

- 1 ■ Where there are conflicts with law, regulation or policy, implement the highest and most
2 restrictive authority.
- 3 ■ Operating and management plans for special-use-authorized sites includes criteria for
4 maintaining healthy forest vegetation, including treating hazard trees.
- 5 ■ Utilize special-use permit conditions as a means of maintaining surface flows.

6 Infrastructure

7 Roads

8 Background and Description

9 The transportation system road network within the Plan area consists of approximately 3,100 miles
10 of roads. These roads are under Forest Service jurisdiction and are referred to as National Forest
11 System roads. In addition to the National Forest System roads in the Plan area, there are other
12 Federal, State, county and private roads, as well as many unauthorized roads. The road system
13 provides access for a wide variety of recreational opportunities, cattle grazing, mining, forest and
14 resource management, and research sites.

15 The portion of the road system available for motor vehicle use by the public is displayed on motor
16 vehicle use maps. These maps also include motorized trails and areas designated for motor vehicle
17 use. Motor vehicle use maps are reviewed and updated as needed. The motorized transportation
18 system also includes National Forest System roads that are only available for limited administrative
19 and permitted use. These roads are not displayed on the motor vehicle use map.

20 The Forest Service uses the term “maintenance level” to describe the level of comfort provided by
21 and maintenance effort required for a National Forest System road. There are five maintenance
22 levels, ML 1–5, but there are no ML 5 roads on the Cibola National Forest transportation system.
23 Refer to the glossary for complete maintenance level definitions. The following is a breakdown of
24 the transportation system road miles in the Plan area by maintenance level.

25 **Table 21. Transportation system road miles in the Plan area by maintenance level**

Maintenance Level	Miles	Portion of Total National Forest System Miles (%)	Partial Description
ML 1	285	9.1	Closed to all motorized (little to no maintenance required)
ML 2	2,564	81.8	Maintained for high-clearance vehicles
ML 3	275	8.8	Maintained for standard passenger cars
ML 4	10	0.3	Maintained for standard passenger cars (higher level of user comfort than ML 3)

26 As indicated in the table, the vast majority of the road miles in the Plan area fall into the ML 2
27 category, which means they are maintained for high-clearance vehicles. Some of the entrances to ML
28 2 roads are not clearly distinguishable from a typical ML 3 road. As a result, it is possible for a road
29 user in a standard passenger car to mistakenly turn onto a road that is not maintained for this type of
30 vehicle.

1 There are many roads that provide access to National Forest System lands and cross private property.
2 The Forest Service does not have legal right-of-way across several of these private parcels.

3 The road system is larger than can be adequately maintained. Road maintenance budgets have
4 declined substantially over the last several years, resulting in a large backlog of deferred
5 maintenance needs. It was determined through the travel analysis process (36 CFR Part 212, subpart
6 A) that the road system contains more roads than are needed for administration and utilization of
7 National Forest System lands in the Plan area.

8 **Desired Conditions**

- 9 ■ The Forest’s transportation system and infrastructure are sufficient to support appropriate
10 multiple uses of the Forest and contribute to social and economic sustainability.
- 11 ■ Infrastructure is functional, appropriate to the setting, and is designed and maintained to blend
12 with the natural environment.
- 13 ■ Methods used to decommission, close, or relocate routes are appropriate to the setting, designed
14 and maintained to blend with the natural environment.
- 15 ■ Regulatory requirements and resource protection measures are followed in the management of
16 the transportation system.
- 17 ■ The Cibola National Forest road system provides access through a safe and well-maintained
18 transportation system.
- 19 ■ National Forest System roads and bridges provide safe and efficient access for all permitted
20 activities and authorized road use on the Cibola National Forest, and are maintained in good
21 condition to prevent resource damage. Roads maintained for standard passenger cars meet public
22 road safety standards, while roads maintained for high-clearance vehicles may have hazards and
23 require operator judgement and skill to negotiate.
- 24 ■ The maintenance and management programs for the Cibola National Forest road system are
25 financially sustainable.
- 26 ■ Undesirable impacts to natural, cultural, and scenic resources from Cibola National Forest
27 System roads are adequately mitigated.
- 28 ■ National Forest System roads are well marked through the proper use of signage, making them
29 easy to locate for all users.
- 30 ■ National Forest System roads intended for use by high clearance vehicles are clearly
31 distinguished from those intended for standard passenger cars, through proper use of road
32 entrance treatments and/or signage.
- 33 ■ National Forest System roads determined, through the appropriate process, to be not needed are
34 either converted to another use, such as a trail, or decommissioned (see Glossary) in a timely
35 manner.
- 36 ■ Open National Forest System roads not presently needed are closed (all motor vehicle traffic
37 prohibited) until they are analyzed again for potential future needs. Road closure methods are
38 effective in eliminating motor vehicle traffic and are consistent with scenic integrity objectives.
- 39 ■ Unauthorized routes that are causing environmental impacts are closed to use and rehabilitated in
40 a timely manner.

- 1 ■ Easements, rights-of-way, and/or special-use permits are obtained or granted to facilitate legal
2 access throughout National Forest System lands.

3 Guidelines

- 4 ■ Construction of new and relocated roads should avoid areas with high mass wasting potential,
5 such as high landslide prone areas, and areas where the limitation for unsurfaced roads is severe,
6 as interpreted by the terrestrial ecological unit or identified in the field.
- 7 ■ New road construction or reconstruction should comply with Endangered Species Act
8 requirements, protect species of conservation concern, and avoid other wildlife areas as
9 identified. Seasonal restrictions may be an option.
- 10 ■ Where possible, new roads should be constructed outside the 100-year floodplain or provide a
11 distance of 300 feet or greater from water resource features, except where necessary for stream
12 crossings. Where possible, reconstructed roads should be relocated outside of the 100-year
13 floodplain or beyond 300 feet of water resource features.
- 14 ■ New road construction or reconstruction should avoid meadows, wetlands, seeps, springs,
15 riparian areas, floodplains, and areas of heritage concern, where feasible. The number of stream
16 crossings should be minimized or mitigated to reduce impacts to watershed condition.
- 17 ■ During project planning, design and implementation in riparian or wet meadow areas or
18 floodplains, unneeded roads should be closed or relocated, drainage restored, and native
19 vegetation reestablished to move these areas toward their desired condition.
- 20 ■ When temporary roads are necessary, designated stream crossings should be constructed to
21 mitigate sedimentation and gradient changes and maintain bank stability. These crossings should
22 be designated by the appropriate resource specialists and removed after use.
- 23 ■ Low water crossings should be improved to protect water quality and stream stability. Fords on
24 perennial streams should be a priority.
- 25 ■ New or redesigned stream crossings, such as bridges and culverts, should be wide enough to pass
26 the bankfull width unimpeded.
- 27 ■ During project planning, design, and implementation, roads that impact cultural resources should
28 be closed or relocated.
- 29 ■ During project planning, design, and implementation, unneeded roads should be
30 decommissioned or rehabilitated to reduce impacts on natural resources.
- 31 ■ Where needed, roads removed from the transportation network should be treated to restore the
32 watershed hydrologic function and all habitats.
- 33 ■ Roads should allow for aquatic organism and wildlife passage where identified through project
34 analysis process.
- 35 ■ Contracts that have the potential to affect resources should include appropriate clauses
36 specifying site protection responsibilities and liabilities for damage.
- 37 ■ During project planning, design, and implementation, existing meadow and stream crossings
38 should be relocated, redesigned or removed, as needed, to maintain or restore hydrologic
39 function, using appropriate tools, such as French drains and elevated culverts.
- 40 ■ After management activities occur in areas with high potential for unauthorized motorized
41 vehicle use, methods should be used to control unauthorized motor vehicle use.

- 1 ■ Dust abatement should occur during construction and road projects where dust is a potential
2 effect.

3 Standard

- 4 ■ Motorized vehicle travel shall be managed to occur only on the designated system of National
5 Forest System roads and motorized trails and areas designated for motor vehicle use, except as
6 otherwise authorized.

7 Management Approaches

- 8 ■ Transportation planning is integrated into all management activities. This Plan provides the
9 framework to guide future changes to the transportation system. Once the final decision for this
10 Plan has been made, potential changes to the Forest's transportation system are evaluated under
11 this framework and through implementation of the Travel Management Rule (36 CFR § 212)
12 (Rule), as required by Executive Order 11644. The Rule requires that a motor vehicle use map
13 (MVUM) be printed, displaying the system of routes and areas designated for motorized vehicle
14 use. Travel management planning is not a static process. The MVUM can be revised on the basis
15 of public input, monitoring, and site-specific analysis. The annual reissuing of the MVUM would
16 reflect any changes made through the NEPA process. Upon reissue, archive old information and
17 update affected information resources.
- 18 ■ Approval of any road construction, reconstruction, or decommissioning is contingent on
19 completion of an appropriate environmental analysis. Factors for prioritization of closed roads to
20 be decommissioned will include desired conditions within management areas such as inventoried
21 roadless areas.
- 22 ■ Good relationships and communications exist with internal and external customers as well as
23 partners. Notify county and other potentially affected users (including permit holders) of changes
24 in road status and/or significant deviations in traffic pattern of a month or greater duration.
- 25 ■ Follow best management practices and other design features as appropriate for all applicable
26 resources such as reducing the potential for wildlife entrapment.
- 27 ■ When routes are removed from the transportation system and not converted to another use,
28 follow-up treatments may include:
- 29 • out-slope roadbeds
 - 30 • remove stream crossing structures
 - 31 • breach drainage ditches
 - 32 • remove unstable fills
 - 33 • decompact the road surface to restore water infiltration and facilitate revegetation
 - 34 • recontour the road surface to restore near-natural surface drainage patterns
 - 35 • removal invasive weeds
 - 36 • seed and/or plant to revegetate disturbed soil, using native seeds or plants if available and
37 approved by resource specialist.
- 38 ■ Road system maintenance priorities are to provide for safe travel on roads maintained for
39 standard passenger cars and to prevent or mitigate resource damage. Roads maintained for
40 standard passenger cars are subject to the safety standards associated with the Highway Safety
41 Act of 1966. To help defray the cost of road maintenance, the Forest continues with current

1 maintenance agreements and seeks to enter into new agreements with other entities including
2 Federal agencies, local government agencies, and private organizations/individuals.

3 **Buildings and Non-transportation Infrastructure (Dams, Water** 4 **Systems, Wastewater Systems, and Communication Towers)**

5 **Background and Description**

6 The Forest manages a variety of buildings and infrastructure including administrative facilities
7 (offices, warehouses, employee housing, and fire facilities) and public recreational facilities (visitor
8 centers, campground or picnic ground restrooms, storage buildings, etc.), associated water and
9 wastewater treatment systems, dams, and communication towers, for a variety of purposes, to enable
10 the Forest Service to fulfill its mission.

11 This infrastructure should be managed/maintained in a manner that meets the needs of the intended
12 purpose and user and provides long-term sustainability of the resources and structure. Administrative
13 infrastructure should function to provide employees a safe, and mission-oriented working
14 environment. Recreational infrastructure should align with the recreational uses designated for that
15 area. In all cases the infrastructure should be maintained to a standard that protects the inhabitant and
16 integrity of the asset.

17 Currently, the Forest has facilities that are being used for purposes not originally intended (for
18 instance warehouses are now needing to have office workspaces instead of just fabrication and
19 storage areas) and some recreational facilities/areas have been converted from one use type to
20 another or multiple use types to try and meet the needs of the Agency and the community within the
21 budget and workforce established. The maintenance requirements across the portfolio of assets is
22 increasing, with much of the preventative maintenance (annual and/or cyclic activities) becoming
23 deferred. The accumulation of deferred maintenance leads to deterioration of performance, increased
24 costs to repair, and a decrease in asset value.

25 As the workforce and mission services continue to evolve, the existing infrastructure may become
26 obsolete from the originally designed purpose and will require the Forest to look at adaptive reuses,
27 multi-uses, and other ways to address accumulating deferred maintenance. The facilities master plan,
28 sustainable recreation plan, recreation site analysis, and other long-term planning documentation will
29 dictate how infrastructure will be maintained, modified, or removed from service.

30 **Desired Conditions**

- 31 ■ All facilities function as intended or are adapted to accommodate the current and/or anticipated
32 demands; the facilities provide an environment free from recognized hazards for people, while
33 avoiding or minimizing negative impacts to natural, cultural, and social resources.
- 34 ■ Potable water systems, where provided, are effectively managed to serve the public or
35 administrative needs while complying with current standards. Previously developed systems that
36 no longer serve the current needs are appropriately decommissioned and the site is returned to its
37 natural state.
- 38 ■ Routine maintenance is accomplished to standard regularly
- 39 ■ Facilities are in compliance with applicable accessibility guidelines and current building or
40 occupancy standards.

1 **Standard**

- 2 ■ As infrastructure is renovated or modified and new construction is complete, applicable
3 standards and regulations shall be met.

4 **Guidelines**

- 5 ■ Emerging technologies and sustainable concepts consistent with the Built Environment Image
6 Guide should be incorporated in facility design, maintenance, and renovation in order to improve
7 energy efficiency, improve economy, conserve natural resources, improve functionality and
8 ensure consistency with the scenic character of the Cibola National Forest.
- 9 ■ Where infrastructure modifications or additions occur, sustainable operations and resource
10 protection should avoid meadows, wetlands, seeps, springs, riparian areas, stream bottoms, and
11 areas of cultural significance, where feasible.
- 12 ■ Forest facilities that are eligible for the National Register of Historic Places should be available
13 for Forest administration, public recreation, and interpretation, Tribal events, and other uses
14 where possible and appropriate.

15 **Management Approaches**

- 16 ■ Develop and implement comprehensive preventive maintenance program for buildings and
17 infrastructure to minimize major unplanned repairs or replacements.
- 18 ■ Prioritize potable water systems and other infrastructure needs and investments for current need
19 and long-term planning goals as described in facilities master plan, sustainable recreation plan,
20 recreation facility analysis, and other resource planning documents, and health and safety
21 requirements for employees and visiting public. All infrastructure with employee occupancy is
22 subject to the Occupational Safety and Health Administration standards and will be evaluated
23 regularly to protect the health and safety of the Forest's employees, volunteers, and the visiting
24 public.
- 25 ■ Work with the Heritage Program to administer and maintain facilities according to the facility
26 master plan and any developed preservation maintenance plans (historic property plans) for
27 administrative facilities and infrastructure that are historic resources.
- 28 ■ Manage architectural properties that are listed on or are eligible for the National Register of
29 Historic Places in accordance with the Secretary of the Interior's standards and guidelines for
30 maintenance, rehabilitation, and reuse.
- 31 ■ Users or inhabitants of facilities in proximity to special uses authorizations will have an
32 awareness of activities approved under the special uses authorization and coordinate any
33 concerns with the appropriate Special Uses staff.

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