










Walkin the Watershed – Stream Teams in Action 2007

Resource Guide

Tips for Stream Team Volunteers

-  Always walk with someone
-  Watch out for irate dogs. Walk cautiously and practice good dog etiquette.
-  Do not drink the river water.
-  Wear long-sleeved shirts and pants to protect against ticks, mosquitoes, black flies, and poison ivy.
-  Wear insect repellent and/or sunscreen, if necessary.
-  Consider landowner rights. Ask permission to cross private land, posted or not.
-  Do not enter posted areas without permission. Take advantage of any public access points.
-  Do not walk on unstable banks; your footsteps could speed erosion.
-  Be aware of wildlife and animal homes, for both your sakes. Respect wildlife and other critters – Observe, Do Not Disturb!

NEVER PUT YOURSELF INTO DANGER TO GATHER SURVEY INFORMATION!

*If at anytime you feel uncomfortable about the stream conditions or surroundings, please STOP your Walkin the Watershed Survey. **YOU and YOUR SAFETY** are much more valuable than any of the objectives of the survey.*

Volunteer Checklist

- | | |
|---|--|
| <input type="checkbox"/> A buddy | <input type="checkbox"/> Gloves |
| <input type="checkbox"/> Data sheets and maps | <input type="checkbox"/> Copy of letter sent to landowners |
| <input type="checkbox"/> Clipboard or other surface for writing | |
| <input type="checkbox"/> Two pencils – color is good to mark on maps | |
| <input type="checkbox"/> Long-sleeved, snag-free clothing/pants (for bugs and thorns) | |
| <input type="checkbox"/> Sunblock | |
| <input type="checkbox"/> Sunglasses (polarized to see into the water better) | |
| <input type="checkbox"/> Life jackets and paddles if canoeing | |
| <input type="checkbox"/> Camera and film | |

Optional Items

- Rubber boots or waders
- Yardstick or measuring tape
- Safety Vests
- Compass
- Field Guides (in ziplock bags)
- Food & Water, for energy!

What you need to do:

Tonight: *Coordinate with your segment team. Arrange meeting places, dates, and times.*

Before the end of June: *Conduct the survey! Fill out the data sheets, include an overall segment description and list of priorities for your segment. Return all Data Sheets, Photos, Maps and other items to: **Walkin the Watershed – Stream Teams in Action, PO Box 397, Huntington, MA 01050** or **walkinthewatershed@hotmail.com**. Contact: Meredyth Babcock at (413) 623-2070.*

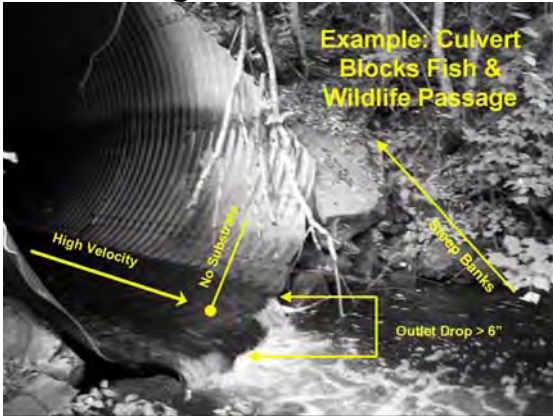
September 2007: *Join us for a picnic to discuss findings and next steps and the completion of the surveys. Stay tuned for more details*

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Free Flowing Condition:

- **Attributes:** Fish & Wildlife Passage, Water Quantity and Hydrology, Unaltered Riverbanks and Protected Floodplain, No Manmade Impoundments (dams, levees, etc), Maintenance of Seasonal Flow Regime
- **Potential Impacts:** Barriers to Fish & Wildlife Passage, Discharges, Runoff, Sedimentation, Manmade Structures in the Floodplain, Bank Stabilization that includes riprap, retaining walls, removal of riparian vegetation or other impacts on habitat features

Fish Passage:



Ballou Dam, Becket: Note any culverts, dams or other man made barriers or diversions along the river segments.

Water Quantity and Streamflow:

As streamflow decreases, many physical changes occur in aquatic habitats. First, water levels drop below the banks where overhanging roots and woody debris offer excellent habitat for many aquatic species including fish, invertebrates, reptiles, and amphibians (below, right).



As water levels recede further, riffles may dry out (see picture left), cutting of migration and movement routes for aquatic species as well as cutting off the flow of the river that some species require to survive or reproduce successfully.



