

Watershed Central

Integrated Approaches and Tools

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Curtis Cooper-ORD, and Christine McKay- Region 4 EPA



Overview

- What makes for successful watershed projects

- Watershed Central
 - Finding watershed management resources
 - “Watershed Central” due out this summer
 - The Wiki – available now

Watershed Plans (2000 Madison Report)

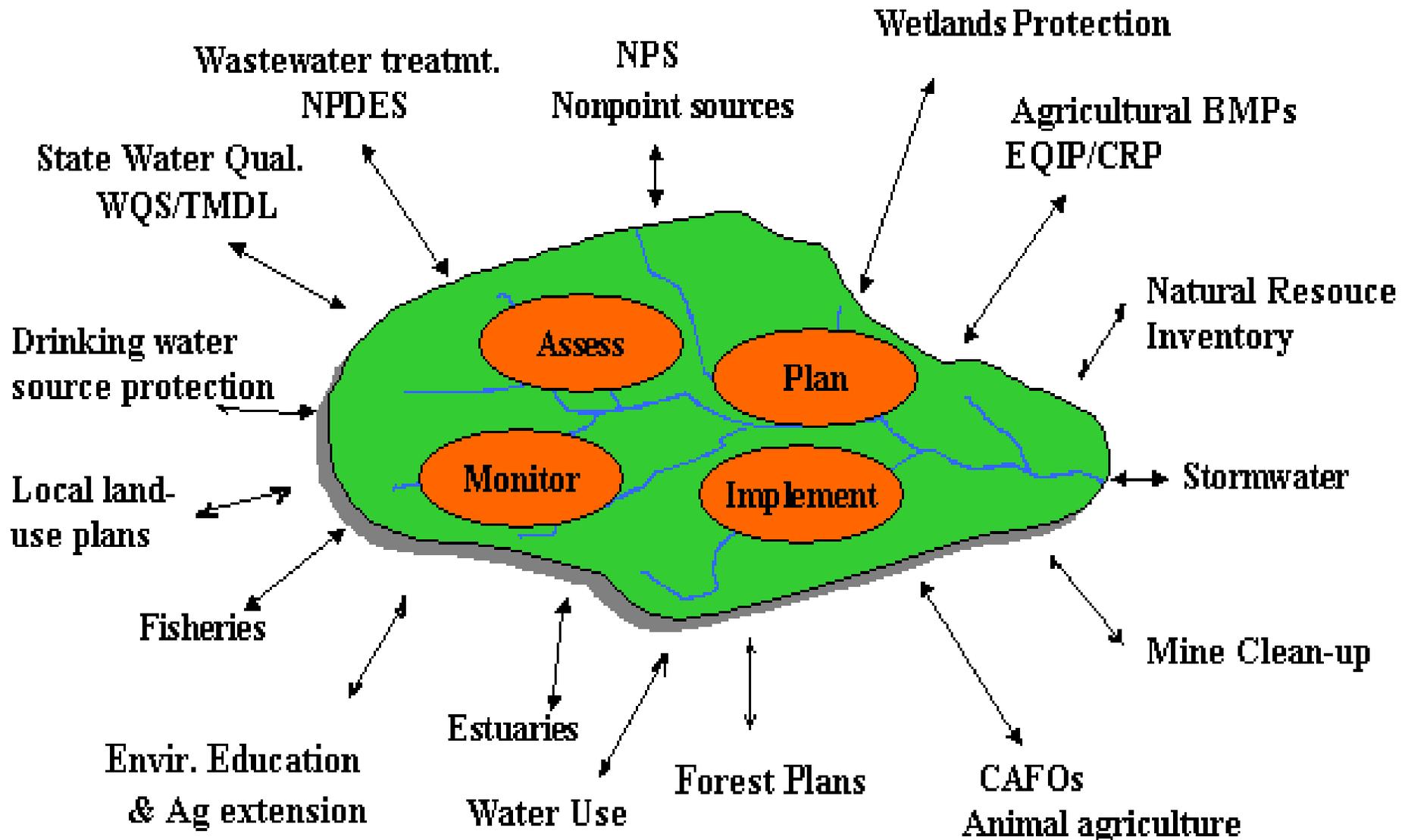
- Convergence of opinion that “watershed plans are necessary precedents for successful watershed management, protection, and restoration interventions..”
- In a recent study,.. “the use of watershed plans was the only factor with a high correlation with potential positive environmental outcomes.” (Trout Unlimited & Pacific Rivers Council)

Factors for successful implementation:

(VA Tech Study of TMDL Implementation Success, 2006)

Enhanced Implementation	Hindered Implementation
<ul style="list-style-type: none">✓ Existence of a watershed plan (focused & achievable)✓ Active involvement of stakeholders✓ Coordination of local and state government✓ Diversity of approaches✓ Adequate resources for voluntary incentives and technical assistance	<ul style="list-style-type: none">✓ Lack of resources✓ Lack of sufficient data to characterize pollutant sources✓ Lack of data to characterize WQ improvement✓ Lack of communication and coordination between agencies✓ Lack of funding particularly mid-project cuts

