



City of Harrisonburg Stormwater Advisory Committee

Meeting Minutes

February 4, 2016 5:00 – 7:00 p.m.

Members in attendance: Rob Alexander, Joanna Mott, Dale Chestnut, Eldon Kurtz, Ted Byrd

Staff/Other in attendance: Thanh Dang, Kelley Junco, Tom Hartman, Dan Rublee, John McGehee, Jeff Bradfield

Public Comment

No public comment.

Review Appeals Received

For full staff report refer to meeting agenda packet.

Kelley outlined the situation between Mr. Bradfield and the Public Works department. Mr. Bradfield took what he believed to be the the overall acreage of his lot and converted it to square feet. He then removed the areas he believed should not be charged a stormwater utility fee and came out with a resulting square footage of area he believed he should be charged based upon. Kelley said that the method Mr. Bradfield used is not correct. The City takes aerial imagery and measures the impervious area on each individual parcel. If there are circumstances where parcel lines are shifted or there was an error with the city's measurement of impervious area, Kelley will work to correct those errors with the property owner's input. The overall discrepancy between Mr. Bradfield's final number and the City's final number is 3,925 square feet, equal to 8 billing units or \$84.00 per year. Mr. Bradfield believes that the City's method is inaccurate since his overall property acreage is not properly reflected to start. The City claims that his overall property acreage is irrelevant since the fee is based upon only the impervious acreage owned by Mr. Bradfield, not the overall parcel. The issue was discussed by SWAC members and Mr. Bradfield was further questioned. Rob Alexander expressed that the issue has two parts. First, the process or method used to come to an impervious area square footage and then second, the actual impervious area agreed upon. Tom Hartman said the City never claimed the GIS was survey-grade. There are inaccuracies that are part of the software and the City has had to deal with many of these issues with property owners in the past. Eldon asked if this was the only occurrence where a property owner challenged the calculation method and Kelley said yes. Rob asked if Mr. Bradfield had measured the impervious area on his property and he said no, he didn't know how he could do that without hiring a surveyor. Rob Alexander said that although he felt like the GIS and aerial imagery were the best tools available, it was necessary to gather in field measurements to take the appeal any further. Ultimately SWAC issued Mr. Bradfield an extension on the appeal in order to gather in field measurements, which they said could be done without hiring a surveyor. They offered that Mr. Bradfield could measure the impervious area on his lot with a measuring wheel. . He could then supply the City with an impervious acreage he feels is more accurate. If Mr. Bradfield does not respond to the City by the May 4 SWAC date, the city's proposed adjustments will be made final.

Update on Stormwater Improvement Plan Scoping Project

Timmons Group gave a presentation to SWAC about the overall stormwater improvement plan scoping project. See attachment A for PowerPoint slides. The scoping project will be a planning tool for the development of the overall stormwater improvement plan document. After the presentation, Timmons asked SWAC questions to assist them in building an idea of what is anticipated for the final deliverable of the scoping project. Ted Byrd stated that the project should assume the same level of service as discussed by Council during the development of the stormwater utility fee. Dan Rublee said that we cannot ignore that the public may want to increase its level of service but it is SWAC and staff's responsibility to outline constraints. Rob Alexander said that he hoped the plan would be used as a decision-making tool and could achieve multiple goals. Eldon agreed that the document should outline the best value for the budget that is currently in place. Tom agreed with Rob and said that the plan should layer with the other documents like the Bicycle and Pedestrian Plan, the Transportation Plan, Comprehensive Plan, the Parks and Recreation Master Plan, etc. As far as stakeholders, SWAC agreed that property owners and citizens that are affected by the plan should be involved in the planning process. Information should be solicited from the universities, advocacy groups, builders association, etc. that may be helpful in the document's historical background.

