem to only think a Rosgen designed stream meets the standards of the Clean Water Act and for all non-traditionally Rosgen designed streams they put onerous pre and post-monitoring on the permit requirements which delay and increase the costs of proposed projects.	Oct 23, 2012 3:17 PM
114	Small urban municipalities can not incur more cost to comply with state and federal regulations.	Oct 23, 2012 3:16 PM
115	the regulations would be as much of a barrier if there were financial resources to handle all of the work, but there aren't. Increased cost to localities is a major barrier.	Oct 23, 2012 3:14 PM
116	Not enough funding to adequately run proper program for plan review and inspection	Oct 23, 2012 3:07 PM
117	We need folks trained in LID design	Oct 23, 2012 3:05 PM
118	Care to maintain facilities in need of, or beyond repair.	Oct 23, 2012 2:45 PM
119	Reliable cost/benefit data for BMPs, local level evaluation of effectiveness and utility.	Oct 23, 2012 2:44 PM
120	Making citizens pay fees that in my opinion are tremendously high.	Oct 23, 2012 2:08 PM
121	Improved COORDINATION from beginning to end of the development project. And the resulting stormwater facilities need to be under municipal control..and not under a Homes Association.	Oct 23, 2012 1:57 PM
122	Both of our barriers deal with costs even as far as regulations and permits. Being a small Municipality we are limited with our budget. The increased cost makes it more difficult to put all our time and effort into the MS4 program without hiring another person to work on this alone.	Oct 23, 2012 1:09 PM
123	Inconsistency bwn PA DEP regional offices; lack of education of regulators	Oct 23, 2012 1:00 PM
124	Insuring maintenance of privately owned stormwater management practices.	Oct 23, 2012 12:36 PM
125	Maintenance of installed stormwater BMPs has been a reoccurring issue with the work we do. We spend a lot of money to fund the BMPs but they are not	Oct 23, 2012 12:34 PM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

	maintained by the property owners. The State doesn't have manpower to maintain everything themselves.	
126	Financial resources not available	Oct 23, 2012 12:29 PM
127	need better access to information	Oct 23, 2012 12:14 PM
128	new retention requirements are a paradigm shift that requires broader stakeholder acceptance	Oct 23, 2012 11:48 AM
129	Lack of clear understanding of implementation timeline and how it trickles down from state to localities.	Oct 23, 2012 11:45 AM
130	funding innovative SWM projects	Oct 23, 2012 11:37 AM
131	I see too many poorly designed projects or I see that the engineer was not guiding the construction contractor who compacted soils or installed something wrong and then no one wants to fix it or admit it was their fault and take responsibility to fix it or correct the problem in the future.	Oct 23, 2012 11:35 AM
132	As a small company we strive to provide low impact projects that don't break the bank.	Oct 23, 2012 11:27 AM
133	keeping up with the changing regulations & then being able to educate client	Oct 23, 2012 11:24 AM
134	The costs of stormwater management projects for a City with a small budget are very high, and our staff does not always have the technical expertise or willingness to explore options.	Oct 23, 2012 11:23 AM
135	Lack of clear design guidance makes it difficult to determine if proposed practices to meet ESD/Critical Area stormwater are effective and efficient. Likewise, without much guidance from the State agency, there is a great discrepancy in how local review of stormwater requirements is handled.	Oct 23, 2012 11:23 AM
136	money	Oct 23, 2012 11:19 AM
137	Funding and responsible parties	Oct 23, 2012 11:18 AM
138	None	Oct 23, 2012 11:10 AM
139	Federal regulations have set the bar for MS4 discharges that are not in proportion to the benefits.	Oct 23, 2012 10:51 AM
140	Small jurisdiction lack the capacity and funding to perform routine inspections during the life of the BMP. I am wondering if these inspections can be placed back on the property owner. They would be responsible for hiring a qualified inspector, then file report with the jurisdiction, similar to an elevator inspection forms.	Oct 23, 2012 10:48 AM
141	We are working with a new program, and so the approval process is still in the process of being streamlined. Maintenance is a universal issue, specifically trash and sediment.	Oct 23, 2012 10:44 AM
142	The sheer cost of retrofitting and maintaining impervious areas.	Oct 23, 2012 10:39 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