Integrated watershed management

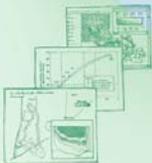
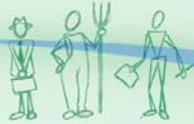


NINE Elements for Section 319 Funding

- A. Identification of causes and sources, listed waters, pollutants, loads by watershed sub-categories, (crops, AFOs, urban, forestry, etc.)
- B. Estimate of load reductions by land use (or other) subcategories expected from BMPs
- C. Description of BMPs, How they are targeted (map suggested)
- D. Estimate of needed technical & financial resources
- E. Information/ Education component
- F. Schedule (who does what, when)
- G. Description of measurable milestones for implementation
- H. Criteria to determine if loadings/ targets are being achieved
- I. Monitoring component for above criteria



Handbook for Developing Watershed Plans to Restore and Protect Our Waters



EPA's Handbook for Developing Watershed Plans to Restore and Protect Our Waters

Helps provide technical support for 9 elements and other water resource management issues

Link

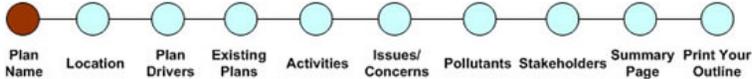
epa.gov/nps/watershed_handbook

Link to Plan Builder

□ www.epa.gov/owow/watershedplanning

Watershed Planning
Basic Information
Frequent Questions
Watershed Planning Process
Watershed Plan Builder
Examples
Information Sources
Publications and Resources
Analysis Tools and Technical Assistance
Funding Sources
Glossary of Terms

Watershed Plan Builder



All fields labelled with a red asterisk (*) are required.
Click the following image  to view help text and identify where to get this information for each question.

Please do not include ampersands, semicolons, single apostrophes or quotation marks when you are filling out the forms in Plan Builder; these values will automatically be removed.

* Do you have an existing project entered into the watershed plan builder? 

Yes No

Please create a plan name for your watershed project. This name will identify your project within the plan builder. Both plan name and email address are required and will be used to retrieve your plan information in the future. If you have an existing project within the watershed plan builder, enter the name of the project and e-mail address below and click the "Retrieve your data button" to access the saved information.

* Plan Name 

* E-mail 

Help

Glossary
 Frequent Questions

Go

Criteria

Air Quality:	Acid Rain, Particulate Matter
Pollutants:	Inorganic Pollutants, Metals, Nutrients, Pathogens, Sediment
Regulatory requirements:	Meet Water Quality Standards
Land Habitat:	Development pressures,

Watershed Central

an Integrated Web-Based Framework for
Watershed Assessment and Management

Build
Capacity

Assess

Plan

Implement

Evaluate/Monitor

Measure Progress
and Report

Stakeholder
Outreach

Problem
Characterization

Critical Areas

Appropriate
Models

Restoration/
Protection
Options

Pollutant
Loads

Reports

Guidance
Tools
Case Studies
Training
Regulations
Funding



WC Website mockup

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Watershed Central

Contact Us Search: All EPA This Area

You are here: [EPA Home](#) » [Water](#) » [Wetlands, Oceans, & Watersheds](#) » [Watersheds](#) » [Watershed Central](#) » Watershed Management Process

Watershed Management Process - Build Partnerships



The very nature of working at a watershed level means you should work with at least one partner to improve watershed conditions because it is often too complex and too expensive for a single entity. New ideas and input provided by partners not only provides a more solid commitment to solutions, but also helps to eliminate redundancy in financial distributions. Stakeholders' involvement also increases the probability of long-term success through trust, commitment, and personal investment. Critical elements of this step are listed below.

- [Identify Key Stakeholders](#) - Stakeholders are defined as those who make and implement decisions, those who are affected by the decisions made, and those who have the ability to assist or impede the implementation of the decisions. Key stakeholders also include those who can contribute resources and assistance to the watershed planning effort and those who are working on similar programs that can be integrated into a larger effort. Keep in mind that stakeholders are more likely to get involved if you can show them a clear benefit to their participation.
- [Identify Issues of Concern](#) - Issues of concern can be identified when meeting with relevant stakeholders. These issues will help to shape the goals and to determine what types of data are needed. Understanding the links between concerns, pollutants or "stressors", and the impacts in the watershed is critical to the success of your watershed management plan. This will also help you set the scope of your watershed effort.
- [Set Preliminary Goals](#) - The more specific your preliminary goals, the easier it will be to develop concrete objectives to achieve the goals. As you move through the planning process you should build on your goals, developing indicators and specific management objectives to measure progress. Establish measurable targets to determine when you have achieved your goals.
- [Develop Indicators](#) - Indicators are either direct or indirect measurements of a component or quality in a system. Indicators provide a powerful means of communicating to various audiences about the watershed status and program progression and are used throughout the planning and implementation process. Indicators should be quantitative so that the effectiveness of management

More info on Build Partnerships

- [Identify Key Stakeholders](#)
- [Identify Issues of Concern](#)
- [Set Preliminary Goals](#)
- [Develop Indicators](#)
- [Conduct Public Outreach](#)
- [Results and Next Steps](#)