Backyard Chickens Ordinance Recommendation

For text of suggested ordinance amendments see meeting agenda packet. Thanh explained that Planning Commission discussed the backyard chickens ordinance in January. A community member wrote Public Works asking if the city would consider an additional fee towards the stormwater utility fee for those properties that have backyard chickens. She said that Public Works did not recommend an additional fee since the stormwater utility fee is based on impervious surface only and not land use. Thanh then asked SWAC to review language updates suggested by city staff and asked if SWAC had other water quality concerns regarding the ordinance. She added that SWAC was not being asked for their opinion on whether backyard chickens should be allowed in the City or not. Joanna Mott said that a 20 foot requirement from stream tributaries would not stop fecal matter from entering the stream. Rob Alexander agreed and offered that residents over-fertilizing lawns may be more of a concern than the fecal matter of chickens or dogs. SWAC agreed that the stormwater utility fee should not be tied to the ownership of backyard chickens. Following further discussion, SWAC recommended the ordinance changes suggested by city staff be forwarded to Planning Commission.

Staff Updates

US EPA Inspection of MS4 Program

Kelley overviewed the US EPA Inspection of the City of Harrisonburg's MS4 Program. The inspection was a two-day visit in July 2015 where EPA and their consultant reviewed active construction site documentation, post-construction inspections, outfall inspections, and internal documentation. After working to respond to the EPA's report observations, the City of Harrisonburg received a letter from the EPA concluding the inspection with no further action from EPA.

Chesapeake Bay TMDL Action Plan

Kelley said that the Chesapeake Bay TMDL Action Plan was approved based upon the street sweeping pollutant reduction numbers. A local Smith Creek TMDL Action Plan was also approved by the state after minor edits were made by city staff.

SWPPP for Public Works Facility

Kelley explained the stormwater pollution prevention plan (SWPPP) document for the Public Works Facility. Public Works is working with EEE Consulting to perform a review of potential pollutant-causing components of Public Works including stockpiles, chemical storage, equipment storage, etc. The resulting document will include inspections for site supervisors, suggestions for long-term and short-term facility improvements, and training to prevent pollution.

Stormwater Utility Fee Billing

Thanh relayed statistics gathered from the first half of the stormwater utility fee bills. The return rate for stormwater bills is at 96%.

East Market Street Regenerative Stormwater Conveyance Project

Thanh reminded the group that the East Market Street Project is funded in part by a DEQ stormwater local assistance fund (SLAF) grant and in part by the stormwater utility fee. She said that Public Works staff will provide a project update to City Council on February 9. Bidding should occur in March and construction should begin May-October. Rob asked if there was any funds budgeted for informational signage. Thanh said she did not know if there was an appropriate location since the project falls within a busy median. Eldon agreed it would be good to have an 'Entering Blacks Run Watershed' or other informational signage on the road for vehicle travelers.

Next Steps/Assignments

SWAC should continue brainstorming about the Stormwater Improvement Plan and send any additional questions or ideas to Kelley or Thanh.

The next SWAC meeting will be held on May 4, 2016.

Stormwater Master Planning



JMU September 29, 2015
Photo Credit: Katie Oglesby

Amelia Wehunt, PE
Sheila S. Reeves, PE, CFM

WWW.TIMMONS.COM



Stormwater Master Plans

- ✓ Why Plan?
- ✓ Regulatory Considerations
- ✓ Components of a Plan
- ✓ Project Identification
- ✓ Project Ranking
- ✓ Typical Outcomes

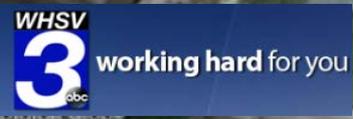


Why Plan?

Flood Closes Street

1 minute left

HARRISONBURG



| Posted: Thu 7:19 PM, Sep 10, 2015 | Updated: Mon 10:38 AM, Nov 09, 2015

Why Plan?