143	Lack of Staff and money to maintain SWM facilities	Oct 23, 2012 10:33 AM
144	Lack of cost history make estimating cost for clients very difficult.	Oct 23, 2012 10:27 AM
145	The localities need a better understanding as to what the new expectations will be in 2014 and training on the updated SWM manual ASAP would be helpful since it contains so many changes.	Oct 23, 2012 10:23 AM
146	Our biggest barrier is finding quality projects to bid on in the lower bay region that fit into our small business capacity.	Oct 23, 2012 10:19 AM
147	The approval time for Federal permits are so slow it is severely hampering and adding to the costs of doing SW and stream restoration projects. The joint review process is broken and needs fixing or we will never implement the WIP recommendations. State and local approvals are also slow but not as bad.	Oct 23, 2012 10:15 AM
148	Restoration/retrofitting costs v. high, resources traditionally allotted to this, very low. Local review process rife with incompetence, old-school engineers, lack of education and understanding of new techniques, or merely inertia.	Oct 23, 2012 10:15 AM
149	Residents doing small projects do not have the knowledge to design SW facilities nor do they have the money to hire design professionals.	Oct 23, 2012 10:04 AM
150	Gaining approvals for manufactured treatment devices	Oct 23, 2012 10:03 AM
151	Communication and education	Oct 23, 2012 9:56 AM
152	Whether maintenance is being done by property owners.	Oct 23, 2012 9:54 AM
153	I am trying to put a dry hydrant, a pipe in a shallow creek, behind our fire house so we can pump water. Otherwise we have to drive miles to ponds. We are 20 miles from a fire hydrant. It has gone through so many tiers of review, that it's way to complicated for what it is. Maybe some agencies could be consolidated.	Oct 23, 2012 9:41 AM
154	I have no problem with State and Federal regulations, but often they come with little or no guidance for the local municipal reviewers, whose lengthy review times and sometimes overly conservative design protocols hinder implementation. Also, the funds for implementation at the local level are typically not there.	Oct 23, 2012 9:41 AM
155	Many local jurisdictions in VA have written the 1999 manual into their local ordinance. Therefore, even though the reviewers know there is better guidelines available in the runoff reduction method and related BMP standards, they cannot approve the calculations, or BMP designs that better reward the use of LID strategies.	Oct 23, 2012 9:36 AM
156	County funding has been flat in the SWM program for several years. Need to determine a way to enhance the importance (and funding) for local SWM and environmental programs.	Oct 23, 2012 9:36 AM
157	implementing guidance is constantly changing; funding for maintenance is lacking	Oct 23, 2012 9:31 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

158	Getting permit compliance information and directives to top officials to act accordingly, also frustrating is changeover of personell and officials to keep them informed of compliance issues.	Oct 23, 2012 9:29 AM
159	Implementation guidance not keeping pace with regulation start times	Oct 23, 2012 9:25 AM
160	State regs not desgmed for built-out urban areas.	Oct 23, 2012 9:20 AM
161	Run off reduction criteria/Green Infrastructure requirements are difficult to comprehend	Oct 23, 2012 9:19 AM
162	As a professional the biggest issue that I see in local municipalities is the lack of maintenance for existing practices and the hesitancy for the municipality to utilize/organize available resources (since there isn't really much budget to expand the local programs) to increase maintenance for existing and future new practices. Getting municipalities to organize volunteer groups such as scouting programs, schools, environmental organizations, etc. to commit to helping regularly maintain these facilities would be a way to limit cost and expand simple maintenance tasks, but the municipalities seem hesitant to get involved in this process (or working with other municipalities on maintenance/new projects). Some municipalities even have trouble working with different divisions of their own municipality (for example, if the transportation and environmental departments are seperate- getting them on the same page to utilize road upgrades for both needs).	Oct 23, 2012 9:19 AM
163	Non-Structural BMP requirements are often vague and open to interperatation, even though these can be some of the most effective at lowering pollutant discharges. As a private sector employee cost is always a barrier; stricter regulations could help justify costs of more expensive BMP's to clients.	Oct 23, 2012 9:16 AM
164	Municipalities don't have a mechanism to pay for new stormwater management projects, certainly don't have the budget to maintain them and often don't know what it is that the PA DEP is requiring them to do.	Oct 23, 2012 9:07 AM
165	As a Virginia local government, we have to implement the Virginia permitting system and integrate our local program with it.	Oct 23, 2012 9:07 AM
166	Lack of dedicated funding stream for maintenance and water quality projects as well as lack of clear administrative guidance from State of VA on new regs.	Oct 23, 2012 9:07 AM
167	Too often review agencies are not specific in criteria, and the rules are often too generic to allow for proper interpretation or implementation.	Oct 23, 2012 9:06 AM
168	will be designing and submitting measures for approval that local gov will not be up to speed to approve	Oct 23, 2012 9:02 AM
169	Consensus and cooperation at local level.	Oct 23, 2012 8:58 AM
170	Time spent maintaining green roofs (always more than you think or charged for but has to be done) and review process (never comfortable, even though it could be)	Oct 23, 2012 8:57 AM
171	Communication to localities in the Bay TMDL/WIP are less than adequate, at	Oct 23, 2012 8:55 AM

