Stream-Riparian Using Large Wood Materials Northeast Workshop – July 2009

Environmental Assessments and NEPA

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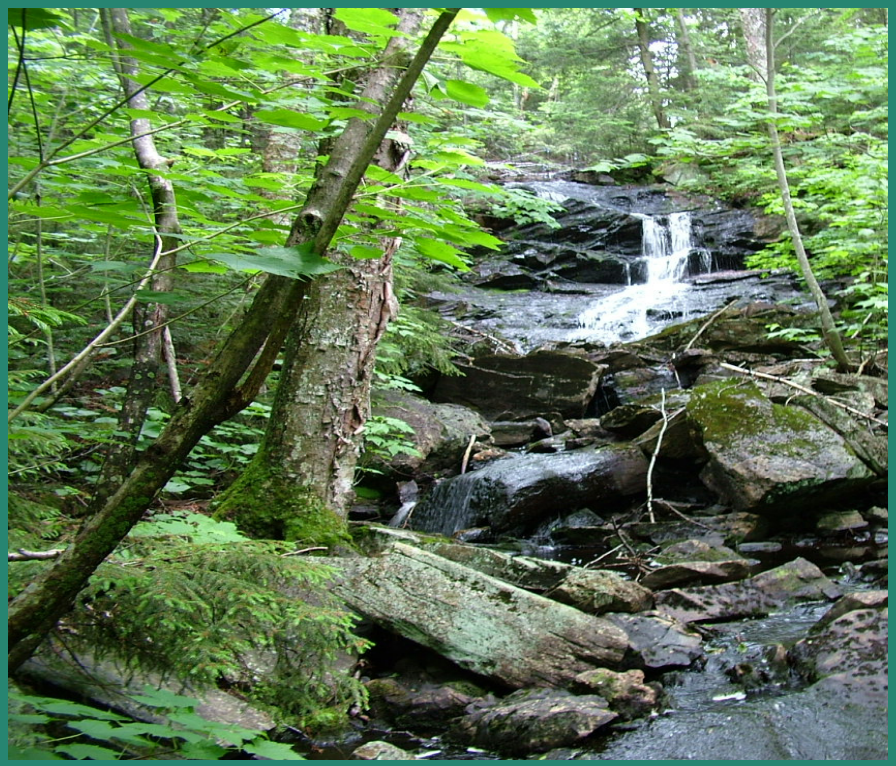

GMNF 2006 Forest Plan Direction

Relative to Stream-Riparian Restoration

- **Goal 4:** Maintain or restore aquatic, fisheries, riparian, and wetland habitat

- **Objectives:** Restore and enhance fisheries habitat using principles of stream geomorphology and habitat management to provide:
  - Less than 50 percent substrate embeddedness in spawning and rearing areas, primarily riffle and run habitats
  - Less than 20 percent fine sediment, sand, and silt in spawning areas
  - At least 30 percent pool habitat, of which at least one third should be Class 1 and 2 holding and resting pools
  - No more than 15 percent of stream bank area eroded on the entire length of stream

GMNF 2006 Forest Plan Direction

Relative to Stream-Riparian Restoration

- **Goal 6:** Maintain or restore ecological processes and systems on the GMNF within desired ranges of variability, including a variety of native vegetation and stream channel types, and their patterns and structural components.

- **Objectives:** Restore and enhance stream ecosystem processes using knowledge of riparian/floodplain functions and large woody debris (LWD) dynamics for the purpose of improving and connecting aquatic habitats, such as those for wild trout and Atlantic salmon, promoting stream stability and sediment and organic matter storage, or to increase stream productivity. Stream habitat should be managed to provide:
  - LWD quantities between 75 and 130 pieces greater than 12 inches diameter per mile of stream
  - Approximately 100 pieces between 8 to 12 inches diameter per mile of stream

Levels of NEPA

- **Categorical Exclusion – Decision Memo**
  - Activities that can be categorically excluded from documentation in an EA or EIS (if no uncertainty of significant effects)
  - Categories of actions for which a project or case file and Decision Memo are required (currently 15 categories)
  - Category 36 CFR 220.6 (e)(7): “Modification or maintenance of stream or lake aquatic habitat improvement structures using native materials or normal practices.”