- ✓ Protect Against Loss of Life
- ✓ Protect Critical Infrastructure
 - Maintain LOS for Critical Corridors
 - Maintain Critical City Services
- ✓ Protect Property & Assets
- ✓ Provide a Framework for Analyzing and Ranking Stormwater Projects
- ✓ Regulatory Compliance



C9 Parking lot Near Duke Dog Alley

September 29, 2015

Photo Credit: The Breeze JMU

The Stormwater Master Plan Process

- Multi-step
- Potentially Multi-phase

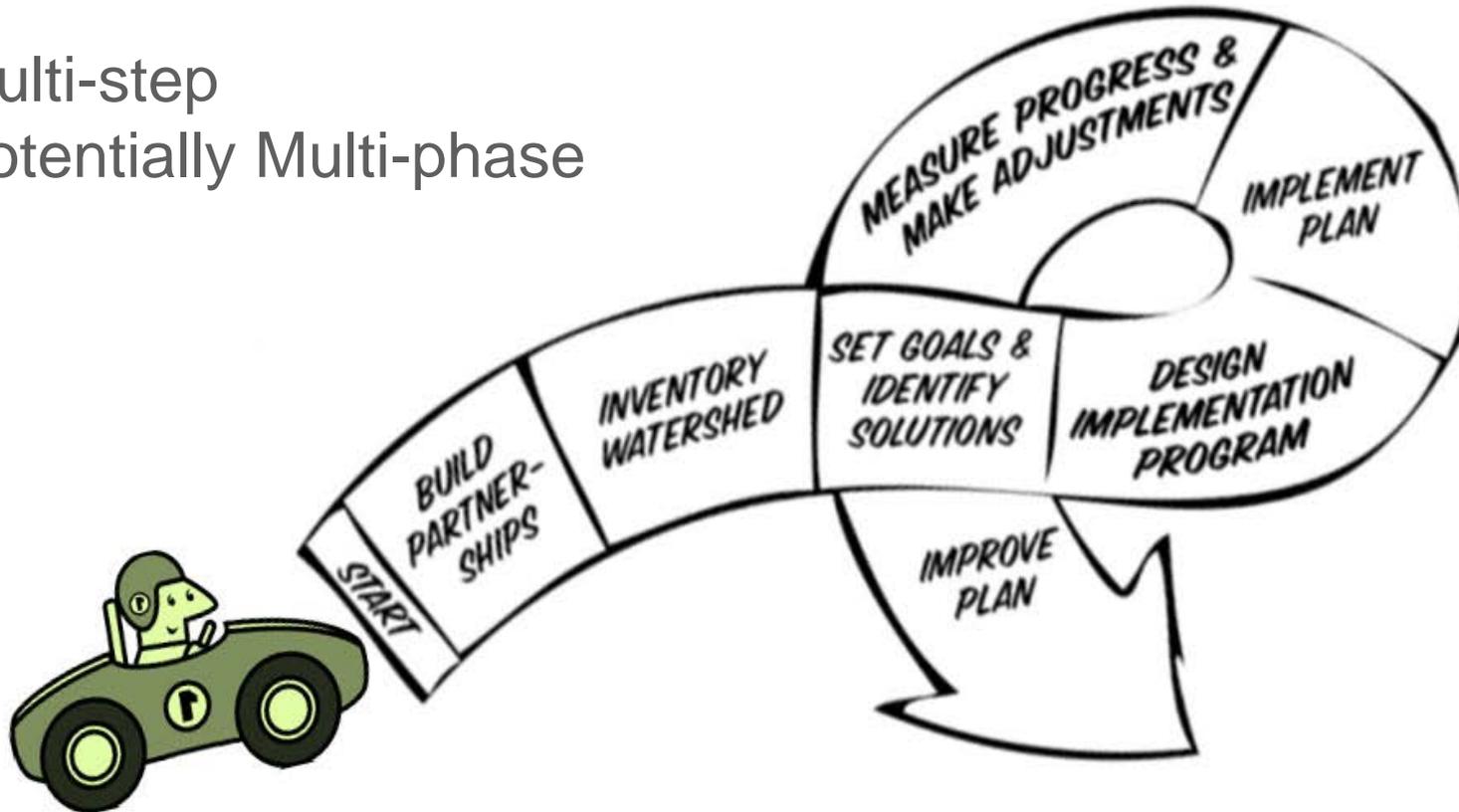


Image Source: USEPA "A Quick Guide to Developing Watershed Plans to Restore and Protect Our Waters," April 2013.

