



Town of Ashland

M A S S A C H U S E T T S

Stormwater Advisory Committee

Agenda

Tuesday, January 9, 2018

7:00 PM

Second Floor Meeting Room

Town Hall, 101 Main St, Ashland, MA 01721

1. Review and approve minutes from November 7 meeting.
2. Discussion on recommended path forward for BOS and review of logistics of said path
3. Review of presentations for the BOS
4. Ex-Officio Reports
5. Outreach Events
 - a. Spring Town meeting Presentation – draft to Town Manager
 - b. Enviroscope presentation at library—January 27, 2018 from 1:00 p.m – 4:00 p.m.
 - c. Other
6. Administrative Items
 - a. Review of Committee Charge
7. Summarization of meeting and adjournment.
8. Next Steps

This Agenda is subject to change

In accordance with Section 20 of the Massachusetts Open Meeting Law, MGL 30A §§18-25 (NOTICE, REMOTE PARTICIPATION, PUBLIC PARTICIPATION, CERTIFICATION) all meetings of the Water Policy Committee are open to the public. Per subsection (f), "no person shall address a meeting of a public body without permission of the chair, and all persons shall, at the request of the chair, be silent. No person shall disrupt the proceedings of a meeting of a public body". The public is encouraged to bring concerns in writing to help document the public participation

Ashland NPDES MS4 COMPLIANCE COST PROJECTION
 Draft
 ROLLUP SUMMARY



NPDES MS4 PERMIT COMPONENT	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		AVERAGE ANNUAL COST
	Hours	Labor Cost	Hours	Labor Cost	Hours	Labor Cost	Hours	Labor Cost	Hours	Labor Cost	
Administration	898	\$ 99,718	674	\$ 71,049	674	\$ 67,255	674	\$ 63,460	674	\$ 59,665	\$ 73,886
Regulation/Enforcement	231	\$ 25,665	231	\$ 24,363	223	\$ 22,264	223	\$ 21,008	223	\$ 19,751	\$ 22,610
Engineering & Master Planning	1223	\$ 135,847	987	\$ 104,081	173	\$ 17,263	293	\$ 27,587	113	\$ 10,003	\$ 75,756
Operations and Maintenance	593	\$ 65,874	537	\$ 56,631	497	\$ 49,615	787	\$ 74,120	527	\$ 46,671	\$ 60,339
Monitoring	262	\$ 29,138	279	\$ 29,431	500	\$ 49,859	500	\$ 47,046	500	\$ 44,233	\$ 47,526
SUBTOTALS (no inflation)	3208	\$ 356,241	2709	\$ 285,556	2067	\$ 206,255	2477	\$ 233,220	2037	\$ 180,324	\$ 180,117
Including 2.5% annual inflation				\$ 292,695		\$ 216,697		\$ 11,030		\$ 10,998	\$ 10,498
Total, Labor & Expenses		\$ 410,739		\$ 346,505		\$ 227,726		\$ 262,997		\$ 210,632	\$ 11,588

Revision Date: 6/6/2017

Assumptions / Exclusions
 Existing level of O+M staff time for existing non-compliance related drainage repair / maintenance excluded
 Baseline O+M not included. Surcharge for compliance included (assumes 50% increase in street sweeping and catch basin cleaning).
 Capital Costs excluded
 Inflation rate 2.50%

Ashland: NPDES MSA COMPLIANCE COST PROJECTION
 Draft
 ROLLUP SUMMARY



NPDES MSA PERMIT COMPONENT	YEAR 1		YEAR 1		YEAR 1		YEAR 2		YEAR 2		YEAR 3		YEAR 3		YEAR 4		YEAR 4		YEAR 5		YEAR 5			
	Hours	Labor Cost	Hours	Labor Cost	Non-Labor Expenses	Hours	Labor Cost	Hours	Labor Cost	Non-Labor Expenses	Hours	Labor Cost	Hours	Labor Cost	Non-Labor Expenses	Hours	Labor Cost	Hours	Labor Cost	Non-Labor Expenses	Hours	Labor Cost	Non-Labor Expenses	
NOTICE OF INTENT, ENDANGERED SPECIES & HISTORIC DOCUMENTATION	0	\$	0	\$	1,000	0	\$	0	\$	-	0	\$	0	\$	-	0	\$	0	\$	0	\$	0	\$	
STORMWATER MANAGEMENT PLAN	230	\$ 25,540	30	\$ 3,162	-	30	\$ 3,162	30	\$ 3,162	-	30	\$ 3,162	30	\$ 3,162	-	30	\$ 3,162	30	\$ 3,162	-	30	\$ 3,162	-	
TMDL COMPLIANCE * (NO CAPITAL COST INCLUDED)	379	\$ 42,086	419	\$ 44,169	1,457	379	\$ 37,818	419	\$ 44,169	1,457	379	\$ 37,818	419	\$ 44,169	1,457	379	\$ 37,818	419	\$ 44,169	1,457	379	\$ 37,818	419	\$ 44,169
PUBLIC ED / OUTREACH	78	\$ 8,661	54	\$ 5,692	1,457	54	\$ 5,398	54	\$ 5,692	1,457	54	\$ 5,398	54	\$ 5,692	1,457	54	\$ 5,398	54	\$ 5,692	1,457	54	\$ 5,398	54	\$ 5,692
ILLCIT DISCHARGE DETECTION & ELIMINATION	1330	\$ 147,691	1147	\$ 120,891	49,585	620	\$ 61,845	620	\$ 58,356	7,585	620	\$ 58,356	620	\$ 58,356	7,585	620	\$ 58,356	620	\$ 58,356	7,585	620	\$ 58,356	7,585	
CONSTRUCTION	112	\$ 12,437	112	\$ 11,806	-	104	\$ 10,378	104	\$ 9,792	-	104	\$ 9,792	104	\$ 9,206	-	104	\$ 9,206	104	\$ 9,206	-	104	\$ 9,206	-	
NEW / REDEVELOP / POST CONSTRUCTION	164	\$ 18,211	128	\$ 13,493	-	164	\$ 16,365	128	\$ 12,595	-	164	\$ 16,365	128	\$ 12,595	-	164	\$ 16,365	128	\$ 12,595	-	164	\$ 16,365	-	
MUNICIPAL GOOD HOUSEKEEPING	325	\$ 36,097	229	\$ 24,147	-	325	\$ 36,097	229	\$ 24,147	-	325	\$ 36,097	229	\$ 24,147	-	325	\$ 36,097	229	\$ 24,147	-	325	\$ 36,097	-	
PROGRAM EVALUATION / REPORTING / RECORDKEEPING	590	\$ 65,516	590	\$ 62,195	-	590	\$ 58,873	590	\$ 55,551	-	590	\$ 55,551	590	\$ 52,229	-	590	\$ 52,229	590	\$ 52,229	-	590	\$ 52,229	-	
SUBTOTALS (no inflation)	3208	\$ 356,241	2709	\$ 285,556	52,498	2067	\$ 206,255	2037	\$ 180,324	10,498	2477	\$ 233,220	2037	\$ 180,324	10,498	2037	\$ 180,324	2037	\$ 180,324	10,498	2037	\$ 180,324	10,498	
Including 2.5% annual inflation																								
Total Labor & Expenses		\$ 410,739		\$ 346,505	\$ 53,811		\$ 227,726		\$ 262,997	\$ 11,030		\$ 210,632		\$ 199,044	\$ 11,844		\$ 199,044		\$ 210,632					

Revision Date: 6/6/2017

Assumptions / Exclusions
 Existing level of O+M staff time for existing non-compliance related drainage repair / maintenance excluded
 Baseline O+M not included. Surcharge for compliance included (assumes 50% increase in street sweeping and catch basin cleaning).
 Capital Costs excluded
 Inflation rate 2.50%

Stormwater Advisory Committee
Suggested motions 1/9/18

Given all that is happening I thought it might be helpful to draft a set of suggested motions for SWAC to vote on.

1. E-fund recommendation

Motion: After due consideration of the need for Stormwater funding and the source options for providing these funds, the Stormwater Advisory Committee hereby recommends that the Town of Ashland implement a Stormwater Enterprise Fund.

2. E-fund implementation timing

Motion: After due consideration of the implementation timing options, Option 1. a slow 5 year implementation, Option 2. A faster 2 year implementation, and Option 3. Immediate Implementation commencing with the start of the next fiscal year, the Stormwater Advisory Committee recommends that the Town of Ashland ...

3. Immediate funding of a flyover

Motion: Recognizing that the town's GIS system data is used for many purposes, and recognizing that the GIS system needs to be refreshed with more current data, and recognizing that in addition to current GIS data that a calculation of impervious area per parcel might be a preferred basis for a Stormwater fee structure, the Stormwater Advisory Committee hereby requests that the town contract with a WSP to provide a digital orthophotographic flyover as soon as possible.

4. Recommendation that the town address its GIS specialist needs

Motion: Recognizing that the town staff does not currently have the capacity to process digital flyover data and produce the required surface map and other data, and given that the town's use of a GIS volunteer is ending, the Stormwater Advisory Committee recommends that the hire a GIS specialist to provide GIS services to the Stormwater Enterprise and other committees in town. We further recommend that the town acquire an ArcGIS Spatial Analysis tool license.

5. Recommended E-fund budget and fee rate. Should the committee see fit to recommend implementation of a Stormwater Enterprise Fund we should put forth a recommended budget and initial flat rate fee structure.
Motion: The Stormwater advisory committee hereby recommends that the following budget be adopted to provide for Stormwater activities ...
6. SWAC enlarged role
Motion: Given that our initial mandate was limited to a funding mechanism and rate structure and that we have nearly completed that mission, I hereby move that we recommend the BoS to expand our mission in accordance with the following...
7. That Dale be present to the BoS on the 17th
Motion: The Stormwater Advisory Committee authorizes Dale M. to present our recommendations to the BoS.
8. Approval of Dale's presentation
Motion: The Stormwater Advisory Committee approves the draft presentation as amended to be given to the BoS and presented on January 17 BoS meeting.



Where We Are Where We Could Go

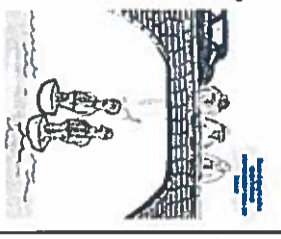


Dale Malabarba, Ph.D.
Chair, Stormwater Advisory Committee



Presentation Outline

- Stormwater - Why Do We Care?
- What You Asked Us To Do
- What We've Accomplished
- Recommendations
- Summary



Stormwater Advisory Committee
Update to the Board Of Selectmen

Stormwater - Why do we care?

Stormwater Advisory Committee
What You Asked Us To Do



The primary objective of the Stormwater Advisory Committee is to determine the best way for the town of Ashland to fund its compliance with the EPA's Draft Massachusetts Small MS4 General Permit. This may involve creating an enterprise fund – or stormwater utility to raise the funds necessary to comply with the permit terms.

The Committee's Take

- This charge is too narrow and will not likely produce the intended outcome
- Broader and more explicit Terms of Reference (TOR) are required to produce a more viable set of options for the Board's consideration
- More on this in a bit, however, we'll move to accomplishments first.

Stormwater Advisory Committee
What We've Accomplished



Major Accomplishment

✓ Completed BOS task "to determine the best way for the town of Ashland to fund its compliance with the EPA's Draft Massachusetts Small MS4 General Permit."

□ Reviewed and assessed funding alternatives (reference Bob's paper) and recommend the Board adopt the Enterprise Fund Option

Rationale:

1. Stormwater costs transparent, explicitly addressed and not subject to other non-stormwater priorities
2. Demonstrates commitment to regulators
3. Consistent with other MA town's approach and recommended by The Nature Conservancy as preferred alternative

Other Considerations:

1. EPA and MA DEP requirements in flux
2. Revenue requirements ill-defined
3. Insufficient data to develop an acceptable billing algorithm
4. Without revised TOR, the Committee is unnecessary



Stormwater Advisory Committee
What We've Accomplished



Other Accomplishments

✓ Reviewed Kleinfelder engineering services contract deliverables to better understand the MS4 permit requirements and implications to include:

- Gap Analysis - summary of Ashland's status with respect to state permit requirements
- Notice of Intent submission for the MS4 Permit

✓ Reviewed the WSP proposal for providing digital orthophotography and determined it was comprehensive, reasonably priced and required

✓ Investigated ArcGIS software capabilities

- ArcGIS provides a mapping and analytics platform for spatial reasoning to explore data and ArcGIS location based widgets
- ArcGIS required to give a personal/enterprise surface map of the town from high resolution independent imagery data provided by a WSP spin off

✓ Explored in-house experience with ArcGIS and determined

- In-house staff knowledge to produce the required maps
- Have not licensed the ArcGIS Spatial Analyst tool, where a single user license costs \$2500