- **Environment Assessment – Decision Notice/FONSI**
  - An EA is needed if there is uncertainty of significant effects

Dutton Brook Large Woody Debris Restoration Project
Decision Memo – March 2009

- In order to meet Forest Plan Goals and Objectives to "[m]aintain or enhance fish populations through habitat protection, enhancement, and restoration, and stocking programs" (2006 Forest Plan, P. 13); "[m]aintain or restore aquatic, fisheries, riparian, and wetland habitats" (2006 Forest Plan, P. 13); and, to [m]aintain or restore ecological processes and systems on the GMNF within desired ranges of variability, including a variety of native vegetation and stream channel types, and their patterns and structural components" (2006 Forest Plan, P. 14), **I have decided to authorize the placement of large woody debris into approximately 1,100 feet of Dutton Brook.**

Natural Turnpike Project Environmental Assessment March 2008

- The Natural Turnpike Project consists of integrated resource management activities including commercial and non-commercial vegetation treatments, wildlife and fisheries habitat improvements, road closures and other road management activities, soil and water improvements and enhancement/preservation of historic sites

Natural Turnpike Project Environmental Assessment Purpose and Need

- **Purpose & Need: Improve the quality of fish habitat in Sparks Brook**

Stream	#[3] LWD/Mile	Canopy Closure	Percent Pool Area	Percent High Quality Pools[2]
Forest Plan Objective[1]	175-230	70%	30%	33%
Sparks Brook	34	79%	2.5%	15%

[1] 2006 FP Objectives establish the desired condition for fish habitat and are based on natural LWD loading.

[2] High quality pools are as long as the stream width, with a depth of 2 feet or greater and abundant cover.

[3] Number of LWD relates to the number of wood pieces greater than 8" diameter and greater than 6' in length

Without increasing the amount of large woody debris, aquatic habitat diversity would remain in its current condition. There is a need to increase the amount of LWD and pool habitat in Sparks Brook

Natural Turnpike Project Environmental Assessment Decision Notice/FONSI

- Add large woody debris (LWD) into sections of Sparks Brook in the project area. The work will involve falling about 115 trees from the riparian area into Sparks Brook along 0.6 mile (86 trees) and 0.2 mile (29 trees) sections of the stream. By doing so, stream processes and LWD functions such as creating pools, adding protective cover, trapping and sorting of spawning gravel can be restored.

NEPA and “Big Gulp” Projects

- ✓ Management activities that could be categorically excluded from an EA can get held up if the larger project is appealed and/or litigated

Old Joe Project Environmental Assessment Decision Notice/FONSI – August 2002

- Decision signed in August 2002
- Predominately a timber sale project
- Included some minor amounts of wildlife and fisheries/stream habitat improvement activities:
  - Improve approximately 3/4 miles of Chittenden Brook and 1/4 miles of Joe Smith Brook (about 6,000 total linear feet) by adding large woody debris (LWD) to the stream channel
- ✓ Appealed and litigated in 2003
- ✓ Forest Service lost case at Appellate Court level in 2005
- ✓ Decision withdrawn

Upper White River Integrated Resource Project Environmental Assessment Scoped in April 2009

- Major effort to integrate resource management activities across ownership boundaries
  - Nearly 2 years of public collaboration with individuals, groups, towns and other agencies
  - Includes a focus on LWD and aquatic passage improvement work on NFS and private land
  - Building partners and volunteer groups for potential stewardship contract opportunities
  - Provided notice during public scoping that some project activities may be separated from the EA and documented in a Decision Memo

Choices for Levels of NEPA – Summary

- **Categorical Exclusion:** Unconnected in time and space with other resource management activities

- **Environmental Assessment:** Integrated resource projects
  - Separate out before scoping
  - Separate out after scoping
  - Include in the EA – difficult to show non-connectivity with other actions

More Information

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THANK YOU