

Chapter 11

Ecosystem Enhancement Program

Overview

The North Carolina Ecosystem Enhancement Program (EEP) is responsible for providing ecologically effective compensatory mitigation in advance of permitted impacts associated with road projects and other development activities. The fundamental mission of the program is to restore, enhance and protect key watershed functions in the 17 river basins across the state. This is accomplished through the implementation of wetland, stream and riparian buffer projects within selected local watersheds. The vital watershed functions that EEP seeks to restore and protect include water quality, floodwater conveyance and storage, fisheries and wildlife habitat.

The EEP is not a grant program, but can implement its restoration projects cooperatively with other state or federal programs such as the Section 319 Program. Combining EEP-funded restoration or preservation projects with 319 or other local watershed initiatives (e.g., those funded through the Clean Water Management Trust Fund or local/regional Land Trusts) increases the potential to improve the water quality, hydrologic and habitat functions within selected watersheds.

Watershed Planning by the Ecosystem Enhancement Program

The selection of optimal sites for EEP mitigation projects is founded on a basinwide and local watershed planning approach that results, respectively, in the development of River Basin Restoration Priorities and Local Watershed Plans.

River Basin Restoration Planning

In developing River Basin Restoration Priorities (RBRP) (formerly called Watershed Restoration Plans), the EEP identifies local watersheds with the greatest need and opportunity for restoration, enhancement or preservation projects. These high-priority watersheds are called “Targeted Local Watersheds” (TLWs). Targeted Local Watersheds are identified, in part, using information compiled by DWQ’s programmatic activities (e.g., Basinwide Assessment Reports). Local factors considered in the selection of TLWs include: water quality impairment, habitat degradation, the presence of critical habitat or significant natural heritage areas, the presence of water supply watersheds or other high-quality waters, the status of riparian buffers, estimates of impervious cover, existing or planned transportation projects, and the opportunity for local partnerships. Recommendations from local resource agency professionals and the presence of existing or planned watershed projects are given significant weight in the selection of TLWs. Targeted local watersheds represent those areas within a river basin where EEP resources can be focused for maximum benefit to local watershed functions. TLWs are therefore given priority by EEP for the implementation of new stream and wetland restoration/enhancement or preservation projects. The location of the EEP targeted local watersheds in the basin are shown in Figure 11-1.

The 2008 Lumber River Basin Restoration Priorities can be found on the EEP website at http://www.nceep.net/services/lwps/pull_down/by_basin/lumber_RB.html. This is the second River Basin Restoration Priorities plan that has been completed by EEP for the Lumber River basin.

Local Watershed Planning

In addition to river basin restoration planning, EEP also develops Local Watershed Plans (LWPs), usually within targeted local watersheds identified in the RBRPs. Through the local watershed planning process, EEP conducts watershed characterization and field assessment tasks to identify critical stressors in local watersheds. The EEP planners and their consultants coordinate with local resource professionals and local governments to identify

optimal watershed projects and management strategies to address the major functional stressors identified. The LWPs prioritize restoration/enhancement projects, preservation sites, and best management practices (BMP) projects that will provide water quality improvement, habitat protection and other environmental benefits to the local watershed.

NCEEP planners make decisions regarding the possible need for new LWP initiatives within a given basin annually. These decisions are based primarily on the quantity and type of compensatory mitigation projects the Program is required to implement, as well as the opportunity for local partnerships within selected 14-digit hydrologic units within the basin.

EEP completed a Local Watershed Plan for Bear Swamp in 2006. For more information on the Bear Swamp LWP, see the online factsheet at http://www.nceep.net/services/lwps/Bear_Swamp/Bear_Swamp.pdf. Another LWP was completed for Lockwoods Folly River in 2007. For more information on the Lockwoods Folly River LWP, see the factsheet at http://www.nceep.net/services/lwps/Lockwood/Lockwood_Folly.pdf or contact EEP Planner Michele Dostin at (919) 715-6817 or via email at michele.dostin@ncdenr.gov.

For further information on EEP LWPs please visit the EEP factsheets located online at <http://www.nceep.net/services/lwps/localplans.htm>.

NCEEP Projects in the Lumber Basin

As of August 2009, a total of 16 EEP mitigation projects have been implemented within the Lumber Basin. Implemented projects include stream and wetland restoration/enhancement and preservation projects that are in one of three stages: design; construction; or monitoring (construction complete). The 16 EEP projects in this river basin include three projects in the design phase and seven in monitoring. The six remaining projects have completed their monitoring requirements. Of these 16 projects, none have been acquired through EEP's full delivery mitigation program. Table 11-1 lists all EEP restorations projects in the Lumber basin.