**Q10. Briefly describe the nature of the barrier (for your highest ratings)**

best. Additionally, the unclear message from the EPA & state have resulted in a lack of confidence within localities and stakeholders that efforts will adequately meet goals within expected timeframes.

172	Short time frame for Bay TMDL, during an economic recession Delayed issuance of new state MS4 permits Lack of funding to implement compliance goals for TMDL and permits	Oct 23, 2012 8:54 AM
173	Seemily constant changes in regulations, the actual cost at the local level for implimentation of the program. Cost of tracking, documenting and inspecting facilities. We just don't have the staff to do all of this.	Oct 23, 2012 8:53 AM
174	I'm not sure I understand the use of the word barrier - the issues I'm facing include balancing new MS4 permit requirements for TMDLs with maintaining an aging infrastructure and limited funding	Oct 23, 2012 8:53 AM
175	No continuity of interpretations of regulations from jurisdiction to jurisdiction	Oct 23, 2012 8:52 AM
176	Budget restraint to effectively maintain.	Oct 23, 2012 8:50 AM
177	Understanding new permit language and how it can practically happen.	Oct 23, 2012 8:49 AM
178	Our locality is about to become a MS-4 and have to deal with the TMDL regulations. Counsel needs regs for TMDL and MS-4 set in stone an required before money is allocated to fund programs.	Oct 23, 2012 8:48 AM
179	Permits and compliance, take place after design, cost estimate and County level approval. Permit requirements can change all of the pre-planning.	Oct 23, 2012 8:48 AM
180	Time, the schedule to complete the program implementation is aggressive, to say the least.	Oct 23, 2012 8:47 AM
181	Unfunded mandates to municipal clients, coupled with lack of options for municipal clients to generate revenue for compliance	Oct 23, 2012 8:47 AM
182	General lack of maintenance for stormwater facilities. Municipalities especially do not have the funds to properly maintain their practices. Private owners are often better.	Oct 23, 2012 8:44 AM
183	Inconsistent application of requirements.	Oct 23, 2012 8:44 AM
184	New VA SWM regulations and lack of clear guidance from DCR. Conflicting reports and information.	Oct 23, 2012 8:43 AM
185	cost to the public	Oct 23, 2012 8:42 AM
186	Nature of the barrier is funding and financial resources for local municipalities to implement new stormwater regs.	Oct 23, 2012 8:41 AM





