



United States
Department of
Agriculture

Forest
Service

**Southwestern
Region**



Environmental Assessment

Forest Plan Amendment for

Riparian Standards and Guidelines

Gila National Forest

**Catron, Grant, Hidalgo and Sierra
Counties, New Mexico**

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Chapter 1 – Purpose and Need

Background

The Gila National Forest received instructions from the 10th Circuit Court to amend the Gila National Forest Land and Resource Management Plan (Forest Plan) (CIV 01-0314 WJ/RLP-ACE) on December 5, 2003. This court settlement came in response to a lawsuit filed by Forest Guardians in November, 2001. The settlement agreement required the Gila National Forest to amend the Forest Plan with respect to scheduled accomplishments of riparian inventories, classifications, and completion of action plans to improve riparian areas in unsatisfactory condition and to achieve satisfactory riparian condition. Factors to be considered in amending the Forest Plan include inventory needs, Forest priorities, and the annual budget process.

A team of interdisciplinary specialists was identified in the spring of 2004 to begin the process of amending the Forest Plan to meet the intent of the settlement agreement.

Purpose and Need for Action

There is a need to address Forest Plan riparian standards and guidelines that contain outdated schedules for riparian inventory and monitoring activity. Additionally, there is a need to incorporate current scientific methodologies for inventorying and monitoring activities, and clarify definitions for riparian and wetland areas. This action is needed, because at the time the Forest Plan was developed in 1986, the intent was to revise the Forest Plan at the end of the first decade. Revision did not occur as planned and is currently scheduled to begin in October 2007. Many of the riparian standards and guidelines are no longer in alignment with current Forest priorities or budget allocations, and in some cases the projected activities are past due.

This action to amend the Forest Plan is needed to modify riparian standards and guideline, adjust projected activity schedules, incorporate current scientific methodologies, and clarify definitions for riparian ecosystems. Factors taken into account include inventory needs, Forest priorities, and the annual budget process. This action responds to the goals and objectives outlined in the Gila Forest Plan, and helps move riparian habitats towards desired conditions described in that plan (USDA 1986).

Proposed Action

The Forest Service proposes to amend the Forest Plan riparian standards and guidelines to meet the purpose and need. The proposed action will:

- Update the Forest Plan riparian standards and guidelines so that they are in alignment with current Forest priorities and budget.
- Reformat scheduled activities for inventory and monitoring activities into a Forest Plan appendix.
- Update the schedule of activities to reflect inventory needs, Forest priorities and funding.
- Reformat methodologies for inventory and monitoring activities into a Forest Plan appendix and incorporate current scientific methodologies.
- Clarify definitions for riparian and wetland areas and reformat definitions into a Forest Plan appendix

The original intent of the Forest Plan riparian standards and guides would remain the same. Direction to inventory, classify, and improve unsatisfactory riparian conditions to satisfactory conditions would be retained.

The amendment was determined to be “non-significant”, consistent with 36 CFR 219.10(f) and Forest Service Manual 1922.51 and 1909.12.5.32. The amendment would not change existing land and resource management practices, Forest Plan goals, objectives, or outputs. Furthermore, the scope of this amendment is limited to selected standards and guidelines regarding scheduled activities, methodologies, and definitions for riparian inventory and monitoring.

Public Involvement

The proposal was listed in the Schedule of Proposed Actions on October, 2003 with the project name “Gila Forest Plan Standards and Guidelines”. The agency mailed a request for scoping comments document titled “Project Scope and Analysis Document”, on September 14, 2004 to 269 individuals on the Forest mailing list. The agency received six responses to the scoping request. In addition, as part of the public involvement process, the agency met with the County Commissioners in Catron, Grant, and Sierra counties, as well as Catron County representative Alex Thal, Arizona-New Mexico Coalition of Counties representative Howard Hutchison, and members of the Upper Gila Watershed Association. The outcome of these public meetings did not produce any significant issues. A description of public involvement efforts detailing results of discussions and document review is included in the project record.

Issues

Using the comments from the public, other agencies, and tribes, the interdisciplinary team determined there were no significant issues.

Chapter 2 - Alternatives

This chapter describes and compares the proposed alternative and the no action alternative considered for the Forest Plan amendment of riparian standards and guidelines. It includes a description of each alternative considered.