[EPA Programs](#)
[Tools & Data](#)
[Wiki Articles](#)
[Case Studies/Examples](#)
[Information Sources](#)

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- Frequent Questions
- Watershed Management Process
- Search & Collaborate
- Map Your Watershed
- Interactive Wiki
- Tools and Data
- Calendar of Events
- Information Sources
 - Technical Assistance
 - Outreach
 - Funding Sources
 - Regulations and Guidance
- Site Map

WC Website Mock-up Map utility

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All EPA



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Map Your Watershed

Interactive Wiki

Tools and Data

Calendar of Events

Information Sources
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Site Map

Explore the Map

Find your watershed, tools, projects, data,
Wiki articles and other information

Enter Address

Enter County

Enter Hydrologic Unit Code

Search

Search and Add Datasets

Enter Hydrologic Unit Code

Search

Download Data

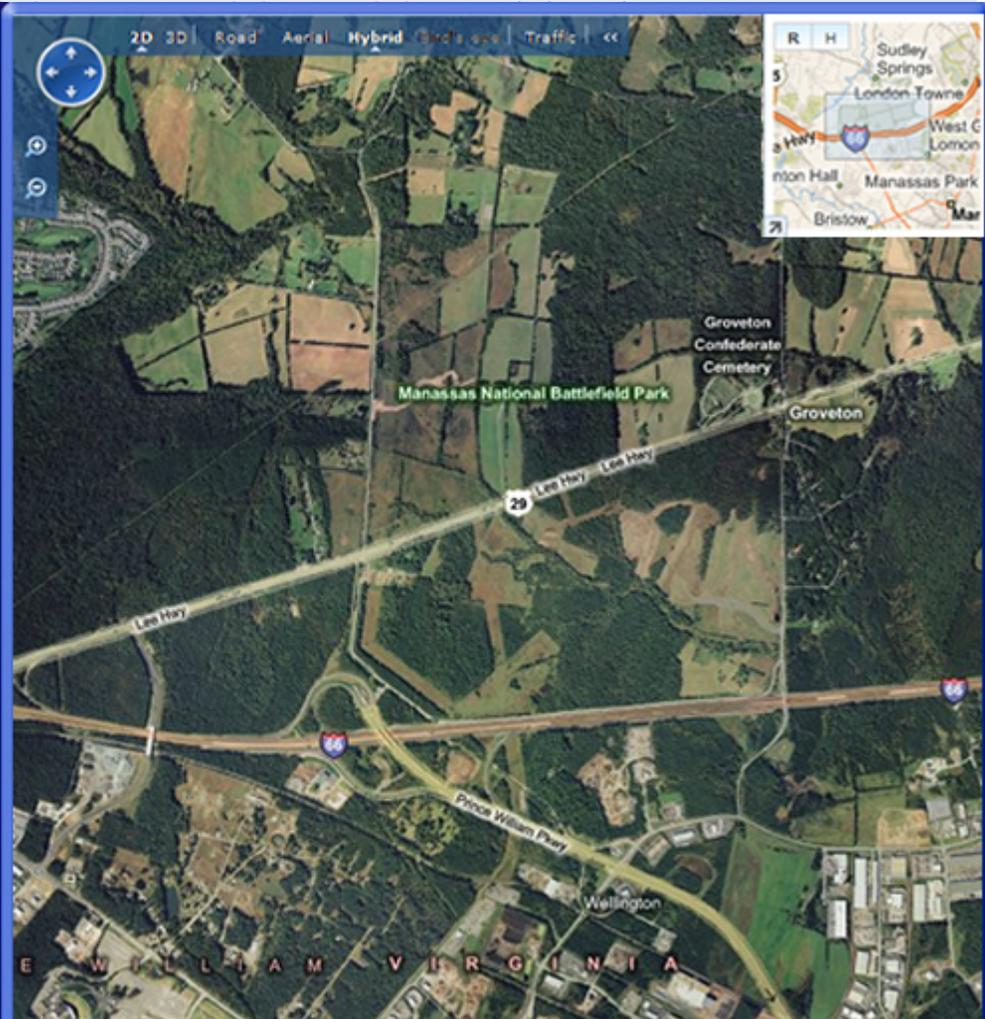
KML WFS WMS XML

Download

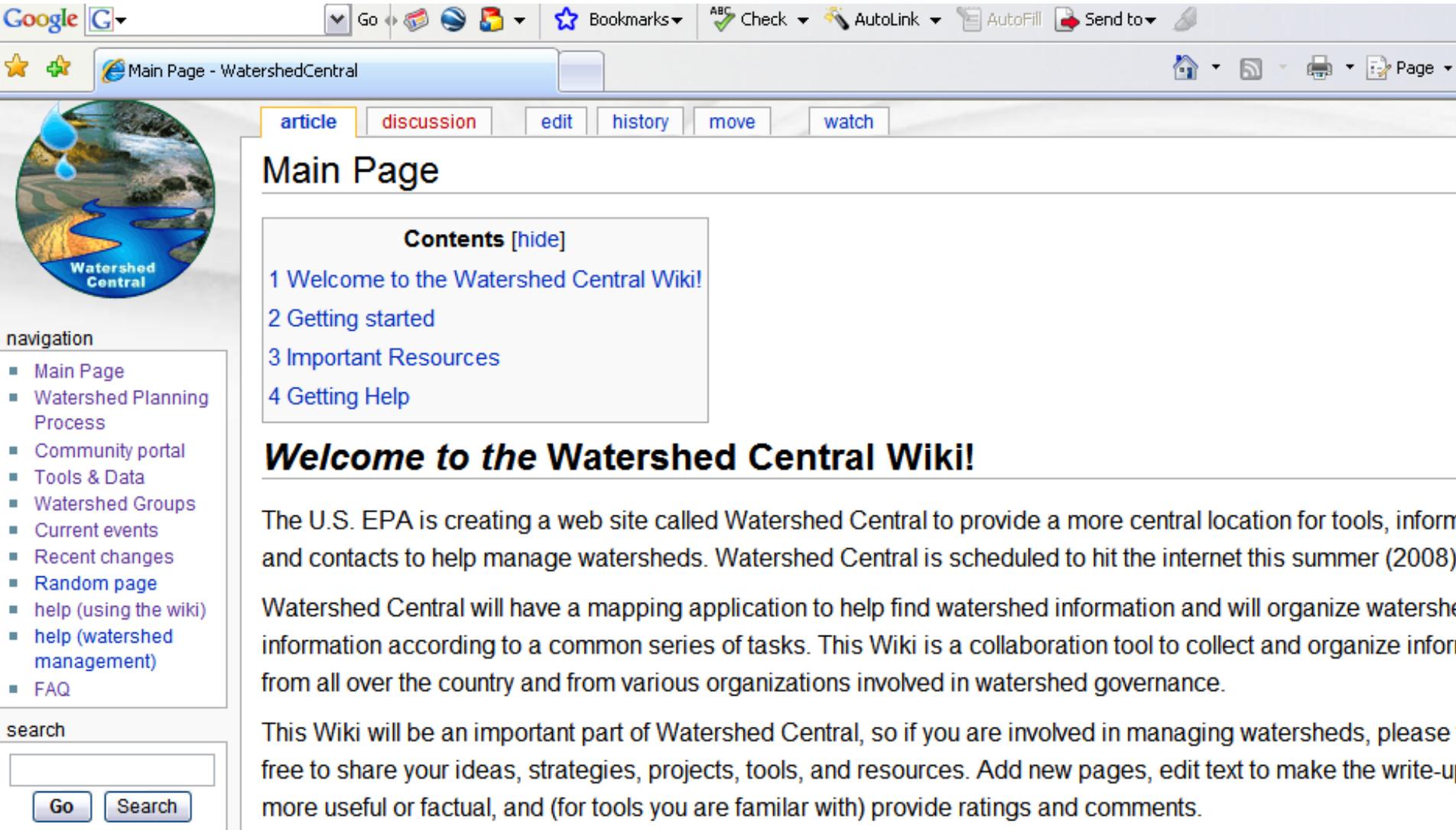
Add Your Information

Upload your data, projects or tool s
and link to a location

Add



A place to share and refine watershed information



Google G

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Bookmarks

Check

AutoLink

AutoFill

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Main Page - WatershedCentral

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Main Page

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- 1 Welcome to the Watershed Central Wiki!
- 2 Getting started
- 3 Important Resources
- 4 Getting Help

Welcome to the Watershed Central Wiki!

The U.S. EPA is creating a web site called Watershed Central to provide a more central location for tools, information, and contacts to help manage watersheds. Watershed Central is scheduled to hit the internet this summer (2008).

Watershed Central will have a mapping application to help find watershed information and will organize watershed information according to a common series of tasks. This Wiki is a collaboration tool to collect and organize information from all over the country and from various organizations involved in watershed governance.

This Wiki will be an important part of Watershed Central, so if you are involved in managing watersheds, please feel free to share your ideas, strategies, projects, tools, and resources. Add new pages, edit text to make the write-up more useful or factual, and (for tools you are familiar with) provide ratings and comments.

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- Watershed Planning Process
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- help (using the wiki)
- help (watershed management)
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search

Go Search

Watershed Management Process

Tools, information, and other resources for each task

The screenshot shows a Windows Internet Explorer browser window. The title bar reads "Watershed Management Process - WatershedCentral - Windows Internet Explorer". The address bar contains the URL "http://sdc-01.saic-solutions.com/watershed/index.php/Watershed_Planning_Process". The browser's toolbar includes navigation buttons, a search box with "Google" text, and various utility icons like "Go", "Bookmarks", "Check", "AutoLink", "AutoFill", and "Send to". The page content is organized into a sidebar on the left and a main content area on the right.

Watershed Management Process - WatershedCentral

- [help \(using the wiki\)](#)
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- 6 [Measure Progress and Make Adjustments](#)

Build Partnerships

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- [Identify Issues of Concern](#)
- [Set Preliminary Goals](#)
- [Develop Indicators](#)
- [Conduct Public Outreach](#)
- [Useful Tools](#) [for building partnerships](#)

Characterize the Watershed

- [Gather Existing Data and Create a Watershed Inventory](#)
- [Identify Data Gaps and Collect Additional Data](#)
- [Analyze Data](#)
- [Identify Causes and Sources That Need to Be Controlled](#)

Tools by categories – data provider



category discussion edit history watch

Category:Data Provider

Articles in category "Data Provider"

There are 23 articles in this category.