TABLE 11-1: EEP MITIGATION PROJECTS IN THE LUMBER RIVER BASIN

PROJECT NUMBER	PROJECT NAME	COUNTY	8-DIGIT HUC
60	Bush Island	Columbus	03040203
128	Ephemeral Pool	Scotland	03040203
201	Juniper Bay	Robeson	03040203
225	Little McQueen	Robeson	03040203
233	Long Swamp	Hoke	03040203
251	Mill Branch	Columbus	03040206
92120	Deep - Horse Creek Mckean	Moore	03040203
92121	Drowning Creek IP Forest Investments	Moore	03040203
92163	Drowning Creek	Moore	03040203
92164	Beaver Dam - Drowning Creek II (Rankin Tract)	Moore	03040203
92165	Wimberly Tract - Nat's Creek	Moore	03040203
92209	Bird Island	Brunswick	03040208
92351	Meadow Branch (Fivemile Branch)	Robeson	03040203
92517	Brown Marsh Swamp	Robeson	03040203
92549	Plum Creek	Brunswick	03040208
92760	Columbus Swamp	Robeson Columbus	03040203

For more information on EEP mitigation projects in the Lumber River Basin, contact Jeff Schaffer (Eastern Operations Supervisor) at (919) 715-1952.

For additional information about EEP's Project Implementation efforts, go to:
http://www.nceep.net/services/implementation/project_implementation.htm.

For additional information about EEP in general, including its various program activities and products, visit <http://www.nceep.net/>.