**Biomimicry
Advisory
Committee**

And More



- ✓ Contacted The Nature Conservancy's (TNC) MA Chapter regarding public/private partnership opportunities and learned:
 - TNC's Naturalist is using social impact capital to fund projects that meet a municipal need and have environmental benefits, i.e., a project funding green infrastructure construction in DC using a credit system
 - Naturalist is the conservation revving unit of TNC that creates and executes deals in partnership with government to provide returns for investors
 - They are willing to explore opportunities with us
- ✓ Coordinated a January 27, 2018 presentation at the library of an Entomoscopia® portable model, courtesy of MA DEP that dramatically demonstrates water pollution concepts and their prevention
- ✓ Arranged for WACA to broadcast the presentation
- ✓ Conducted public outreach at the Farmer's Market through posters and discussion



**Stormwater
Advisory
Committee**

Recommendations



- ✓ The Board adopt the Enterprise Fund approach to ensure compliance with the requirements of the H54 permit.
- ✓ The Board amend and expand the Committee's Terms of Reference to include the following:
 1. Develop a set of implementation strategies where each includes a description of the work, a timeline, and a quarterly risk/reward assessment.
 2. Identify and justify a preferred implementation strategy.
 3. Draft a final report describing this effort.
- ✓ The Board allow the size of the Committee to be reduced from 7 members to 5
 1. To facilitate achieving a quorum to conduct meetings
 2. To acknowledge that recruiting further members is not necessary and distracting



**Stormwater
Advisory
Committee**

Summary



- ✓ The Committee has accomplished much since beginning its efforts this summer
- ✓ The Committee has a broad, complementary skill set that contributes to its strategic thinking and tactical results
- ✓ All members participate, contribute and have agreed to accept the greater responsibilities that come with our proposal to expand the Committee's terms of reference
- ✓ We need your continued support to empower and stabilize the work of the Committee and the town require to ensure the requirements of the H54 permit are satisfied



→ Rob will do new slides w/ notations



The Stormwater Folks



The Committee

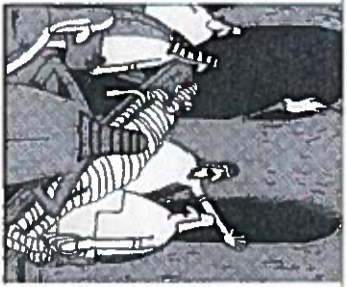
- Dale Malabarba
- Rob St. Germain
- Jeannine Walker
- Mary Mortensen
- Meghan Selby



Town Staff Support

- Maeghan Dos Anjos
- Rajitha Purumella

Questions / Comments





Ashland, Massachusetts Stormwater Advisory Committee

The Committee has reviewed the charge presented to us by the Board of Selectmen. After much discussion and deliberation, the Committee has determined this charge to be too narrow and not likely to produce the outcome we perceive the Board intended. Consequently, the Committee has drafted a revised charge or Terms of Reference (TOR) for the Board's consideration.

Specifically, we believe the Board requires more than a recommended way for the town to fund compliance with the MS4 permit requirements. The Committee believes it can best serve the Board if it not only provides a recommended funding mechanism, but also identifies and defines a set of alternative implementation strategies to instantiate the recommended funding mechanism.

This broader remit allows the Committee to identify and document critical underlying assumptions for the Board's consideration that are inherent in each of the various implementation strategies. These assumptions will impact both the cost and revenue streams and must be explicitly considered. The broader remit also allows the Committee to deliver to the Board the product we believe they require. Namely, a set of implementation strategies where each includes specific underlying assumptions, a revenue-producing formula based on them, and a qualitative risk/reward assessment.

What follows is the original charge and then the revised TOR for the Board's' comments, consideration and approval.

Original Charge: The primary objective of the Stormwater Advisory Committee is to determine the best way for the town of Ashland to fund its compliance with the EPA's Draft Massachusetts Small MS4 General Permit. This may involve creating an enterprise fund – or stormwater utility – to raise the funds necessary to comply with the permit terms.

Stormwater Advisory Committee Terms of Reference (TOR)

- Determine the best way for the town of Ashland to fund its compliance with the EPA's Draft Massachusetts Small MS4 General Permit
- Define a set of implementation strategies where each includes specific underlying assumptions, a revenue-producing formula based on them, and a qualitative risk/reward assessment
- Identify and justify a preferred implementation strategy
- Draft a final report describing this effort

Revenue raised is for the town of Ashland.