Alternatives

Alternative A - The Proposed Action

Under this alternative, the Forest Plan would be amended to meet the Forest's legal obligation to align riparian standards and guidelines with current activity schedules, work priorities, and annual budget process as previously described in the purpose and need section of this document. The proposed amendment is fully described in Tables 1 which shows the current Forest Plan management direction (standards and guidelines) along with the proposed management direction and rationale for the proposed change. The management direction in Table 1 contains proposed changes to :

- Standards and guidelines
- Activity schedule
- Definitions

Alternative B - No Action

Riparian standards and guidelines, associated activities and methodologies as described in the Forest Plan would remain in effect and the proposed amendment would not be incorporated into the Forest Plan. This alternative would not meet the Forests legal obligation to align riparian standards and guidelines with current activity schedules, work priorities, or annual budget process.

Table 1: Current and Proposed Forest Plan Standards and Guidelines and Rationale for Proposed Change.

Current Forest Plan Location	Current Standard & Guideline (to be replaced by proposal)	Proposed Standard & Guideline, Activity Schedule, or Definition	Rationale for Change
Page 30 Paragraph 5 Sentence 1	Within the first decade, complete classification and inventories of all riparian areas, and complete action plans to improve all unsatisfactory riparian areas.	<p>Complete classifications and inventories of riparian ecosystems.</p> <p>Develop action plans that identify strategies for achieving satisfactory riparian conditions.</p> <p>Create an activity schedule in Forest Plan appendix. Insert these two activities:</p> <ol style="list-style-type: none"> 1. <i>Complete classification and inventories of all known riparian ecosystems that are associated with perennial streams by 2010.</i> 2. <i>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 starting in 2006.</i> 	<p>Retain original intent to complete classification and inventories of all riparian areas.</p> <p>Revise the schedule to bring the Forest into compliance.</p> <p>Move schedule to a Forest Plan appendix which enables the agency to update schedule with an administrative action based on priorities and annual budget.</p>

Current Forest Plan Location	Current Standard & Guideline (to be replaced by proposal)	Proposed Standard & Guideline, Activity Schedule, or Definition	Rationale for Change
Page 30 Paragraph 5 Sentence 2	Improve all riparian areas to satisfactory or better condition by 2030.	<p>Improve riparian ecosystems in unsatisfactory condition to satisfactory condition.</p> <p>Create an activity schedule in Forest Plan appendix. Insert this activity: <i>Manage for upward trends in riparian ecosystems assessed as unsatisfactory to achieve satisfactory condition by 2030.</i></p>	<p>Retain original intent to improve all riparian areas to satisfactory and focus on improving unsatisfactory conditions with an emphasis on managing for an upward trend.</p> <p>Move schedule to a Forest Plan appendix which enables the agency to update schedule with an administrative action based on priorities and annual budget.</p>
Page 30 Paragraph 5 Sentence 3	Satisfactory conditions are expressed as a percentage of natural conditions.	A method for evaluating riparian condition known as the proper functioning condition (PFC) method will be added to the existing methods described in the Forest Plan. Proper functioning condition inventory methods are summarized in the list of definitions following Table 1.	<p>Incorporate evaluation methods that address variability in site potential versus evaluating all riparian areas with a rigid set of standards based on percent of natural (vegetation) characteristics.</p> <p>Improves data coordination with other agencies using the PFC evaluation methodology.</p>

Current Forest Plan Location	Current Standard & Guideline (to be replaced by proposal)	Proposed Standard & Guideline, Activity Schedule, or Definition	Rationale for Change
Page 30 Paragraph 5 Sentence 4	Twenty-five percent of all riparian areas must be in satisfactory condition by 2000.	<p>Maintain riparian ecosystems currently in satisfactory condition.</p> <p>Create an activity schedule in Forest Plan appendix. Insert this activity: <i>Manage for upward trends in all riparian ecosystems assessed as unsatisfactory by 2030.</i></p>	<p>Retain original intent to achieve satisfactory conditions in all riparian areas by emphasizing maintenance of all areas currently in satisfactory condition and managing for upward trends in all riparian ecosystems by 2030.</p> <p>The majority of all riparian areas are in an upward trend and moving towards satisfactory condition, this includes most perennial streams of which many are fenced to exclude grazing.</p> <p>Managing for upward trend within a specific time frame (2030) provides the agency with a realistic goal. Managing for all riparian areas in satisfactory condition by 2030 may not be achievable because recovery rates are highly variable depending on site characteristics, disturbance history, climatic influences, and vegetation recruitment.</p>

Current Forest Plan Location	Current Standard & Guideline (to be replaced by proposal)	Proposed Standard & Guideline, Activity Schedule, or Definition	Rationale for Change
Page 30 Paragraph 6	<p>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>A method for evaluating riparian condition known as the proper functioning condition (PFC) method will be added to the existing methods described in the Forest Plan. Proper functioning condition inventory methods for riparian and wetland are summarized in the list of definitions following Table 1.</p>	<p>Gila National Forest has been using the PFC method for evaluating riparian and wetland areas since 1998.</p> <p>Incorporation of the PFC method in the Forest Plan appendix simply expands direction for current scientific methodologies for inventory and monitoring activities.</p>
Page 30 Paragraph 7	<p>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 tree 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>A method for evaluating riparian condition known as the proper functioning condition (PFC) method will be added to the existing methods described in the Forest Plan. Proper functioning condition inventory methods for riparian and wetland are summarized in the list of definitions following Table 1.</p>	<p>Gila National Forest has been using the PFC method for evaluating riparian and wetland areas since 1998.</p> <p>Incorporation of the PFC method in the Forest Plan appendix simply expands direction for current scientific methodologies for inventory and monitoring activities.</p>

Current Forest Plan Location	Current Standard & Guideline (to be replaced by proposal)	Proposed Standard & Guideline, Activity Schedule, or Definition	Rationale for Change
Page 30 Paragraph 8	Satisfactory condition is defined for wildlife as: 1. Maintain at least 60 percent of natural shade over land surface.	A method for evaluating riparian condition known as the proper functioning condition (PFC) method will be added to the existing methods described in the Forest Plan. Proper functioning condition inventory methods for riparian and wetland are summarized in the list of definitions following Table 1.	Gila National Forest has been using the PFC method for evaluating riparian and wetland areas since 1998. Incorporation of the PFC method in the Forest Plan appendix simply expands direction for current scientific methodologies for inventory and monitoring activities.
Page 30 Paragraph 9	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.	Develop action plans on a site-specific basis that identify strategies for achieving satisfactory riparian conditions.	Clarifies direction and retains original intent. Action plans are developed as part of a site specific project such as an allotment management plan, prescribed fire or other type of activity that has the potential to effect riparian or wetland areas.

Current Forest Plan Location	Current Standard & Guideline (to be replaced by proposal)	Proposed Standard & Guideline, Activity Schedule, or Definition	Rationale for Change
	None	Evaluate riparian conditions using appropriate quantitative and/or qualitative 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 existing riparian area survey and evaluation system – RASES (USDA 1989) – in order to make comparisons. Additional evaluations of the same areas(s) to determine satisfactory and unsatisfactory conditions may include other methods such as PFC.

Proposed Definitions

Aquatic Ecosystem	The stream channel, lake or estuary bed, water, biotic communities, and the habitat features that occur therein (FSM 2526.05)
PFC Method – Satisfactory Riparian (Lotic) Conditions (Prichard and others 1993).	<p>Lotic riparian-wetland areas are functioning properly when adequate vegetation, land form, or large woody debris is present to:</p> <ul style="list-style-type: none"> • Dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; • Filter sediment, capture bedload, and aid floodplain 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; • Support greater biodiversity; and • Provide the listed benefits applicable to a particular area.
PFC Method – Satisfactory Wetland (Lentic) Conditions (Prichard and others, 1994)	<p>Lentic riparian-wetland areas are functioning properly when adequate vegetation, landform, or debris is present to:</p> <ul style="list-style-type: none"> • 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;

- Support greater biodiversity; and
- Provide the listed benefits applicable to a particular area.

PFC Method –
Unsatisfactory
Riparian Conditions
(USDI BLM, 1998 and
1999)

Riparian conditions are considered unsatisfactory if a riparian-wetland is not in proper functioning condition (see definitions for satisfactory riparian or wetland), and is placed into one of three other categories:

1. 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.

2. 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.

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

Riparian Area

Geographically delineable areas with distinctive resource values and characteristics that are comprised of the aquatic and riparian ecosystems (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 few 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).

Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Information in the table is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

Alternative A, the proposed amendment, would not result in any environmental impacts, changes to existing resource condition, or changes to current management practices for two key reasons: (1) the amendment is strategic and does not involve site-specific or ground-disturbing activities, and (2) the amendment replaces outdated Forest Plan standards and guidelines to reflect updated projections for activities such as riparian inventorying and monitoring and current scientific definitions and methodologies. Thus, under both alternatives, the Forest would continue to evaluate potential effects of proposed actions on riparian or wetland areas, coordinate with other agencies, apply measures to avoid or mitigate potential adverse impacts wherever possible, and conduct monitoring and evaluation of activities having effects to riparian or wetland resources, consistent with existing requirements.

The changes associated with Alternative A would improve Forest Plan consistency with inventory and evaluation methodologies for riparian and wetland areas and updating activity schedules to be in alignment with current agency policy and budgets.

Table 2. Comparison of Alternatives A and B.

Purpose and Need for Action The Forest Plan...:	Alternative A	Alternative B
Reflects current activity schedules, work priorities, or annual budget process for projected inventory and monitoring activities for riparian and wetlands.	Yes	No
Reflects current methodologies for assessing riparian and wetland conditions.	Yes	No
Contains definitions that support current scientific information for riparian and wetland resources.	Yes	No

Chapter 3 - Environmental Consequences

This section describes the environmental consequences or effects of the proposed changes to Forest Plan standards and guidelines for riparian inventories, classifications, and scheduled dates for those activities.

Effects of Alternative A – Proposed Action

The proposed changes offer the same protection to riparian and wetland areas as the original wording in the Forest Plan. The amendment includes all the original intent and expands upon it by broadening the methodologies used for inventorying and monitoring, and clarifying definitions for riparian and wetland areas. Updates to schedules for inventorying and monitoring activities bring the agency into compliance for accomplishment of these activities. Other minor changes including reformatting the schedules, methodologies, and definitions into a Forest Plan amendment provide the agency with the flexibility to update as needed with an administrative change versus an amendment.

Effects of Alternative B – No Action

Under the No Action alternative, the purpose and need would not be met. The Forest Plan direction would not reflect current activity schedules, work priorities, or annual budget process for projected inventory and monitoring activities for riparian and wetlands. Without updated and clarified direction and terminology, the Forest Plan would remain inconsistent with current policies and practices, which could make it more difficult to use when planning and implementing projects. The Forest Plan would become increasingly outdated. The Forest Plan would not meet the legal requirement for updating the schedule of activities as outlined in the settlement agreement.

Appendix to be added to the Forest Plan

Activity Schedule

Activity	Schedule
Complete classification and inventories of all known riparian ecosystems that are associated with perennial streams.	2010
Initiate classification and inventories on the remaining riparian areas such as springs, seeps, intermittent, and ephemeral drainages on a project-by-project basis.	2004
Manage for upward trends in all riparian ecosystems assessed as unsatisfactory.	2030

Chapter 4 – Coordination

The Forest Service consulted the following individuals, Federal, state and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

INTERDISCIPLINARY TEAM MEMBERS:

Koury, Carolyn	Hydrologist
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Monzingo, Jerry	Fisheries Biologist
Telles, Arthur	Wildlife Biologist
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FEDERAL, STATE, AND LOCAL AGENCIES:

Arizona New Mexico Coalition of Counties	Howard Hutchison
Catron County Environmental Consultant	Alex Thal
Catron County Wildfire Prevention Coordinator	Don Weaver
Center for Biological Diversity	Eric Ryberg
County Commissioners	Catron, Sierra and Grant Counties
Forest Guardians	John Horning
New Mexico Environment Department	Gedi Cibas
New Mexico Game and Fish	Lisa Kirkpatrick
Upper Gila Watershed Alliance	Marilyn Wright-Germain

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.