FIGURE 11-1: EEP TARGETED LOCAL WATERSHEDS

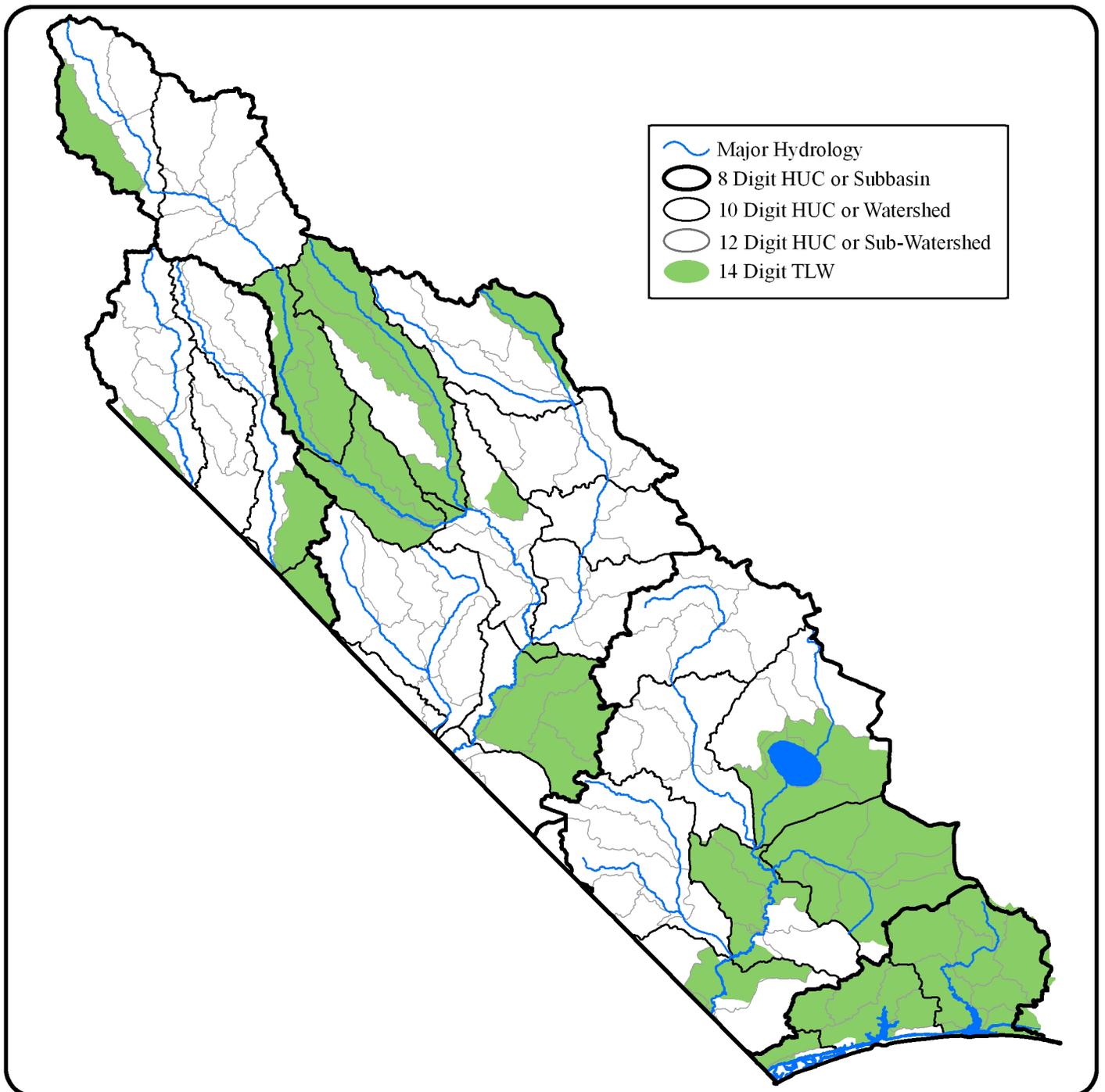


TABLE 11-2: TARGETED LOCAL WATERSHEDS AND 12 DIGIT HUCs

12 DIGIT HUC SUBWATERSHED	SUBWATERSHED NAME	TARGETED LOCAL WATERSHED NUMBER
030402030103	Naked Creek	03040203010040
030402030301	Town of Wagram - Lumber River	03040203020010
030402030302	Gum Swamp	03040203040010
030402030303	Town of Maxton - Lumber River	03040203020010
030402030401	Back Swamp	03040203030020
030402030402	Bear Swamp	03040203050010
030402030403	Mill Branch - Lumber River	03040203030010
030402030501	Upper Raft Swamp	03040203060020
030402030502	Little Raft Swamp	03040203060020
030402030504	Middle Raft Swamp	03040203060020
030402030505	Lower Raft Swamp	03040203060030
030402030605	Gallberry Swamp	03040203110010
030402031001*	Saddletree Swamp	03040203080020
030402031005	River Swamp - Lumber River	03040203190010
030402031003*	Jacob Swamp - Lumber River	03040203050010 03040203060030
030402031101	Dunn Swamp	03040203191010
030402031102	Upper Porter Swamp	03040203191010
030402031103	Lower Porter Swamp	03040203190010 03040203191010
030402031104*	Flowers Swamp - Lumber River	03040203190010
030402040106*	Beaverdam Creek - Gum Swamp Creek	03040204010060
030402040503	Middle Little Pee Dee River	03040204037010
030402040304	Wilkinson Creek	03040204048010
030402060303	Green Swamp - Big Creek	03040206020040
030402060305*	Bogue Swamp	03040206020040
030402060306	Boggy Swamp - Waccamaw River	03040206020040
030402060401	Bear Pen Island Swamp	03040206030010
030402060402	Honey Island Swamp	03040206030010
030402060403*	Upper Juniper Creek	03040206030010
030402060404	Alligator Swamp	03040206030010
030402060405	Lower Juniper Creek	03040206030010
030402060601	Horse Pen Swamp - Waccamaw River	03040206030010 03040206010070
030402060602	Gore Lake - Gore Creek	03040206060010
030402060605	Regan Branch - Waccamaw River	03040206060010 03040206050010
030402060702	Buck Creek - Waccamaw River	03040206050010 03040206090010
030402060704	Bellamy Branch - Waccamaw River	03040206090010
030402080101	Middle Swamp	03040207020010

12 DIGIT HUC SUBWATERSHED	SUBWATERSHED NAME	TARGETED LOCAL WATERSHED NUMBER
030402080102	Headwaters Lockwoods Folly River	03040207020010
030402080103	Royal Oak Swamp	03040207020020
030402080104	Scotts-Branch - Lockwoods Folly River	03040207020010
030402080105	Mill Creek	03040207020030
030402080106	Pamlico Creek - Lockwoods Folly River	03040207020030
030402080107	Town of Long Beach - Montgomery Slough	03040207020040
030402080201	Upper Shallotte River	03040207020060
030402080202	Middle Shallotte River	03040207020060
030402080203	Shallotte Creek	03040207020060
030402080204*	Lower Shallotte River	03040207020060 03040207020090
030402080302	Calabash Creek	03040207020110
030402080303*	Lower Little River - Atlantic Intracoastal Waterway	03040207020110

* Denotes that only part of this subwatershed intersects with an EEP targeted local watershed