Watershed Planner Assistant

- Brainstorm
- Create webpage
- Descriptions and links to WebPages
Watershed Planning Tools/ Online GIS Tools

- Web Soil Survey
- Indiana Map
- StreamStats (USGS)
- County GIS (Beacon)
- USEPA
  - Watershed Planner
  - Nonpoint Source (Education and Outreach) Toolbox
  - Watershed Central Wiki
Watershed Planning Tools/ Online GIS Tools

- **StreamStats**

  ![StreamStats Interface](image-url)
Watershed Planning Tools/ Online GIS Tools

- USEPA Watershed Planner

The Watershed Plan Builder Tool and Planning website is open to feedback! EPA is making this draft site widely available with the purpose of having it used and tested by a variety of watershed partnerships. EPA will be seeking advice from such organizations in developing the final version. Please address your comments, suggestions, and corrections to OWOW-WPB@epa.gov with “Watershed Plan Builder Site” in the subject line or by Mail to the address below. Submissions should be received by September 30, 2007.

We all live in a watershed - the area that drains to a common waterway, such as a stream, lake, estuary, wetland, or, ultimately, the ocean. EPA has long used a watershed approach to help restore and protect the nation’s water resources through watershed planning and management.

This site provides information and tools developed by EPA to assist with the development and implementation of effective watershed management plans. It is designed for people who are involved in watershed management activities. These activities include the development and implementation of watershed plans, the analysis of data, and the implementation of management practices. Each piece of this website provides specific information or helps you perform a task.

- Watershed Plan Builder - This tool walks you through a series of pages where you can input information about your watershed. The end product is a customized outline that can be used to develop a watershed management plan.
- Watershed Planning Process - Here you can find step by step instructions for developing a watershed plan. Use this information to fill in the pieces of your customized watershed plan outline.
- Basic Information - Learn more about the history of the Watershed Planning website and why it was developed.
- Frequent Questions - Turn to this page to find answers to some of the basic questions you may have about watersheds, the watershed planning process, and how to use this site.
- Examples - View examples of watershed plans (or sections of watershed plans)
- Information Sources - Turn to this section to find links to publications, analysis tools and technical documents, and funding sources related to watersheds and watershed planning. This section also includes a full glossary of terms related to watershed plan building.
Watershed Planning Tools/ Online GIS Tools

- USEPA Nonpoint Source Toolbox
Watershed Planning Tools/ Online GIS Tools

- USEPA Watershed Central Wiki
Best Management Practice Tools

- eFOTG

Welcome to eFOTG

What is eFOTG?

Technical guides are the primary scientific references for NRCS. They contain technical information about the conservation of soil, water, air, and related plant and animal resources.

Technical guides used in each field office are localized so that they apply specifically to the geographic area for which they are prepared. These documents are referred to as Field Office Technical Guides (FOTGs).

Appropriate parts of the Field Office Technical Guides are automated as data bases, computer programs, and other electronic-based materials such as those included in these web-based pages.

What is in eFOTG?

Section I General References
In this section you will find general state maps, descriptions of Major Land Resource Areas, watershed information, and links to NRCS reference manuals and handbooks. Section I contains links to researchers, universities, and agencies we work with.

Section I also contains conservation practice costs, agricultural laws and regulations, cultural resources, and information about protected plant and animal species.

Section II – Soil and Site Information
In this section you will find detailed information about soil, water, air, plant, and animal resources. NRCS Soil Surveys, Hydro-Soil Interpretations, Ecological Site Descriptions, Forage Suitability Groups, Cropland Production Tables, Wildlife Habitat Evaluation Guides, Water Quality Guides, and other related information can be found here as it becomes available.

Section III – Conservation Management Systems
In this section you will find information on NRCS Quality Criteria, which establish standards for resource conditions that help provide sustained use.

Section IV – Practice Standards and Specifications
In this section you will find the NRCS Conservation Practices. Practice Standards define the practice and where it applies. Practice specifications are detailed requirements for installing the practice in the state.

Section V – Conservation Effects
In this section you will find backgound information on how
Best Management Practice Tools

- eFOTG cont.
Best Management Practice Tools

- Forestry

Forestry intentionally combines agriculture and forestry to create integrated and sustainable land-use systems. Agroforestry takes advantage of the interactive benefits from combining trees and shrubs with crops and/or livestock. Agroforestry practices include:

- Alley Cropping
- Forest Farming
- Riparian Forest Buffers
- Silvopasture
- Windbreaks
- Special Applications

- Agroforestry for Farms and Ranches
  NRCS Technical Note describing tree and shrub practices in sustained agricultural systems.

