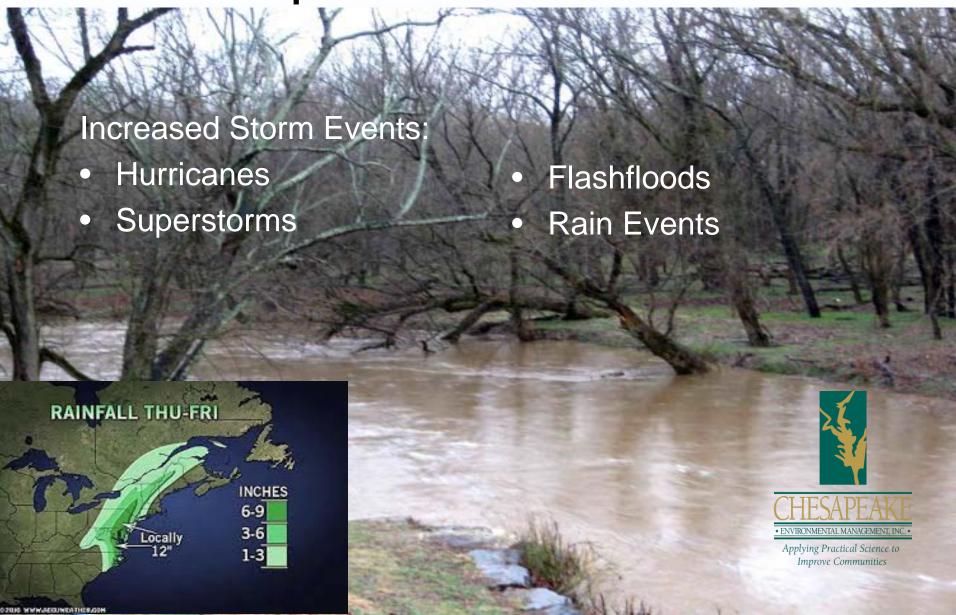




- Utility Right of Way have multiple stream crossings
- Installed Prior to Urbanization
- Farmland and Open space
- Crossed small streams

pplying Practical Science
Improve Communities

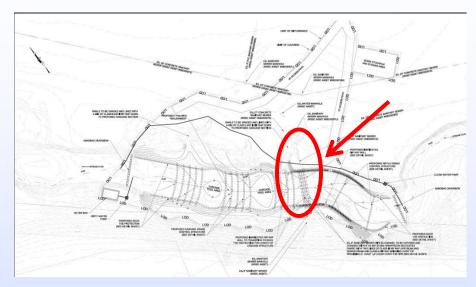


Leads to this:



- Emergency Repair
 - Letter of Authorization
 - Expedited Permit
 - 1 month start to finish





- Routine Upgrades
- Capital Improvement Project
- Design/Permits to Construction 6 to 9 Months



Permits/Approvals:

- MD Forest Conservation Act
- County/City Construction Permits
- State Historic Preservation Office

- Threatened and Endangered Species Clearance
- Section 404 Wetlands and Waterways
- Adjacent Property Owners

Stake Holders:













- Time-frames
 - Construction/ Off-Peak times
 - April October (Gas)
 - October May (Electric)
 - Stream Closures
 - Use I: March to June 15
 - Use II: June 1 to September 30,
 December 16 to March 14
 - Use III: October to April 30
 - Use IV: March to May 31





Use I Stream Construction Schedule

	Sample Project Schedule																	
					September	October	November	December	January	February	March	April	May	June	July	August	September	October
ID	Task Name	Duration	Start	Finish	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	Project Initiation	1 day	Wed 10/2/13	Wed 10/2/13		10/2												
2	Field Investigations and Reporting	34 days	Wed 10/2/13	Mon 11/18/13														
3	Permit Submissions and Approvals	129 days	Wed 10/16/13	Fri 4/11/14			İ											
4	Construction Begin	1 day	Mon 4/14/14	Mon 4/14/14								4/14						
5	Construction of the Entire Project	123 days	Mon 4/14/14	Tue 9/30/14]
6	Construction Complete	1 day	Tue 9/30/14	Tue 9/30/14													•	9/30
7	Use I and Use I-P Stream Closure	76 days	Mon 3/3/14	Sun 6/15/14											j			

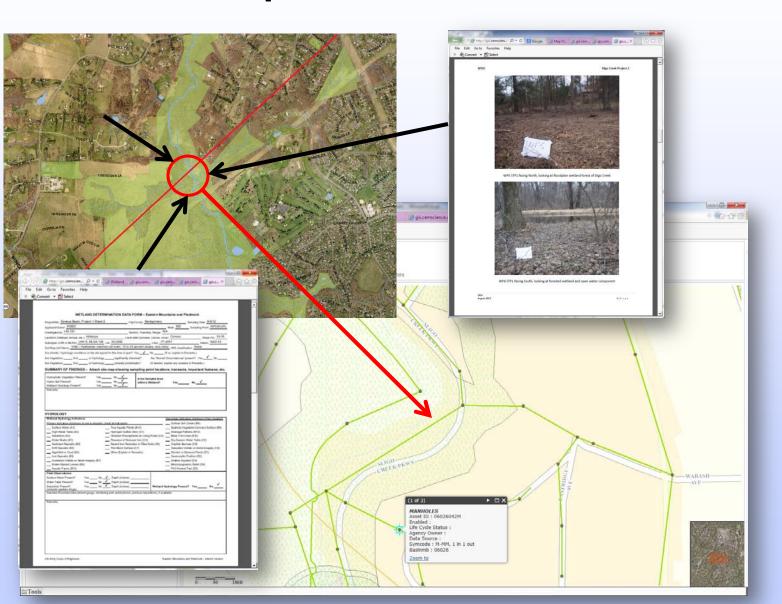
Use I and IP Closure (Recreation and Protection of Aquatic Life)
March 1 - June 15

Use II Stream Construction Schedule

Sample Project Schedule																		
					September	October	November	December	January	February	March	April	May	June	July	August	September	October
ID	Task Name	Duration	Start	Finish	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	Project Initiation	1 day	Wed 10/2/13	Wed 10/2/13	•	10/2												
2	Field Investigations and Reporting	34 days	Wed 10/2/13	Mon 11/18/13														
3	Permit Submissions and Approvals	129 days	Wed 10/16/13	Fri 4/11/14														
4	Construction Begin	1 day	Mon 4/14/14	Mon 4/14/14								◆ 4/14	!					
5	Construction of the Entire Project	123 days	Mon 4/14/14	Tue 9/30/14														
6	Construction Complete	1 day	Tue 9/30/14	Tue 9/30/14														9/30
7	Use II Stream Closure (Shell Fish Harvesting Waters)	88 days	Sun 6/1/14	Tue 9/30/14						_								
8	Use II Stream Closure	66 days	Mon 12/16/13	Fri 3/14/14														

Use II Closure (Shell fish Harvesting)
June 1 – September 15
December 16 to March 14







Things to Remember:

- Monitor your systems
- Know which permits/approvals needed
- Know your construction schedule
- Know stream closure dates