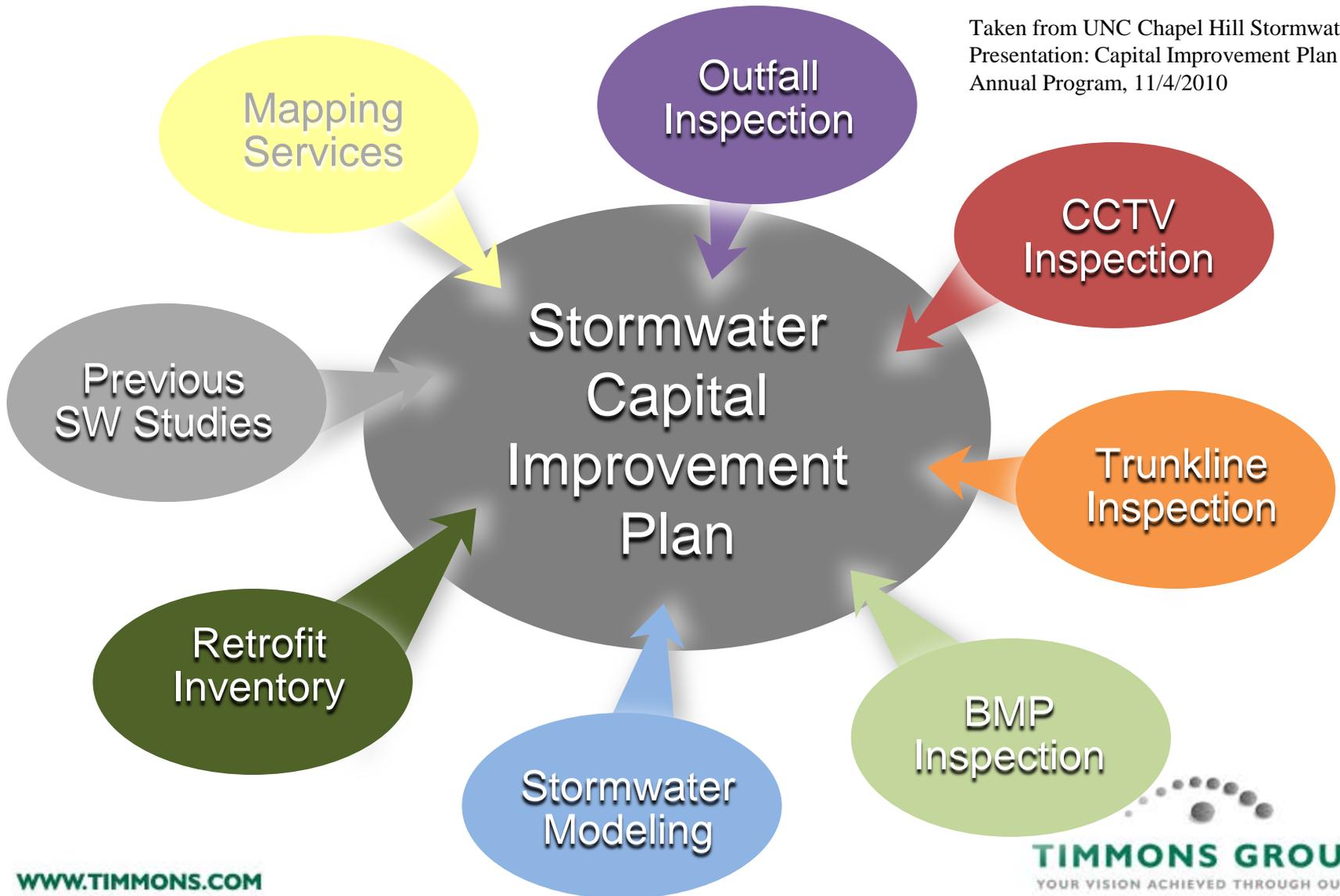
Regulatory Considerations

- ✓ MS4 Permit
- ✓ TMDL Compliance
 - Water Quality Improvements
 - Retrofits
- ✓ VSMP
- ✓ State Stormwater Regulations
- ✓ Chesapeake Bay Protection Act
- ✓ Local Ordinances