B

- [BASINS](#)

C

- [California Environmental Data Exchange Network \(CEDEN\)](#)
- [Canadian Geospatial Data Portal](#)

G

- [Global Earth Observation System of Systems \(GEOSS\)](#)
- [Goddard Space Center Global Change Master Directory](#)
- [Gulf of Maine Ocean Data Partnership](#)

M

- [Maryland Biological Stream Survey \(MBSS\)](#)

N

- [NHDPlus](#)
- [NRCS Geospatial Data Gateway](#)
- [National Water-Quality Assessment Program \(NAWQA\)](#)
- [National Wetlands Inventory \(NWI\)](#)
- [Nutrient Water Quality Criteria](#)

P

- [Pacific Northwest Water Quality](#)

S cont.

- [Surface Water Ambient Monitoring Program \(SWAMP\)](#)

U

- [U.S. General Soil Map \(STATSGO\)](#)
- [USGS Chesapeake Bay Tools \(COAST\)](#)
- [USGS Instantaneous Data Archive](#)
- [USGS Seamless Data Distribution System](#)
- [USGS Seamless Data Distribution System, Resources Observation and Science](#)
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Wiki - Tools

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Maryland Biological Stream Survey (MBSS)

The [Maryland Biological Stream Survey \(MBSS\)](#)  uses random sampling to determine the status of wadeable streams and rivers in Maryland. Since 1994, biologists have collected water samples, biological, and habitat data for over 2800 stream sites in Maryland!

Special project sampling was done in 2005-2006, to address issues uncovered in the first two rounds, along with planning for Round Three Random Sampling (2007-2009). Publications with the latest results are posted on the MBSS ["What's New?"](#)  page.

EPA Taxonomy Tags:

ETSS Information Types:	Factsheets; Research Reports; Data
ETSS Laws, Regulations & Treaties:	NA
ETSS Functions:	Water Monitoring; Data Access; Data Collection
ETSS Industries:	NA
ETSS Organizations:	EPA
ETSS Substances:	NA
ETSS Cooperation & Assistance:	NA
ETSS Emergencies & Cleanup:	NA
ETSS Environmental Media:	Surface Water; Water Pollution

Experience Required:	NA
Time Needed for Application:	
Data Needs:	Pipe delimited text file
Support available:	None
Software requirements:	NA
Cost to purchase:	Public Domain



Rating: 5.0/5 (1 vote cast)

[Comment on this tool](#)

User Comments (2 messages, page 1 of 1)

Mhurd:

This program has great SOPs and a great QA /QC program, including double entry of data and diff checks. Also, they're

Fish data for Maryland

[Fish Distributions](#)

[Your Feedback](#)

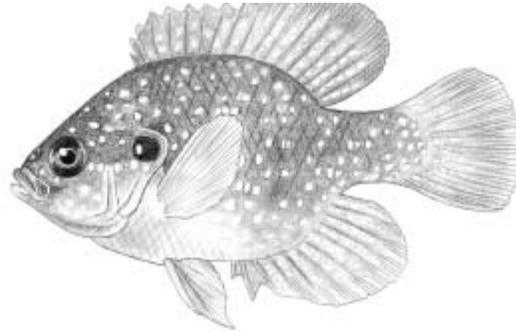


Illustration by Dave Neely

The map below shows presence (green circles) of this species in the 1995-2002 MBSS dataset.

Distribution of Bluespotted sunfish in Maryland (MBSS data)



Wiki – water quality/BMP tools



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PREDICT Tool for AVGWLF

The [PREDICT Tool](#) allows for incorporating BMPs into [AVGWLF](#) used in PA and New England.

EPA Taxonomy Tags:

ETSS Information Types:	EPA Models; Spatial Data
ETSS Laws, Regulations & Treaties:	NA
ETSS Functions:	Data Analysis; Water Forecasting; Geospatial Services
ETSS Industries:	NA
ETSS Organizations:	NA
ETSS Substances:	NA
ETSS Cooperation & Assistance:	Technical Assistance
ETSS Emergencies & Cleanup:	NA
ETSS Environmental Media:	Water
ETSS Health:	NA
ETSS Industrial:	NA
ETSS Research, Prevention & Control:	Models
ETSS Audiences:	Researchers & Scientists
ETSS Geography:	United States

Experience Required:	Moderate
Time Needed for Application:	Days
Data Needs:	Unknown
Support available:	None
Software requirements:	ArcView
Cost to purchase:	Public Domain

The following text can be used to easily add information to the required EPA taxonomy tags. {{EPA Taxonomy|infotypes=|LawsRegsTreaties=|functions=|industries=|organizations=|substances=|coop=|emergencies=|envmedia=|health=|industrial=



Rating: 0.0/5 (0 votes cast)

Wiki – Pennsylvania / NEIWPC tools



PRedICT

[PRedICT Overview](#)

[PRedICT Downloads](#)

[PRedICT Registration](#)

Visit the [AVGWLF](#) website to download the [AVGWLF](#) companion software.



[Report a bug](#)



If you have any questions about **PRedICT**, please contact any of the following individuals:

Latest PRedICT Version: 7.1.3, Built on February 11, 2008

psiee penn state
institutes of energy & the environment

For general distribution or use questions, contact:
Dr. Barry M. Evans
Penn State Institutes of the Environment
The Pennsylvania State University
128 Land and Water Research Building
University Park, PA 16802
(814) 865-3357

For program installation questions or errors contact:
Kenneth J. Corradini
Penn State Institutes of the Environment
The Pennsylvania State University
1 Land and Water Research Building
University Park, PA 16802
(814) 865-6966

For programming questions and technical support issues contact:
David W. Lehning
Penn State Institutes of the Environment
The Pennsylvania State University
1 Land and Water Research Building
University Park, PA 16802
(814) 865-6965

State, Local, Tribal, Federal, International



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Canadian Community Monitoring Tools and Science Hub

The Canadian Community Monitoring Network has evolved into the Citizen Science Network. An electronic hub for the network has been created at [www.citizenscience.ca www.citizenscience.ca]. The site has a directory of community-based monitoring and citizen science organizations from across Canada, as well as a rich toolkit of relevant resources, and an on-line listing of events. Citizen science monitoring groups are welcome to create a profile for the monitoring initiative on the site and join the list serve serving the community.

EPA Taxonomy Tags:

ETSS Information Types:	Concerned Citizens Resources; Basic Facts & Information
ETSS Laws, Regulations & Treaties:	NA
ETSS Functions:	Community & Regional Development; Environmental Education; Environmental Monitoring & Forecasting
ETSS Industries:	NA
ETSS Organizations:	NA
ETSS Substances:	NA
ETSS Cooperation & Assistance:	Communities
ETSS Emergencies & Cleanup:	NA
ETSS Environmental Media:	Ecological Monitoring; Water; Watersheds
ETSS Health:	NA
ETSS Industrial:	NA
ETSS Research, Prevention & Control:	Research
ETSS Audiences:	All

Experience Required:	None
Time Needed for Application:	Hours
Data Needs:	None
Support available:	None
Software requirements:	None
Cost to purchase:	Public Domain

Wiki – International Items



The Canadian Community Monitoring Network



français

The CBM Toolbox

PHASE	TOOL BOX	QUESTIONS TO ASK
Community Mapping	<p>Information Gathering to understand local context.</p> <p>Governance Analysis of the main groups within the community that influence environmental planning, management & reporting.</p> <p>Decision Making Support that provides opportunities for the community to identify their information needs.</p> <p>Mapping Understanding Canadian Government</p>	<ul style="list-style-type: none"> ○ What is the nature of the information needed to make decisions? ○ What monitoring is already taking place? ○ Who are the key groups and networks that could be involved? ○ What are the best ways to engage each different group? ○ Is the community interested in monitoring?
Participation Assessment	<p>Consultation & Outreach activities that seek interested participants.</p> <p>Champion Identification of those individuals or groups driving CBM.</p> <p>Stakeholder Analysis Defining Stakeholder Roles</p>	<ul style="list-style-type: none"> ○ Are the values of monitoring commonly understood? ○ What are participants' motivations and expectations? ○ What kinds of skills and expertise are available locally? ○ What resources, training and equipment are needed? ○ Who are the potential champions? ○ What are the common community values?

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- Glossary
- Contact us

WC Wiki – watershed project pages

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category discussion edit history watch

Category:Watershed Group

PROJECT NAME	Tribal Involvement				Sediment	Nutrient Management	Fish Habitat	Market-based Approaches/Water Quality Trading/Economic Incentives	Water Quantity (includes stormwater recharge, net outflow of water, drainage management and flooding)	Bacteria
	Urban	Suburban	Rural							
Bayou Bartholomew				x	x		x			
Bear River				x				x		
Cape Fear River		x	x	x				x		
Charles River		x						x	x	x
Cheat River				x			x			
Christina River			x	x		x				
Clark Forke-Pend Oreille			x	x		x				
Cumberland River		x	x	x						
Dungeness River	x		x	x		x				x
Dunkard Creek				x						
Fourche Creek		x			x					
Great Miami River				x	x	x		x		
Greater Blue Earth				x	x	x				
Hanalei Bay		x		x	x	x				x
Huff Run				x						
Ipswich River			x							
Kalamazoo River	x			x				x		
Kenai River	x			x						
Lake Hopatcong		x	x			x				
Lake Tahoe			x	x	x	x		x		



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Example from My Maps in Google – Spa Creek

The screenshot displays the Google My Maps interface. At the top, the Google Maps logo is visible, along with a search bar containing the text "e.g., '10 market st, san francisco' or 'hotels near lax'". Below the search bar are buttons for "Search Maps", "Show search options", "Search the map", "Find businesses", and "Get directions".

The main map area shows a satellite view of an urban area with several overlays. A red line indicates a route or boundary, and a green area represents a specific region. Various markers are placed on the map, including blue wavy lines representing water monitoring stations and a green house icon representing headquarters. The map includes a scale bar at the bottom left showing 2000 feet and 500 meters.

On the left side, the "My Maps" panel is visible, showing the "Spa Creek Database" as the selected map. Below this, there is a list of "Featured content" with icons and descriptions:

- [Spa Creek Headwaters Monitoring Station](#)
Staff Gage, Single Stage Sampler Rack Pt
- [Parking Lot at Whalen Fields](#)
Potential Site of Bioretention area for parki
- [Spa Creek Headquarters](#)
<http://spacreek.org/> Website for Spa Creek

The right side of the map shows navigation controls, including a vertical zoom slider, a compass, and buttons for "Traffic", "More...", "Map", and "Satellite".

Icons - used to educate and share information

Web Images Maps News Shopping Mail more ▾

stulehman@comcast.net | My Profile | Help | Web History | My Account

Google Maps e.g., "10 market st, san francisco" or "hotels near lax"

Search Maps Show search options

Search the map Find businesses Get directions

Search Results My Maps

View in Google Earth Print Send Link

Traffic More... Map Satellite

Create new map - Browse the directory

Created by me

- Untitled
- Spa Creek Database
- Integrated Watershed Management

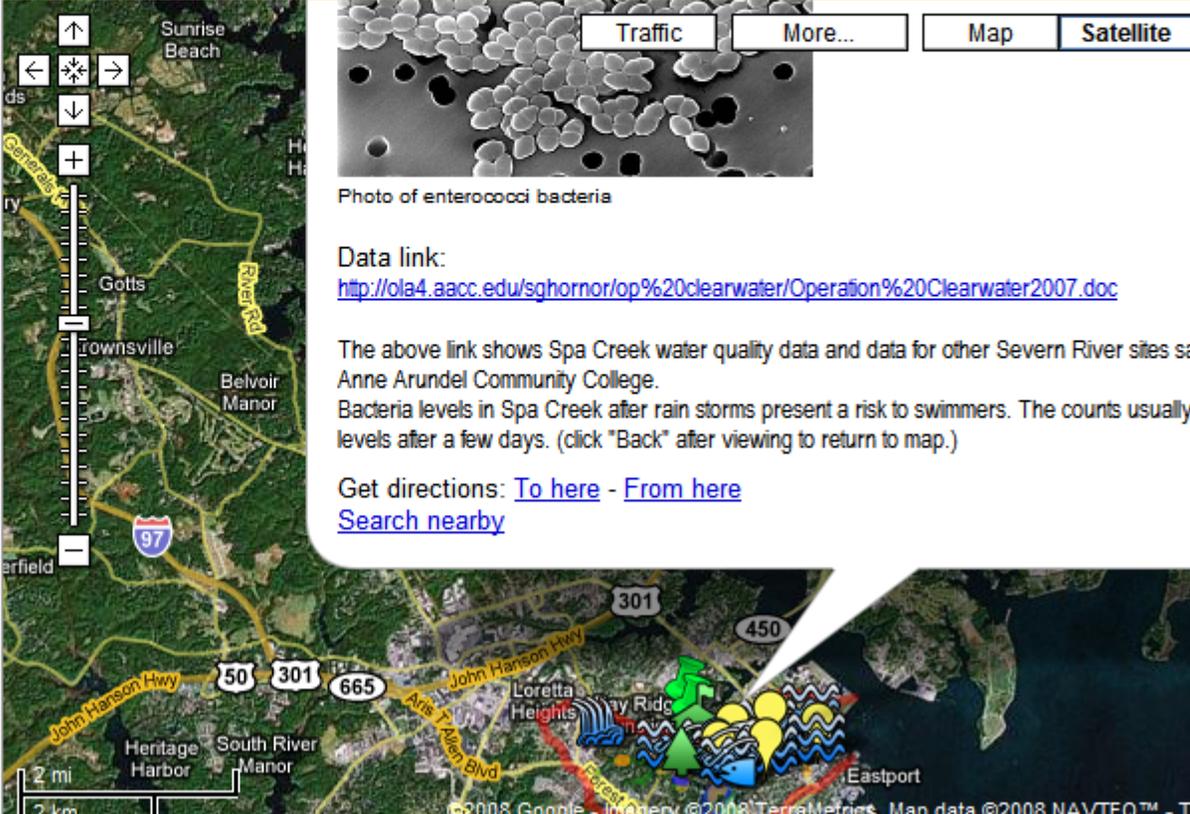
Featured content

Collaborate Edit

Spa Creek Database

Spa Creek Conservancy Information
133 views - Unlisted
Created on Jun 22 - Updated Mar 14
By stulehman - 2 Collaborators
[Rate this map](#) - [Write a comment](#)

-  [Spa Creek Headwaters Monitoring Station](#)
Staff Gage, Single Stage Sampler Rack Pt
-  [Parking Lot at Whalen Fields](#)
Potential Site of Bioretention area for parki
-  [Spa Creek Headquarters](#)
<http://spacreek.org/> Website for Spa Creek



The map shows a satellite view of the Spa Creek area in Annapolis, Maryland. It features several icons: a blue wavy icon for the monitoring station, a yellow pencil icon for the parking lot, and a green house icon for the headquarters. A callout box provides a data link and additional information about water quality and bacteria levels. The map includes a scale bar (2 mi / 2 km) and copyright information for Google, TerraMetrics, and NAVTEQ.