**Q11. Which of the following services would you most likely use in the future?  
Please select as appropriate.**

1	Mandatory requirement to hire trained Engineering Professionals at Local and State agencies	Dec 17, 2012 3:39 PM
2	I would prefer single day stormwater conferences on specific issues so a designer could pick and chose which conference to attend, rather than multi-day conferences where you have to stay the night so you don't miss that one item on Day 2.	Nov 28, 2012 9:09 AM
3	The willingness of infrastructure owners to pay for efficient effort to release water as clean as the rain it once was.	Nov 28, 2012 8:36 AM
4	again, cost - for myself and rural water association, if I do not receive grant funds	Nov 28, 2012 6:36 AM
5	reliance on direction from Town Engineer	Nov 9, 2012 12:21 PM
6	More on stormwater retrofit selection and design practices.	Oct 30, 2012 3:56 PM
7	Statewide conferences	Oct 26, 2012 8:07 PM
8	single-day statewide stormwater conference?	Oct 24, 2012 12:46 PM
9	accurate information on cost and efficiency of stormwater practices	Oct 24, 2012 6:56 AM
10	As a retired professional..I have limited time to devote to this..so I probably would not go out of my way to attend conferences, etc	Oct 23, 2012 1:57 PM
11	None	Oct 23, 2012 12:10 PM
12	Hands on training for BMP installation.	Oct 23, 2012 10:48 AM
13	sample design solutions that can be modified to fit city/urban design situations.	Oct 23, 2012 10:04 AM
14	Due to budget limitts, many training and stormwater conferences are out of reach; no travel expences, no traing budgets = no stormwater training	Oct 23, 2012 9:29 AM
15	Tools to deal with various TMDLs - Ches Bay, bacteria, PCBs, etc	Oct 23, 2012 8:53 AM
16	Lobbying support to decrease unfunded mandates to municipal clients, and/or options for municipal clients to generate revenue for compliance	Oct 23, 2012 8:47 AM



**Q12. Which of the following training programs would you most likely use in the future?  
Please select as appropriate.**

1	Introduction of ecological processes into design and monitoring of SW controls	Nov 28, 2012 10:09 AM
2	have attended a week-long introductory course at CWP in Maryland, 9 years ago	Nov 28, 2012 6:36 AM
3	training oriented webcasts	Nov 27, 2012 4:26 PM
4	Trainings seem to be overdone. What we need are consistent application of the new stormwater regulations.	Nov 20, 2012 9:29 AM
5	I'm not in your area	Nov 7, 2012 1:05 PM
6	Stormwater retrofit selection, design, installation and maintenance.	Oct 30, 2012 3:56 PM
7	Train the regulators: how to build consensus and support, educate and inform, compromise and negotiate especially in the early development/transition stages of a the local program authorities.	Oct 26, 2012 12:52 PM
8	Anything that can be accessed remotely would be good for us.	Oct 25, 2012 10:08 AM
9	networking with decision makers to learn more in a supportive setting is good	Oct 25, 2012 8:21 AM
10	Emphasis should be on repealing the Chesapeake Bay initiative a creating a flexible plan that is tailored for each region. Education on how to lobby Congress to get this program scrapped	Oct 24, 2012 11:16 AM
11	None	Oct 23, 2012 12:10 PM
12	Training and certification of contractors for BMP maintenance. What we really need is guidelines and/or enforcement on who is responsible for maintaining BMPs and then enforcement of the entity responsible for doing inspections and notifying the BMP owner that maintenance and/or repairs or needed. We put emphasis on retrofits and LID but not at all on maintaining existing BMPs.	Oct 23, 2012 10:15 AM
13	We do work in the Bay catchment, but we are outside the Bay	Oct 23, 2012 9:23 AM
14	All of these would useful. But in the stage of learning that most PA municipalities are in the basics, such as LID Maintenance, installation and maintenance are crucial.	Oct 23, 2012 8:51 AM

**Q13. Rank the webcast topics you would be most interested in watching?  
Please select as appropriate.**

1	things like green roofs and floating wetlands are not worth training on. They are rarely implemented due to lack of financial feasibility.	Nov 28, 2012 9:21 AM
2	submerged gravel wetlands	Nov 28, 2012 8:57 AM
3	Recognition of pollutant accumulation and disposal management under GI implemented plans.	Nov 28, 2012 8:36 AM
4	How about something related to the use of manufactured stormwater treatment systems? These are important tools that continued to be ignored across the bay watershed. There appears to be a strong bias against their use; even in retrofit applications.	Nov 20, 2012 9:29 AM
5	Stormwater Management for Transport Projects	Nov 5, 2012 4:39 PM
6	MS4 permits	Oct 24, 2012 10:53 AM
7	efficiency of stormwater practices	Oct 24, 2012 6:56 AM
8	See comment for question 12.	Oct 23, 2012 10:15 AM
9	Donot watch webcasts	Oct 23, 2012 9:23 AM
10	Inspection techniques, tracking software	Oct 23, 2012 8:53 AM

**Q14. If CSN were to offer the following opportunities, which would you be most likely to engage in?**

1	Some items don't apply to me, and are checked the lowest	Nov 28, 2012 7:26 AM
2	I'm not in your area	Nov 7, 2012 1:05 PM
3	Whatever is geographically possible.	Oct 25, 2012 10:08 AM
4	Joining a activist group to lobby for the repeal of the Bay Initiative	Oct 24, 2012 11:16 AM
5	This is a totally new program for us in which we have no experience so feel limited in what we could offer to other in any of these areas of expertise	Oct 23, 2012 3:07 PM
6	I currently am involved with a total of six non- profits. My primary goal is to influence these organization to better coordinate their efforts. I really don't have time to get nay more envolved.	Oct 23, 2012 1:57 PM
7	None	Oct 23, 2012 12:10 PM
8	Share publications	Oct 23, 2012 9:23 AM



**Q15. Please feel free to offer any additional comments or suggestions**

1	Stormwater field will improve when review agencies at the Local and State level will hire Professionals who are trained Engineers.	Dec 17, 2012 3:39 PM
2	I'd like to do more, but the reality is that we are short staffed and there is very little money for trainings and travel.	Nov 28, 2012 2:15 PM
3	T	Nov 28, 2012 9:49 AM
4	Call me the un-Civil Civil Engineer. I don't want to 'mingle' with others. My time is to valuable.	Nov 28, 2012 7:37 AM
5	Prefer to attend conferences during the work week; I try to avoid weekend seminars and networking at all costs.	Nov 27, 2012 8:35 PM
6	Woot! Woot!	Nov 27, 2012 4:48 PM
7	nothing	Nov 27, 2012 4:30 PM
8	I'm not in your area and you may want to ignore this whole survey. I'm always on the look out for any information that will help us here at the Lake of the Ozarks. LOWA is a not for profit watershed alliance presently implementing a major 319 grant. Our focus is working with individual property owners to reduce stormwater runoff. We call it The LOWA LILs Project where LILs is Low Impact Landscapes. Our focus is retrofits as opposed to new construction. <a href="http://www.sosLOWA.org">www.sosLOWA.org</a> thanks.	Nov 7, 2012 1:05 PM
9	Folks, our budget is such that if it's not free or nearly free, we cannot attend. Webinars are a great tool, but here again cost is a barrier. Love having access to a library of past webinars.	Nov 6, 2012 10:18 AM
10	Most of the time my responses were intended for myself only, but In some cases I'm responding to things I think others in my firm may be able to participate in even if I'm not likely myself (ie, the webcast topics or training more relevant for designers and/or other engineering staff).	Oct 29, 2012 3:17 PM
11	I work for the state of PA. I am interested in working/volunteering for the CSN or related agencies. Is there anything that you can suggest to get me started in who to contact or any events that I could attend for no cost to get involved? This survey was very thourough, but I don't design or necessarily work with stormwater at this point in my carrer. Sorry I couldn't be of more help. Nancy Cisar	Oct 26, 2012 2:37 PM
12	If the bay cleanup deadline date is to remain 2025, government funding of needed improvements must be provided as soon as possible or mandatory stormwater utility legislation passed. There is no other way to meet the TMDL requirements. If EPA and MDE are serious about 2025, why is nothing happening regarding funding?	Oct 26, 2012 1:09 PM
13	The hardline regulatory approach is hurting the art and science of good stormwater management. The cost of getting a plan approved is going to be an 'incentive' to try and beat the program. New proprietary practices are not getting approved because of the cost to test and submit for state approval. Those products that do get approved will be extraordinarily expensive, a cost the	Oct 26, 2012 12:52 PM



**Q15. Please feel free to offer any additional comments or suggestions**

property owner will have to bear..All these things ultimately hurt the effort. Today, more people than ever are willing to help protect the environment. When government requirements spend more money on 'words on paper' than actually protecting the environment, people stop supporting.