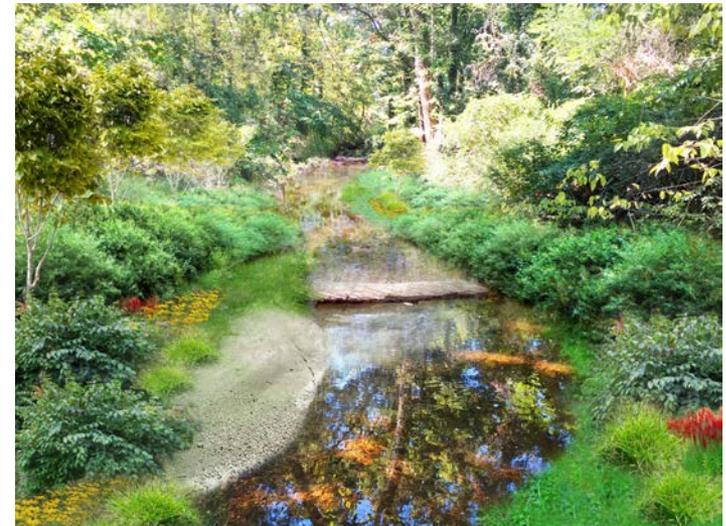
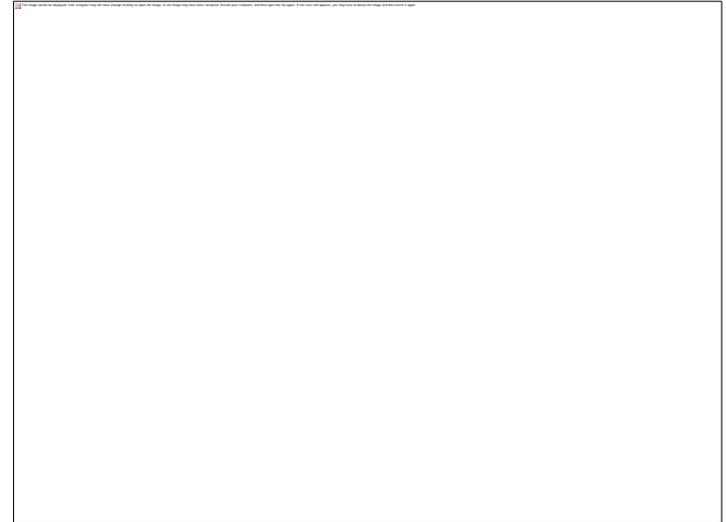
Potential Plan Components

Taken from UNC Chapel Hill Stormwater
Presentation: Capital Improvement Plan and
Annual Program, 11/4/2010



Project Identification

- ✓ Previous studies
- ✓ Deferred maintenance
- ✓ LOS deficiencies
- ✓ Water quality and quantity improvements
 - New
 - Retrofits
 - Repairs



Project Ranking

- ✓ Objective project scoring
- ✓ Encompasses the City's priorities
- ✓ Facilitates Implementation Planning



