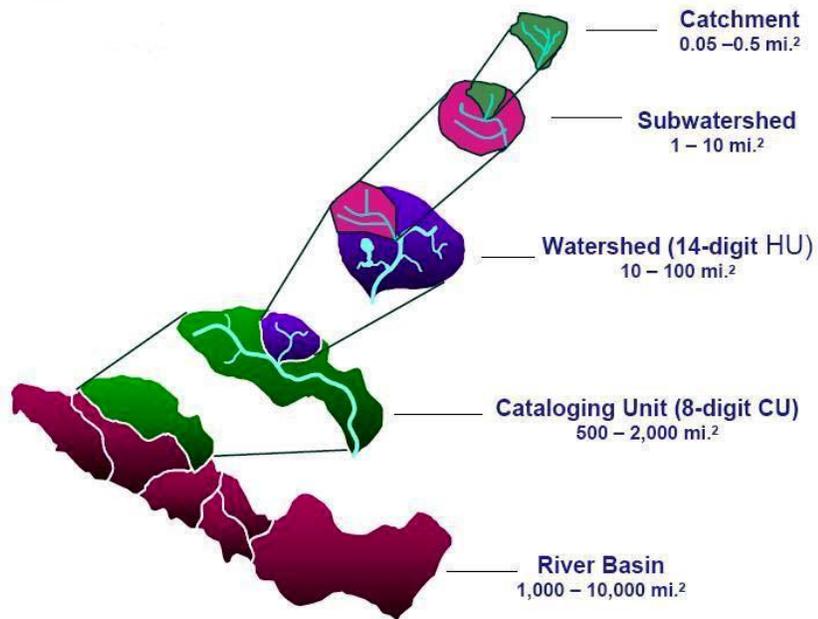


Determine *Priority Watersheds* for Stream and Wetland Projects

The N.C. Ecosystem Enhancement Program uses a **watershed approach** to determine priority areas for implementation of stream and wetland mitigation projects. The purpose of this approach is to concentrate mitigation resources in areas where they will have the greatest benefit to local watershed functions. EEP's watershed approach includes **three major steps**, beginning at the scale of river basins, proceeding to local watersheds [14-digit Hydrologic Units (HUs)], and culminating in the identification of project sites (stream reaches, wetland, and buffer sites) within priority sub-watersheds. The figure below illustrates the major scales of EEP watershed planning.



Step 1 – River Basin Restoration Priorities

EEP watershed planners develop and periodically update reports known as River Basin Restoration Priorities (RBRPs). RBRPs use available geospatial data, watershed field tours and input from state and local resource professionals to identify 14-digit HUs with a mix of problems (e.g., streams with impaired water quality and/or degraded habitat), assets (e.g., rare aquatic species, healthy riparian buffer zones) and opportunities (e.g., hydric soils, conservation properties). A ranking methodology is used to prioritize such local watersheds, and a certain number are designated as Targeted Local Watersheds (TLWs) within the 8-digit Cataloging Units (CUs) comprising a given river basin. TLWs represent those local watersheds (approximately 10 to 100 square miles each) in which watershed projects (restoration, enhancement, preservation, and bmp) should achieve the largest functional benefit..

July 2013

As of July 2013, EEP has designated 522 of 1,601 local watersheds (14-digit HUs) across the state as TLWs. Information on EEP's [RBRP Methodology](#) and the most recent [RBRP updates](#) are available on the [Watershed Planning Section](#) of EEP's portal. Information is searchable by river basin and includes the contact information of the planning staff member for the subject river basin.

Step 2 – Local Watershed Plans

Depending on programmatic mitigation needs – which are driven by anticipated impacts associated with N.C Department of Transportation projects and permitted impacts associated with other development activities in the state – certain CUs within the state are periodically identified for new local watershed planning (LWP) initiatives.

LWP initiatives usually include three phases of work designed to identify the most significant local watershed problems, and develop recommendations (including specific mitigation projects) to most effectively address these problems. To determine the areas (14-digit HUs) in which to focus LWP efforts, EEP watershed planners begin by looking at the TLWs identified within the latest RBRPs for a given river basin. EEP planners typically select one to three contiguous TLWs, comprising approximately 50 to 150 square miles, within which to conduct local watershed planning.

Factors used to select the LWP focus areas (specific 14-digit HUs) include: geospatial information and feedback from local resource professionals indicating abundant project site opportunities; observations made during “windshield surveys” (field tours) of the watershed area indicating restoration/enhancement and preservation opportunities; willingness of local resource professionals to participate in an LWP stakeholder group; ongoing and/or planned local watershed funding initiatives being spearheaded by local resource professionals; and existing EEP mitigation projects within the proposed LWP area. EEP's LWP initiatives, which typically require 24 to 30 months to complete, culminate in the development of four major products:

1. *Preliminary Findings Report*-- an evaluation of available data sources and a preliminary determination of current watershed conditions;
2. *Watershed Assessment Report*- a summary of major functional conditions within the LWP study area and prioritization of subwatershed areas for restoration/enhancement and preservation opportunities;
3. *Watershed Management Plan*- recommendations (e.g., restoration projects, BMPs and institutional measures) for the most critical local watershed problems identified; and
4. *Project Atlas* –site-specific information and mapping for potential mitigation project sites identified within the LWP study area.

Ongoing and completed LWP initiatives conducted by EEP Planners are highlighted on the [EEP website](#). As of July 2013, EEP Planners had completed a total of thirty-two local watershed planning efforts across the state. In addition, three LWPs are currently in active development and three plans on hold due to a decrease in mitigation needs.

Step 3 – Project Site Selection

EEP focuses project implementation effort in prioritized watersheds through multiple project procurement methods:

July 2013

- EEP purchases bank credits from private mitigation banks developed within TLWs;
- EEP issues requests for proposals (RFPs) for mitigation projects that are located in identified priority watersheds; and
- EEP implements Design-Build and Design-Bid-Build projects within LWP areas and TLWs.

Step 4 – Post Plan Implementation Monitoring

In compliance with its' [In-Lieu Fee Instrument](#), EEP tracks projects implemented within TLWs and LWPs. In addition, EEP is currently identifying priority watersheds across the state with high concentrations of projects implemented by EEP and other entities and is developing strategies to model watershed response to improvement projects.

At the project-reach and catchment scales, EEP's Monitoring & Research Section is pursuing long-range monitoring activities at selected project sites to determine the extent to which functional benefits are being realized. Data generated by such project- and subwatershed-specific monitoring will be used to evaluate success of EEP's watershed approach.