- |    |  |                       |
|----|--|-----------------------|
| 14 | Repair of streams, stream ways, and urbanized drainage ways is optimal to restoring the Chesapeake Bay. Utility funds should have 60% of total dedicated towards stream investigation and restoration Maintenance of existing SWM facilities is primary to achieving water quality goals.40% of utility fund should be for inspection and enforcement! Simple huh ?  | Oct 26, 2012 8:52 AM  |
| 15 | I realize your emphasis is on practitioners and technicians in the Chesapeake Bay area. But if there are folks in the Hinterlands able to help, please count us in too.  | Oct 25, 2012 10:08 AM |
| 16 | In the above you classified an "expert panel." Expert is a strong word, thus I don't believe I am an expert. I would serve on a panel, but to say expert panel I believe that wouldn't be the best classification of some. I would imagine there are many "experts" in the field, I just don't consider myself one.  | Oct 25, 2012 9:46 AM  |
| 17 | thanks local grassroots initiatives need more money and support! This is our effort: <a href="http://www.friendsofbrookpark.org/brook-park/brook-daylighting/">http://www.friendsofbrookpark.org/brook-park/brook-daylighting/</a> The Brook Restoration project includes planning a wetland system in the Mott Haven neighborhood of the South Bronx with native plantings to support fauna, similar to the natural brook that ran through the park in the late 1800's. Rainwater harvesting from adjacent buildings will be divert 1,000,000 gallons of water a year from the combined-sewer to an above ground cistern for irrigation, and below-grade cisterns used to maintain water levels in the wetland. A comprehensive ecosystem assessment will be used to determine native plantings and diverse species habitat. Community involvement and stewardship will ensure the success of the project over the long-term. Our South Bronx community needs and wants more green and aquatic open space to provide a more natural landscape. The Friends of Brook Park with the wider local community has had many discussions, meetings, and design sessions, as well as made presentations to solicit input and involvement in a grass-roots vision for the redesign of the asphalt portion of the park, and an exhibition at the local Mott Haven branch of the New York Public Library. This has been facilitated through a planning and design grant with the Mid-Atlantic Arts Foundation. The project will improve our community with this environmental resource unique to the area, and further link upland communities with the surrounding waterways. Brook Restoration Informational Handout. Click on the image for a larger version! The study phase of this exciting effort is funded through the National Oceanic and Atmospheric Administration (NOAA) South Bronx Waterfront Partnership funded by Congressman José E. Serrano and managed by the Wildlife Conservation Society (WCS). We welcome your support and ideas as to how to obtain the resources necessary to implement. Our Restorations Project Manager Aaron Petersohn is guiding this unique effort and our partnership with The Gaia Institute and others. Email us FoBP team onsite with David Bragdon, head of New York City's Office of Long-Term Planning and Sustainability <a href="#">CLICK HERE</a> to read more with lots of photos in this excellent piece entitled "Rewiring the City" in The New York Moon by NICK JURAVICH with photographs by BLAINE DAVIS. Selected background information: From: History of the Bronx Borough City of New York, compiled for the North Side News by Randall Comfort, A.B., | Oct 25, 2012 8:21 AM  |

**Q15. Please feel free to offer any additional comments or suggestions**

LL.B. (member of the New York Historical Society) with the collaboration of Charles D. Steurer and Charles A.D. Meyerhoff, North Side News Press, New York, 1906 Pg. 3 Go where you will, you will find the old Indian names still in use. As we have seen, Muscoota was their name for the Harlem River-perhaps on account of the number of "mosquitoes" they found there, as the name signified "the river of the grass lands." The Bronx River they termed "Aquahung," while the Hudson was in their language "Shatemuck." Mill Brook, whose waters once flowed, clear and crystal, through the Webster and Brook Avenues valley, was known by them as "Acrahung" and Spuyten Duyvil Creek "Papihinamen." This gave rise to the "Island Papihinamen," lying to the north of old King's Bridge and east of Tippet's Brook, which was in truth an island when the tide was high. Pg.32 At what is now 160th Street, Boston Road made a sharp turn to the right, to cross a little brook, whose waters, once clear and crystal, babbled merrily along over their pebbly bed under a double line of stately weeping willows. While this sounds far from a description of what I remember Mill Brook to be, yet it is strictly correct. Many wonder where the old stream received its name. On its banks in early days once stood a large sawmill, and we find, back in the old histories, that it was styled "The Saw Mill Brook." Near Tremont, not far from the same Mill Brook, is said to have been the home of the celebrated Charlotte Temple. Only a pile of stones served to designate the site. "Alas, poor Charlotte! The tears that have been shed over thy tragic fate would easily make another such rivulet!"