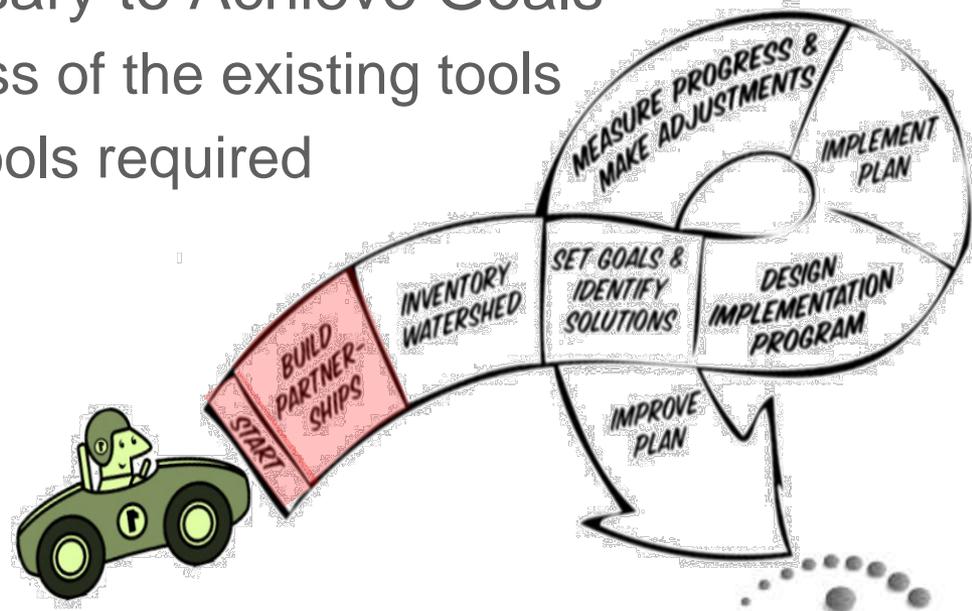
Typical Outcomes of SW Master Plans

- ✓ Comprehensive List & Map of Identified Stormwater CIP Projects
- ✓ Conceptual Design Alternatives & Planning Costs for High Priority Projects
- ✓ Framework for Analyzing and Ranking Stormwater Projects
- ✓ Budget & Implementation Planning
- ✓ Stormwater Program Refinement



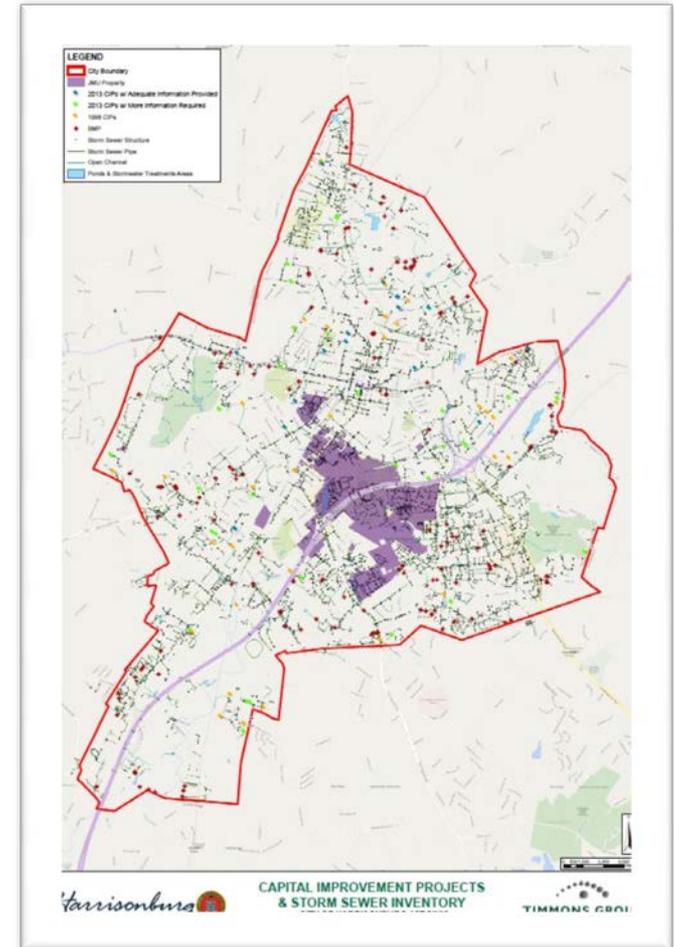
Stormwater Improvement Plan Scoping Project