Photo of enterococci bacteria

Data link:
<http://ola4.aacc.edu/sghornor/op%20clearwater/Operation%20Clearwater2007.doc>

The above link shows Spa Creek water quality data and data for other Severn River sites served by Anne Arundel Community College.
Bacteria levels in Spa Creek after rain storms present a risk to swimmers. The counts usually return to normal levels after a few days. (click "Back" after viewing to return to map.)

Get directions: [To here](#) - [From here](#)
[Search nearby](#)

©2008 Google - Imagery ©2008 TerraMetrics - Map data ©2008 NAVTEQ™ - I

...and to share data

Operation Clearwater: Summer 2007

Sally Hornor, Anne Arundel Community College Environmental Center

The Environmental Protection Agency has determined that the abundance of enterococci is more closely correlated with gastrointestinal problems associated with swimming than is the fecal coliform count. The cutoff point for recommended swimming is 104 enterococci/100 ml water for single sample results. Counts in red do not meet the recommended level.

Enterococci per 100 ml

Location	5/23	5/30	6/6 *	6/13*	6/20*	6/27	7/5*	7/11	7/18	7/25	8/1	8/7*	8/15	8/22*
Spa Cr/City Dock			0	28	232	16	170	8	4	0		4	8	110
Spa Cr/ Market St			80	148	144	16	40	124	256	4		120	0	100
Spa Cr/ Amos Garrett Park			60	296	872	168	700	116	36	40		280	24	1600
Sap Cr/ Truxtun Park			120	144	240	24	450	44	32	40		0	16	800
Spa Cr/Well's Cove	48	960	220	110	1330	260	210	56	116	56	8	0	12	100
Spa Cr/ 4 th St			0	120	108	0	60	156	24	4		0	8	<100

6/6: approx. 0.7" of rain within 48 hours of sampling; 6/13: approx. 0.17" of rain within 12 hours of sampling

6/20: between 0.2 – 0.5" of rain within 7 hours of sampling; 7/5: between 0.2-0.46" of rain within 48 hours

8/7: approx. 0.5" of rain within 36 hours of sampling; 8/22: approx. 1.2" of rain within 24 hours of sampling

Wiki – Collaboration on “articles”

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- [\(diff\)](#) [\(hist\)](#) . . [Tools list](#); 15:39 . . [\(+41\)](#) . . [Jsturman](#) ([Talk](#) | [contribs](#))
- [\(Upload log\)](#); 14:14 . . [Ccooper](#) ([Talk](#) | [contribs](#)) (*uploaded "Image:CCTest MBSSR1R2Public MATT.xls": Cooper Test for upload options*)
- [\(diff\)](#) [\(hist\)](#) . . [m Mattawoman Creek Monitoring Data](#); 13:59 . . [\(+26\)](#) . . [Ccooper](#) ([Talk](#) | [contribs](#)) ([→Data](#) -)
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- [\(diff\)](#) [\(hist\)](#) . . [m Mattawoman Creek Monitoring Data](#); 13:45 . . [\(0\)](#) . . [Ccooper](#) ([Talk](#) | [contribs](#)) ([→Description](#) -)
- [\(diff\)](#) [\(hist\)](#) . . [BASINS](#); 13:43 . . [\(0\)](#) . . [Ed Partington](#) ([Talk](#) | [contribs](#))
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- [\(diff\)](#) [\(hist\)](#) . . [BASINS](#); 13:40 . . [\(+5\)](#) . . [Ed Partington](#) ([Talk](#) | [contribs](#)) ([→Environmental Monitoring Data Available \(Via Download\) Through BASINS](#) -)
- [\(diff\)](#) [\(hist\)](#) . . [N National Estuaries Projects](#); 13:39 . . [\(+1,041\)](#) . . [Stulehman](#) ([Talk](#) | [contribs](#)) (*New page: {{tools|experience=none|time=none|data=guidance and case studies|support=none|software=none|cost=no cost}} <http://epa.gov/owow/estuaries/> Estuaries are places where rivers meet the sea...*)
- [\(diff\)](#) [\(hist\)](#) . . [BASINS](#); 13:37 . . [\(+61\)](#) . . [Ed Partington](#) ([Talk](#) | [contribs](#)) ([→Environmental Monitoring Data Available \(Via Download\) Through BASINS](#) -)
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- [\(diff\)](#) [\(hist\)](#) . . [N IDLMAS](#); 23:17 . . [\(+786\)](#) . . [Jsturman](#) ([Talk](#) | [contribs](#)) (*New page: {{tools|experience=Moderate|time=Days|data=Unknown|support=None|software=GIS|cost=Unknown}} <http://www.epa.gov/nrmrl/pubs/600r05149/600r05149diasidlams.pdf> IDLMAS*)

Link to Watershed Central Wiki

- <http://sdc-01.saic-solutions.com/watershed>

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