18	only comment is that i was a bit confused by highest being 1 and lowest being 5. hope others noticed that, too!	Oct 24, 2012 12:46 PM
19	The Bay Initiative as it is being administered relative to MS4's does not allow for any flexibility, Areas where the "urbanized area" is relatively small and where the quality of the waters leaving the "urbanized area" is fairly good are being treated the same as the very large urbanized areas where the stormwater is severely impacted. The one size fits all approach results in high costs with little impact in the areas where the stormwater runoff is only slightly impacted. Also, without any state or federal monies being applied, it is a huge burden on local governments.	Oct 24, 2012 11:16 AM
20	The Chesapeake Stormwater Network has been a valuable resource as we locally track and monitor stormwater regulation changes in Virginia and in making available in easy to find locations research/studies that support these changes.	Oct 24, 2012 11:10 AM
21	very interested in promoting regenerative stormwater conveyance in region	Oct 24, 2012 9:36 AM
22	Low ratings on some of these are not b/c i wouldnt want to particpate, but I dont think they apply to me, such as share your research, or enter an LID design competition.	Oct 23, 2012 3:14 PM
23	Coordination between the Conservation District and the local municipal engineers is critical. These efforts should be sharred with local conservation organizations for their input and assistance. Thanks for the opportunity to particpate ..Bob Donaldson	Oct 23, 2012 1:57 PM
24	as a designer of residential and commerical projects, i am more interested in obtaining the best possible info on reasonable designs then in attempting my own	Oct 23, 2012 12:14 PM

**Q15. Please feel free to offer any additional comments or suggestions**

research. i am looking for proven accepted answers to swm design as well as new and innovative designs.

25	I feel that it is paramount that the topics & material that are available need to be made as approachable as possible for all levels of participation! Thanks for your dedication and hard work. Jason	Oct 23, 2012 11:27 AM
26	Great website, great resources, and great staff. Keep up the good work!!!!	Oct 23, 2012 11:23 AM
27	No additional comments	Oct 23, 2012 11:10 AM
28	None at this time.	Oct 23, 2012 10:33 AM
29	I feel as a small business owner of a stormwater and ecological landscape construction company that networking between clients, engineers and construction companies in this specific field would greatly help.	Oct 23, 2012 10:19 AM
30	Hmm - seems like you guys are trying to do/improve upon the AWSPs at CWP. Why not join together? I feel like all of these efforts are so diluted, it makes it hard for any particular one to be useful. Just my \$0.02	Oct 23, 2012 9:58 AM
31	Looking at Stormwater practices from a floodplain-wide perspective that incorporates and coordinates many practices in an overall system at the local stream basin level?	Oct 23, 2012 9:25 AM
32	Need for more emphasis on public policy, environmental restoration, and citizen involvement. Programs donot work without an engaged stakeholder community, but yet little or no attention and resources is devoted to that aspect of solving the problem.	Oct 23, 2012 9:23 AM
33	Technical training on the new VA regulations would be tremendously helpful; all outreach sessions so far have been focused on the administrative framework of the program which only needs tweaking vs the technical criteria that are vastly different.	Oct 23, 2012 9:07 AM
34	We are very engaged with the Hampton Roads PDC and VAMSA - these two organizations fulfill alot of the above needs for us. I do appreciate the CSN technical bulletins very much - very helpful and thought provoking. More of these would be great.	Oct 23, 2012 8:53 AM
35	Great work. Keep it coming!	Oct 23, 2012 8:49 AM