- Ecosystem Services
  This Forest Service Web site provides information on economic and social values of forest ecosystems. New opportunities in market-based conservation and stewardship are being explored by NRCS and the Forest Service.

- Forestry Economic Models
- National Forestry Handbook
  The National Forestry Handbook (NFH) provides informational material to assist NRCS personnel in the planning and
Best Management Practice Tools

- Forestry cont.

Riparian Forest Buffers

Riparian forest buffers are natural or re-established streamside forests made up of tree, shrub, and grass plantings. They buffer non-point source pollution of waterways from adjacent land, reduce bank erosion, protect aquatic environments, enhance wildlife, and increase...
Best Management Practice Tools

NHCP

National Conservation Practice Standards - NHCP

The table below is the current list of National conservation practices in alphabetical order by practice name, with the practice code in parentheses. The table contains links to the practice standard (available in either Portable Document Format (PDF) or MS-Word), a conservation practice information sheet and the Conservation Practice Physical Effects (CPPE) worksheet for most practices, and job sheets for a limited number of conservation practices.

The last column contains national templates for Statements of Work associated with each conservation practice. These national templates are provided in MS-Word and are for modification and adaptation by the NRCS State Offices.

These Statements of Work outline deliverables for all conservation practices in the National Handbook of Conservation Practices (NHCP), as well as for comprehensive nutrient management plan development, conservation planning, and cultural resources compliance activities.

There are five additional national templates for Statements of Work that are not directly associated with conservation practices: 1) Conservation Planning, 2) Comprehensive Nutrient Management Planning, 3) Cultural Resources Archival Research, 4) Cultural Resources Identification Surveys and 5) Cultural Resources Evaluations.

NOTICE - National Conservation Practice standards should not be used to plan, design or install a conservation practice. You must have the conservation practice standard developed by the state in which you are working to insure that you meet all state and local criteria, which may be more restrictive than national criteria.

State Conservation practice standards are available through the Field Office Technical Guide (FOTG). If no state conservation practice standard is available in the FOTG, you should contact the appropriate State Office or your
## Best Management Practice Tools

- **NHCP cont.**

<table>
<thead>
<tr>
<th>Conservation Practice Name (Units) (Code) (Date Issued)</th>
<th>Standard</th>
<th>Conservation Practice Information Authority</th>
<th>CPPE Worksheet</th>
<th>Job Sheet</th>
<th>National Statement of Work Template</th>
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</table>
Best Management Practice Tools

Urban BMP's - Water Runoff Management

The following documents require Adobe Acrobat.

A. Construction Site Impact Reduction (temporary practices) (8)

- Brush Barrier (46 KB)
- Construction Entrance/Exit (73 KB)
- Construction Sequence (35 KB)
- Silt Fence (Filler Fence) (110 KB)
- Storm Drain Inlet Protection (145 KB)
- Straw Bale Barrier (71 KB)
- Temporary Seeding (69 KB)
- Topsoiling (75 KB)

B. Source Reduction (16)

- Animal Waste Collection (45 KB)
- Erosion (51 KB)
Best Management Practice Tools

- Urban cont.

**STRAW BALE BARRIER**

**What is it?** A temporary sediment barrier consisting of a row of entrenched and anchored rice, or wheat straw bales.

**Purpose**

To intercept and detain small amounts of sediment from disturbed areas of limited extent in order to prevent sediment from leaving the site. To decrease the velocity of sheet flows and low-to-moderate level channel flows.

**Location of Straw Bale Barrier in Swale**

Section View

Because straw bale barriers are not designed to withstand high pressure heads, the drainage area must be restricted and the barrier located so that the water depth does not exceed 1.0 ft (305 mm) at any point. Do not install straw bale barriers across streams, ditches, or where flows are concentrated. It is not recommended to use a straw bale barrier across a swale or ditch. Usually a silt fence or other BMP would better address erosion and sediment problems in this case. The design life of straw bale barriers is three months or less. Improper use of straw bale barriers has been a major problem. Straw bale barriers have been used in streams and drainage ways where high water velocities and volumes have destroyed or impaired their effectiveness. Improper placement and installation of the barrier...
Best Management Practice Tools

Conservation Buffers

Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways