The Importance of Stakeholder Involvement in Small Watershed Action Plans & Maintaining Stream Health

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Why Are Small Watershed Action Plans Needed?

◆ Many municipalities completed larger watershed management plans during the 1990’s and 2000’s.
  - Plans typically focused on capital restoration projects
  - Included limited public involvement
  - Not detailed enough to meet many grant requirements

◆ Small Watershed Action Plans focus on the subwatershed level

◆ Help municipalities meet current water quality regulations and Waste Load Allocations

◆ Assist municipalities in obtaining grant funding (EPA 319 A –I criteria)
Baltimore County Watershed Action Planning Areas
What is a SWAP?

◆ **Small Watershed Action Plan**

◆ Strategy that outlines how we will clean up our streams

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**Small Watershed Action Plan (SWAP)**

**Tidal Back River**

**Fact Sheet**

**What is a SWAP?**

A SWAP is a strategy that outlines how we will clean up our streams.

The plan will:

- outline the existing surroundings,
- identify sources of pollution,
- examine alternative ways to enhance our watershed and clean our streams,
- determine the costs,
- and decide who will implement the options.

**Who participates in the SWAP?**

Participation by many stakeholders is essential in the preparation of the SWAP. Residents in the neighborhoods, leaders from local community and business associations and government agencies are all necessary to build a successful plan. This plan will have a tally sheet that computes all the actions needed to have a clean stream. Each group or organization will be responsible for the implementation of several actions. Full implementation is needed to achieve success.

**How will we improve our streams?**

Restoration actions may include:

- New stormwater management facilities
- Planting trees
- Rainspout disconnections
- Additional forest along streams
- Neighborhood rain gardens and rain barrels
- Fertilizer reduction
- Community awareness about stormwater
- Shoreline restoration projects

**How can I get involved?**

Contact The Back River Restoration Committee about all the ways you can help restore your watershed:

Back River Restoration Committee: 410-254-1577  www.savebackriver.org

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Baltimore County Watersheds & Monitoring 410-887-5683
Website: www.baltimorecountymd.gov/go/backriver
Email: watersheds@baltimorecountymd.gov
A Tidal Case Study

- Tidal Back River, Baltimore County, MD
  - Community focused effort
  - Steering committee of community leaders, business associations & government
  - Focused on
    - Engaging Citizen & Watershed Groups
    - Municipal actions
Tidal Back River

- 7,720 acres
- 10 subwatersheds
- Landuse:
  - 34% Residential
  - 32% Forest
  - 20% Commercial & Industrial
Tidal Back River Small Watershed Action Plan (SWAP)

- Year long plan development
- Review of existing data & new data collection
- Bi-Monthly Steering Committee Meeting
- 3 Stakeholder Meetings
Tidal Back River SWAP – Steering Committee Members

◆ Baltimore County & City
  ▶ Baltimore County DEPRM
  ▶ Baltimore City – DPW

◆ Community
  ▶ Back River Restoration Committee
  ▶ Back River Tributary Team
  ▶ Citizen Leaders

◆ Consultants
  ▶ Parsons Brinckerhoff
Watershed Characterization & Data Collection

- GIS Analysis & Characterization
- Field Assessments
  - Upland Assessments
  - Rapid Stream Assessment (Tidally Influenced Streams)
  - Stormwater Facility Retrofit Study
- Community Surveys
  - Known water quality problems/locations
  - Input on watershed goals/objectives
  - Input on restoration opportunities
Field Assessments

- Upland Assessments
- Stream Corridor Assessments
- Stormwater Facility Retrofits
Upland Assessment Components

- **Neighborhoods (NSA)**
  - 46 neighborhoods

- **Institutions (ISI)**
  - 27 sites

- **Open Spaces (PAA)**
  - 9 sites

- **Hotspot Operations (HIS)**
Downspout Disconnection
◆ 76% of Neighborhoods
◆ 93 acres of rooftop runoff

Lawn Care Education & Storm Drain Marking
◆ 33% - Lawn care
◆ 76% - Storm drain marking
Street Trees
- 40% of neighborhoods
- 1,300+ trees

Street Sweeping
- 22% of neighborhoods
- 25 miles of roadways
Rapid Stream Assessment – Low Gradient Streams

- Used modified version of Maryland’s Stream Corridor Assessment (SCA) Protocols
- Adapted SCA for Low Gradient Streams
  - Erosion sites
  - Buffers
  - Fish migration barriers
  - Exposed/discharging pipes
  - Channelization/altered streams
  - Dumping
  - Habitat
  - Unusual conditions
Stream Findings

- Dumping & trash were prevalent
  - Estimate 175 truckloads of trash to be removed from channel
- 74% of the channels have inadequate buffers

*These are items that Community Involvement can help improve with some help from their local governments and watershed associations!*
Stormwater Facility Retrofit Study

- Focused on Dry Detention Ponds
- Looked for water quality retrofit potential
- Identified maintenance needs
Stake Holder Meetings

Meeting #1: July 2009 – introduced community to SWAP concept

- Had over 150 community members attend
- Brainstormed watershed slogan
- Voted on watershed Goals & Objectives

What is a Watershed?

