

PROJECT SCOPE AND ANALYSIS DOCUMENT

**Gila National Forest
Catron, Grant, Hidalgo, Luna and Sierra Counties**

PROPOSED FOREST PLAN AMENDMENT RIPARIAN STANDARDS AND GUIDELINES *September 2004*

1. Introduction

The Gila National Forest has not been able to meet certain scheduled activities outlined in the Forest Plan regarding riparian area inventory and management. Forest Guardians, an environmental group concerned about the management of riparian areas, filed a lawsuit against the Gila National Forest in 2001 for failure to comply with the Gila Forest Plan. A legal settlement was reached that provides for the Gila National Forest to amend the Forest Plan and update riparian management direction by July 2005.

2. Purpose and Need

The purpose of the amendment is:

- To update Forest Plan riparian standards and guidelines to include current riparian methodology.
- To clarify definitions for riparian ecosystems and other terms.
- To schedule activities that are flexible enough to allow adjustment to budget, workforce and priority changes.

The amendment is needed because:

- The Gila National Forest Plan was implemented in 1986 and is not scheduled for revision until 2007.
- Budget and workforce assumptions in the plan have not been funded in past Forest budgets or reflected in national or regional priorities and it is expected that this trend will continue.
- The Forest has not been able to meet certain scheduled riparian related activities (inventories and improvement of conditions) outlined in the Forest Plan.
- The Forest has recognized that some standards and guidelines that define satisfactory riparian areas may not apply to all riparian ecosystems and may not be attainable.

3. Proposed Action

The Gila National Forest proposes to amend the Gila National Forest Plan to update scheduled activities and definitions associated with riparian standards and guidelines. This amendment is expected to be non-significant pursuant to the National Forest Management Act (NFMA, 16 USC 1604(f) (4), and 36 Code of Federal Regulations 219.10(f), and Forest Service Handbook 1909.12, 5.32). Non-significant amendments generally result from actions that do not significantly alter the intent of the Forest Plan and result in minor changes in standards and guidelines. Amendments to the Forest Plan will be incorporated into the Forest Plan and as an appendix to the Forest Plan.

Scheduled activities and definitions for satisfactory and unsatisfactory riparian ecosystems will be located in an appendix to the Forest Plan. The schedule of activities will be updated to reflect inventory needs, Forest priorities and funding. Definitions of riparian related terms will be updated to reflect current scientific information and standards. No changes will be made that affect the original intent of the Forest Plan riparian standards and guidelines. Direction will be retained to inventory, classify, and improve unsatisfactory riparian conditions to satisfactory conditions.

4. Proposed Riparian Standards and Guidelines

Current Standards & Guidelines	Proposed Change
A. Within the first decade, complete classification and inventories of all riparian areas, and complete action plans to improve all unsatisfactory riparian areas.	A1. Complete classifications and inventories of riparian ecosystems. A2. Develop action plans that identify strategies for achieving satisfactory riparian conditions.
B. Improve all riparian areas to satisfactory or better condition by 2030.	B1. Improve riparian ecosystems in unsatisfactory condition to satisfactory condition. B2. Activity schedule moved to appendix.
C. Such satisfactory conditions are specified below, expressed as a percentage of “natural” conditions.	C1. Revised definition moved to appendix.
D. Twenty-five percent of all riparian areas must be in satisfactory condition by 2000.	D1. Maintain riparian ecosystems currently in satisfactory condition. D2. Activity schedule moved to appendix.

Current Standards & Guidelines	Proposed Change
<p>E. Satisfactory condition is defined for aquatic as:</p> <ol style="list-style-type: none"> 1. Maintain at least 80 percent of natural shade over water surfaces. 2. Maintain at least 80 percent of natural bank protection. 3. Maintain the composition of sand, silt, and clay within 20 percent of natural levels. 	<p>E1. Revised definition moved to appendix.</p>
<p>F. Satisfactory condition is defined for vegetation as:</p> <ol style="list-style-type: none"> 1. Maintain at least 60 percent of the woody plant composition in three or more riparian species. 2. Maintain at least three age classes of riparian woody plants, with at least 10 percent of the woody plant cover in sprouts, seedlings, and saplings of riparian species. 3. Maintain at least 60 percent of natural shrub and tree crown cover. 	<p>F1. Revised definition moved to appendix.</p>
<p>G. Satisfactory condition is defined for wildlife as: Maintain at least 60 percent of natural shade over land surface.</p>	<p>G1. Revised definition moved to appendix.</p>
<p>H. On a site-specific basis, identify riparian-dependent resources and develop action plans and programs to bring about conditions essential to supporting those dependent resources.</p>	<p>H1. Develop action plans that identify strategies for achieving satisfactory riparian conditions.</p>
<p>I. None</p>	<p>I1. Evaluate riparian conditions using appropriate quantitative and/or qualitative methods.</p>

5. Proposed Activity Schedule

The proposed appendix to the Forest Plan would contain the following scheduled activities and definitions for satisfactory and unsatisfactory riparian condition:

Activity	Schedule
Complete classification and inventories of all known riparian ecosystems that are associated with perennial streams.	2010
Initiate classification and inventories on the riparian areas that have not been inventoried such as springs, seeps, intermittent, and ephemeral drainages on a project-by-project basis.	2004
Manage for upward trends in riparian ecosystems assessed as unsatisfactory to achieve satisfactory condition.	2030

6. Proposed Definitions

Riparian area: Geographically delineable areas with distinctive resource values and characteristics that are comprised of the aquatic and riparian ecosystems (FSM 2526.05).