Stormwater Enterprise Fund Implementation Steps, Preliminary Timeline, Budget and Fees

Stormwater
Advisory
Committee





Stormwater E-fund Timetable



- ❖ The Town Manager is suggesting immediate implementation of the Stormwater Enterprise Fund to fund a flyover and flyover analysis
 - ❖ Logistically this is very do-able → See Timetable
 - ❖ Problem: very little public awareness
 - ❖ Key Dates

- Jan 17 - SWAC presentation to BOS
- Mar 8 - Budget and Rates approved by BOS
- Apr ? - Town Manager's Forum
- May ? - Vote E-fund at Town Meeting
- July 1 - Implement E-fund accounting
- Aug ? - First Stormwater billing with water bills



Preliminary Budget & Fee



❖ Anticipated First Year Stormwater Expense

➤ Flyover	➤ \$ 20,000
➤ Flyover Analysis	➤ \$ 120,000
➤ Kleinfelder support	➤ \$ 50,000
➤ Other Stormwater implementation costs	➤ \$ 20,000
➤ DPW Stormwater allocation	➤ \$ 40,000
❖ Total	➤ <u>\$ 250,000</u>

Handwritten notes:
 MS4 - 31-102K
 sweepings + dog waste } 52K
 catch basin
 Resources: 8,117
 615:

❖ Billing Rate example - Flat Fee per location

➤ $\$250,000 \div 7500 \leq \34 per annum

➤ or \$17 semi-annually



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Other Implementation To-Do's



- Board of Selectmen decisions – Policy and Timing
- Coordinate with Billing provider and Software provider
- Accounting set up by town financial director
- On-line payment set up – Town Treasurer
- Identify ALL payees
- Public Awareness - Public Awareness - Public Awareness



Committee Recommendation



- Slow - Fast - Faster???
- Budget & Fee???
- Flyover Approval Now???
- Town Manager decision on GIS support???
- Public Awareness Campaign???



CURRENT CONSUMPTION		CONSUMPTION HISTORY		USAGE ON METER	
READING DATE	READING	READ TYPE	CONSUMPTION	USAGE ON METER	REMOVED
01/25/2017	653	A	20	0	
10/25/2016	633				
USAGE					
Hundred Cubic Feet: 20					
1 HCF (Hundred Cubic Feet) = 750 Gallons					
A-Automatic Reading Transmitted to City Hall		C-Customer Read		V-Visual Read By City Technician	
E-Estimate		M-Manual Adjusted Read			

RIGHT TO DISPUTE YOUR WATER/SEWER BILL: Please go to www.newtonma.gov for the Application for Water Leak Abatement. While in dispute, owner is still responsible for FULL PAYMENT OF THE BILL by due date to avoid interest charges.

CURRENT CHARGES FOR BILL DATE 01/27/2017	
WATER	\$138.50
SEWER	\$204.00
STORMWATER	\$18.75
LESS ELDERLY DISCOUNT	\$0.00
LESS ELDERLY W DISCOUNT	\$0.00
TOTAL CURRENT CHARGES	\$361.25
PLEASE PAY TOTAL AMOUNT DUE	\$361.25

CONSUMPTION

CONSUMPTION	WATER	SEWER	COMBINED
0 to 10 HCF	\$6.45	\$9.45	\$15.90
11 to 25 HCF	\$7.40	\$10.95	\$18.35
26 to 60 HCF	\$8.50	\$11.75	\$20.25
> 60 HCF	\$10.60	\$13.50	\$24.10

Outdoor Meter Rates \$11.65 per HCF

IMPERVIOUS AREA SQ FOOTAGE

*For Non-Residential Property where Storm Water Impervious Surface Area Rates apply, Please visit www.newtonma.gov for details.

MAILING ADDRESS

ACCOUNT NUMBER [REDACTED]

BILLING DATE 01/27/2017

METER NUMBER [REDACTED]

DUE DATE 02/27/2017

FOR BILLING INQUIRIES, ADDRESS CHANGES AND SALE OF PROPERTY CALL (617) 796-1040

FOR METER REPAIRS CALL (617) 796-1640

FOR PAYMENT QUESTIONS CALL (617) 796-1330

FOR IMPERVIOUS QUESTIONS CALL (617) 796-1661

TERMS: BILLS DUE 30 DAYS FROM BILL DATE.

Past due balances may be subject to interest charges at 6% per annum.

VISIT OUR WEBSITE AT <http://WWW.NEWTONMA.GOV>

BILING ACTIVITY FOR	
PRIOR BALANCE	\$0.00
INTEREST CHARGES	\$0.00
CURRENT CHARGES FOR BILL DATE 01/27/2017	\$361.25
PLEASE PAY TOTAL AMOUNT DUE	\$361.25

WATER/SEWER BILL

CITY OF NEWTON WATER AND SEWER DIVISION, PUBLIC WORKS



BILL NUMBER 670 [REDACTED]