A watershed is the area of land that contributes runoff to a particular point along a waterway.
Held Slogan Contest

- Brainstormed slogans with Steering Committee
- Community voted on slogans & proposed their own ideas

SLOGANS

- Back River – Your Back Door to the Chesapeake Bay
- Back River – Visit it’s Natural Beauty
- Scenic Back River – Discover it!
- Back River – Where Nature and Neighborhoods Connect
- Back River – Keep Our River Clean: Stow it Don’t Throw it!
- Back River – Discover What You’ve Been Missing
- Back River – Get Back to Nature
- Back River – Keep it Clean, Hon!
- Back River – Baltimore County’s Hidden Treasure
- Back River – Keep Back River Clean!
Provided A Direct Way For Community to Be Involved

We Need Your Help!

Join the Back River Restoration Committee and Baltimore County Environmental Protection and Resource Management (DEPRM) to clean up the shoreline and mudflats of Back River. Meet at the Essex Park and Ride at 8:00 AM.

SaveBackRiver.org  BRRC
Stake Holder Meetings

◆ Meeting #2: October 2009

- Provided results of field assessments
- Slogan Voting – slogan will appear on signs when entering the watershed
- Community Vote on Citizen Action Items

11 Things You Can Do At Home to Help The Back River!

1. Limit or eliminate use of fertilizers and pesticides; keep them off of driveways and sidewalks
2. Plant native trees, shrubs, and perennials & reduce the amount of your yard devoted to lawn
3. Disconnect your downspouts and/or use a rain barrel to capture rooftop runoff
4. Clean up after your pets
5. Wash your car on the grass or at the car wash
6. Water only when and where it's really needed
7. Properly maintain your vehicle; avoid or properly absorb spills/leaks on streets and driveways
8. Participate in/organize a neighborhood street tree planting program
9. Plant trees, especially near your backyard stream and don’t mow to the banks
10. Keep your street curbs & gutters clear of trash and organic debris
11. Join your local watershed association!
Blue Card Summary

- Available at 1st & 2nd community meetings
- Allowed residents to document problem areas & receive follow up information if wanted
- Improved meeting flow while allowing residents to voice their concerns

PROBLEM No. 1
Nearest Cross Streets: ________________________________

Problem Type:
- [ ] TRASH
- [ ] DUMPING
- [ ] ILLEGIT DISCHARGES
  (Ex: Chemicals, Sewage, Oil, etc.)
- [ ] EROSION
- [ ] STANDING WATER
- [ ] OTHER

Problem Description: ________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

Contact Information (OPTIONAL)
Name: __________________________________________ Email: _____________________________
Phone: __________________________________________

Blue Card Summary

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SOLUTIONS
- DEPRM researched each issue, field verified if necessary and responded to the citizen via: e-mail, letter or phone call.
- A Task Force was formed to discuss the problem with Midges in Back River.
Highlighted Activity Since Last Meeting

**Clean-up Projects-Bread and Cheese Creek**
September 10, 2009

- Over 50 volunteers!
- Removed:
  - 34 shopping carts
  - 2 motorcycles
  - 6 bicycles
  - 1 bath tub
  - Several bowling balls

**Clean-up Projects – Back River Mud Flats**
August 2-29, 2009

- 325 Tires
- 10 tons of debris
- Numerous donations from businesses and individuals
- Over 250 volunteers!

**Back River WWTP Tours**

- 9/18/09 - 12 attendees
- 9/22/09 - 10 attendees

**Midge Task Force Meetings**
In September - DEPRM, BRRC, MDA and Balto. City representatives met with Back River business owners to discuss Midge problem and solutions

**Created Midge Task Force**
Stake Holder Meetings

Meeting #3: January 2010

- Presentation of draft Small Watershed Action Plan
- Held a Citizen Fair to allow citizens to learn more about activities in their watershed.
Continued Watershed Updates

- Continued updates
- Governor attended clean-up
- News coverage
Maintaining Community Momentum is Key To Success

◆ Provide Community With Ways to Stay Involved
  ❖ Held multiple cleanups of streams and tidal mud flats. Over 250 community members attended clean up events
    ♦ Removed 1,000+ tires & over 50 tons of trash
Small Watershed Action Plan (SWAP) Development

Key components

- Watershed characteristics
- Identify sources of pollution
- Examine alternative ways to enhance the watershed & clean up streams
  - Citizen & Watershed Groups
  - Municipal Actions
- Cost estimates
- Implementation plans
Tidal Back River - SWAP

- Plan developed to meet established watershed Goals, Objectives & Action Items
- Implementation began in Spring 2010 & is on-going
- Includes measures to monitor for plan effectiveness & success
Questions?

http://www.baltimorecountymd.gov/Agencies/environment/watersheds/

SaveBackRiver.org just passed 400,000 lbs. and 2575 tires and counting...

BRRC is looking for a 15-25hp outboard motor donation (or reasonably priced) to replace one of our original motors. We are also looking for someone to do some underwater photography.

Please give Brian a call at 443-414-4384 if you are able to help with items.

http://www.savebackriver.org/