- Aquatic Ecosystem: The stream channel, lake or estuary bed, water, biotic communities, and the habitat features that occur therein (FSM 2526.05).
- Riparian ecosystem: Transition between the aquatic ecosystem and the adjacent terrestrial ecosystem; identified by soil characteristics or distinctive vegetation communities that require free or unbound water (FSM 2526.05).

Wetland: Those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances do or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds (FSM 2527.05).

Satisfactory riparian conditions: Riparian conditions are considered satisfactory based on the following definitions:

Proper Functioning Condition (PFC) Method – Riparian (Lotic) Areas (Prichard and others, 1993)¹:

Lotic (running water) riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to:

- Dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality;
- Filter sediment, capture bedload, and aid flood plain development;
- Improve flood-water retention and ground-water recharge;
- Develop root masses that stabilize streambanks against cutting action;
- Develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and,
- Support greater biodiversity.

Riparian-wetland areas are functioning properly when there is adequate stability present to provide the listed benefits applicable to a particular area.

PFC Method – Wetland (Lentic) Areas (Prichard and others, 1994):

Lentic (standing water) riparian-wetland areas are functioning properly when adequate vegetation, landform, or debris is present to:

- Dissipate energies associated with wind action, wave action, and overland flow from adjacent sites, thereby reducing erosion and improving water quality;
- Filter sediment and aid floodplain development;
- Improve flood-water retention and ground-water recharge;
- Develop root masses that stabilize islands and shoreline features against cutting action;
- Restrict water percolation;
- Develop diverse ponding characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterbird breeding, and other uses; and,
- Support greater biodiversity.

Lentic riparian-wetland areas are functioning properly when there is adequate stability present to provide the listed benefits applicable to a particular area.

¹ The Bureau of Land Management (BLM) and the Forest Service (FS) announced a cooperative riparian-wetland management strategy with the Natural Resource Conservation Service in 1996 based on Prichard and others (1993 and 1994). This cooperative strategy recognizes that if riparian-wetland areas are to be productive, they have to be managed on a watershed basis, across ownership boundaries. Common terms and definitions and a minimum method for evaluating the condition of riparian-wetland areas was needed. The BLM and the FS identified the PFC method as the starting point—as the minimum level of assessment for riparian wetland areas.

Unsatisfactory riparian conditions: Riparian conditions are considered unsatisfactory if a riparian-wetland is not in proper functioning condition (see above definition for satisfactory condition), and it is placed into one of three other categories (USDI BLM, 1998 and 1999):

Functional – At Risk

Riparian-wetland areas that are in functional condition, but have an existing soil, water, or vegetation attribute which makes them susceptible to degradation.

Nonfunctional

Riparian-wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows, and thus are not reducing erosion, improving water quality, etc.

Unknown

Riparian-wetland areas for which there is a lack of sufficient information on which to make any form of determination.

7. Proposed Methods

Riparian conditions may be assessed through the use of one or more scientifically credible methods in common use among land management agencies. In particular, for trend estimates, it may be necessary to use the previous sampling method such as the riparian area survey and evaluation system – RASES (USDA 1989) – in order to make comparisons. Additional evaluations of the same area(s) to determine satisfactory and unsatisfactory conditions may include other methods such as PFC.

Literature Citation

Prichard, D., H. Barrett, J. Cagney, R. Clark, J. Fogg, K. Gebhardt, P. Hansen, B. Mitchell, and D. Tippy. 1993. Riparian area management: process for assessing proper functioning condition. TR 1737-9. Bureau of Land Management, BLM/SC/ST-93/003+1737, Service Center, CO.

Prichard, D., C. Bridges, S. Leonard, R. Krapf, and W. Hagenbuck. 1994. Riparian area management: process for assessing proper functioning condition for Lentic riparian-wetland areas. TR 1737-11. Bureau of Land Management, BLM/SC/ST-94/008+1737, Service Center, CO.

USDA. 1989. Riparian area survey and evaluation system (RASES). Forest Service, Southwestern Region, Albuquerque, NM.

USDI Bureau of Land Management. 1998. A User Guide to Assessing Proper Functioning Condition and the Supporting Science for Lotic Areas. Technical Reference 1737-15.

USDI Bureau of Land Management. 1999. A User Guide to Assessing Proper Functioning Condition and the Supporting Science for Lentic Areas. Technical Reference 1737-16.