- ✓ Assess Existing Conditions
- ✓ Form Partnerships in Achieving Shared Success
- ✓ Identify Goals (LOS) of the City
- ✓ Identify Tools Necessary to Achieve Goals
 - Assess the readiness of the existing tools
 - Identify additional tools required
(Gap Analysis)
- ✓ Public Outreach
- ✓ Deliverables

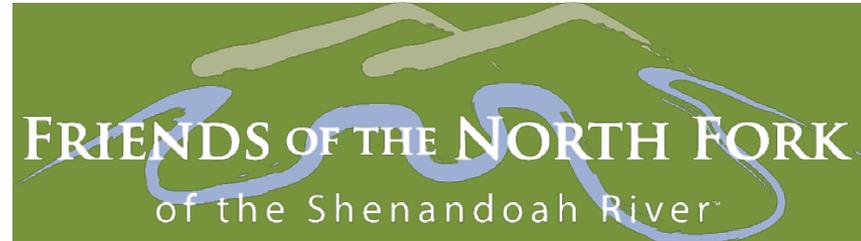


Assess Existing Conditions

- ✓ Characterize watersheds, subdivide for future work
- ✓ Identify System Deficiencies
 - Water Quality
 - Water Quantity
- ✓ Field Visits, If Needed
- ✓ Mapping Review
- ✓ Maintenance Tracking Processes



Partnerships



- Coordinate Efforts
- Community Buy-In



Stormwater Program Goals (LOS)

Level of Service	Program Management & Oversight	Operations & Maintenance	Capital Improvement Projects	VSMP and MS4 Permit Compliance
1	Comprehensive Planning & Full Implementation Capabilities	Fully Preventative / 100% Routine	Prioritized / Fully Funded	Exemplary Permit Compliance
2	Proactive Planning & Systematic CIP Implementation Capabilities	Fully Preventative / 100% Routine	Prioritized / Fully Funded	Pro-Active Permit Compliance
3	Priority Planning & Partial CIP Implementation Capabilities	Mixture of Inspection and Routine Based	Compliant, Inspection-Based / Moderate Budget	Minimal Permit Compliance
4	Reactionary Planning & Minimal CIP Implementation Capacities	Response Only	Critical Needs Only / Minimal Budget	Below Minimum Permit Compliance
5	No Planning & No CIP Implementation Capabilities	Non-Responsive	No Planning / No Budget	Non-Compliant

Taken from SWAC Meeting Minutes, Meeting #3 April 2, 2014.

Toolbox Assessment

- ✓ Assess the readiness of existing tools
 - Inspection Records
 - Asset Inventory Database & Mapping
 - Previous Studies
- ✓ Identify additional tools required (Gap Analysis)
 - Modeling
 - TMDL compliance



Photo Credits:

<http://www.susquehannafloodforecasting.org/inundation-maps.html>

<http://www.civilgeo.com/geo-hec-ras/>

http://rasmodel1.rssing.com/chan-6225374/all_p2.html

<https://www.flow3d.com/home/industries/water-environmental/rivers/river-hydraulics>

Public Outreach

- ✓ Public Meeting
 - Input on proposed process to develop the SW Master Plan
 - Gather comments on stormwater issues

- ✓ City to provide support:
 - publicizing,
 - promoting,
 - recording, and
 - logistics

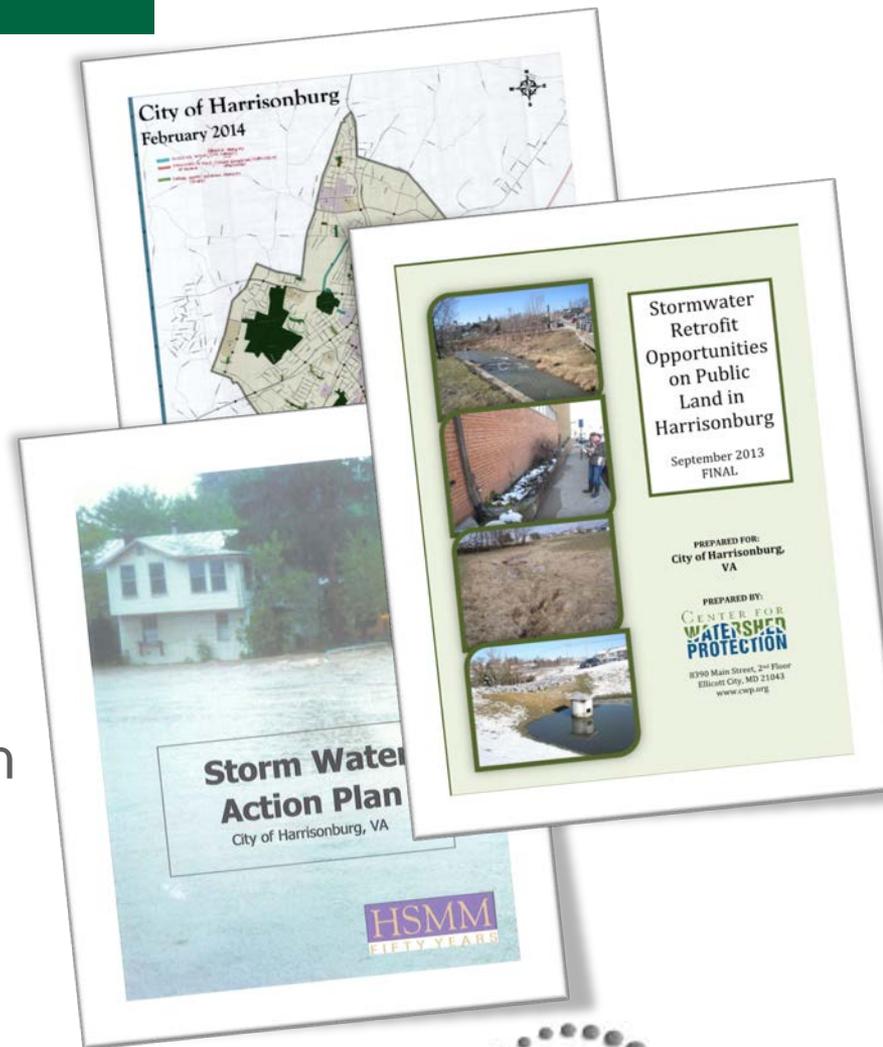


Schedule

ID	 Task Mode	Task Name	Duration	Start	Finish	February	March	April	May	June	July	August
1		Project Kickoff	1 day	Tue 2/2/16	Tue 2/2/16							
2		SWAC Meeting #1	5 days	Wed 2/3/16	Tue 2/9/16							
3		SWAC Meeting #2	61 days	Wed 2/10/16	Wed 5/4/16							
4		SWAC Meeting #3	65 days	Thu 5/5/16	Wed 8/3/16							
5		Progress Report #1	10 days	Wed 2/3/16	Tue 2/16/16							
6		Progress Report #2	20 days	Wed 2/17/16	Tue 3/15/16							
7		Progress Report #3	23 days	Wed 3/16/16	Fri 4/15/16							
8		Progress Report #4	21 days	Mon 4/18/16	Mon 5/16/16							
9		Progress Report #5	22 days	Tue 5/17/16	Wed 6/15/16							
10		Progress Report #6	22 days	Thu 6/16/16	Fri 7/15/16							
11		Progress Report #7	22 days	Mon 7/18/16	Tue 8/16/16							

Deliverables

- ✓ Public Meeting Materials
- ✓ Monthly Progress Reports
- ✓ Final Report
 - Work Description
 - Findings
 - Recommendations for Developing a Future Stormwater Improvement Plan



Thank you!



JMU Flooding September 29, 2015

Photo Credit: Hailey Knepp



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