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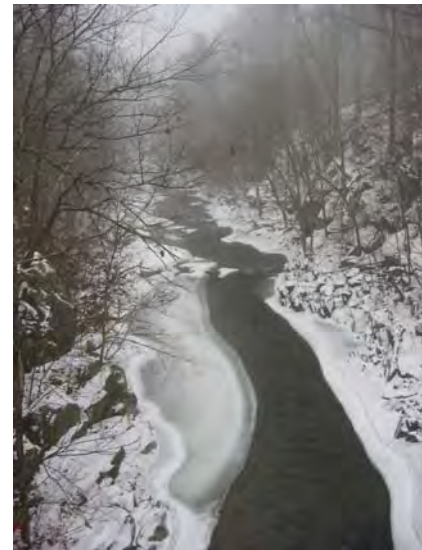
West Branch, Chester: Erosion and sediment movement are an important natural river process which maintains diverse habitat types for fish and other aquatic species. Excessive sediment, e.g. siltation from construction or road runoff, can be detrimental to aquatic habitat. In some circumstances, the natural river erosion process may threaten infrastructure, such as this road. Note any areas of excessive erosion or floodplain areas where infrastructure or other development may be situated.

Scenic/Aesthetic:

- **Attributes:** Scenic vistas/overlooks, Waterfalls, Gorges, Unfragmented Forests and Wildlife Habitat, Context-Sensitive Development, Native Vegetation, Wildlife Viewing Areas, Rural Roads and River Views
- **Potential Impacts:** Unsightly Land Use Activities (e.g. Gravel Pits, Muddy Forestry Trails, Construction Yards, Parking Lots, etc.), Increased width, signage, removal of stately trees or other roadwork that changes character of rural roads, Invasive Species



Downstream of Chesterfield Gorge looking upstream, Chesterfield. Note prominent view of hillside in background. This is an example of an important scenic vista of unfragmented habitat and forest. The hillside, in this case Smith Pyramid, should be noted in your datasheet and on the segment map.



View of Middle Branch from Smith Road Bridge, Chester. Example of a scenic overlook of the river.

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Geologic:

- **Attributes:** Gorges, Waterfalls, Unique Rock Formations, Outcroppings, Ledge
- **Potential Impacts:** Blasting, Removal of Rock



Windsor Jams, Windsor. An example of a gorge and waterfall with unique outcroppings and ledge.



Glacial Rock Formation, East Branch, Chesterfield. An example of a unique rock formation.

Ecological:

- **Attributes:** Fisheries, Native Vegetation, Unfragmented Forests and Wildlife Habitat, Rare & Endangered Species, Riparian Buffers, Water Quality, Water Quantity, Seasonal Flow Regime, Water Temperature, Air Quality, River Functions and Hydrology, Large Woody Habitat, Shade Cover
- **Potential Impacts:** Invasive Species, Sedimentation, Impervious Surfaces, Salt & Sand Application, Non-Point Source Pollution, Discharges, Erosion, Removal of Riparian Vegetation

Healthy Habitats



Vernal Pool: The jelly-like sacs are frog eggs. Vernal pools are important habitat for frogs, salamanders, and turtles.



Drowned Land Brook, Savoy/Windsor: An example of an extensive wetland system which provide habitat for numerous species – including birds, fish, turtles, wetland plants, etc.

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Recreational:

- **Attributes:** Trails, Paddling (Canoe & Kayak), Fishing, River Access, Swimming, Public Facilities (e.g. restrooms, trash removal, informational and interpretative signs, picnic tables, river access, etc.)
- **Potential Threats:** Degraded water quality (e.g. Closure of Swimming Areas), Limitations on Access, Safety Hazards



Wildwater Canoe Races: Longest continuously run whitewater race in U.S. Whitewater boating is one of the important recreation opportunities in the watershed.



Trails and River Access: Note formal and informal trails and public access. Also note any improvements which could be made, e.g. trail repairs, informative and interpretative kiosks, improved parking or facilities.

Historical/Cultural:

- **Attributes:** Historic Districts, Archeological Remains, Historically Significant Buildings and Town Centers, Bridges, Cellar Holes, Foundations, Stone Walls, Mills, Former Agricultural Lands, Scenic Roadways, Agriculture, Working Landscapes
- **Potential Impacts:** Bridge Repair/Replacement, Dilapidated Structures, Non-Context Sensitive Development (e.g. inappropriate and contrasting materials and structures compared to rest of area and historic features), Economy



Historic Resources: Note any historically significant buildings and Town Centers, bridges, cellar holes, foundations, stone walls, Mills, and former agricultural lands found along the river corridor. Please note if these are sensitive resources.



Cultural Resources: Include scenic roadways, agricultural or working landscapes, or other rural community resources and events, e.g. the Cummington Fairgrounds – one of the oldest agricultural societies in New England and home to the Cummington Fair.

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NOTES: