Pronghorn Right of Way Fence Modification Project

Scenery Specialist Report

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December 15, 2014
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Pronghorn Right of Way Fence Modification Project Phase II

Introduction

Users of the national forests express a strong interest in maintaining the character of forest settings. These settings provide special places for recreation and visual amenities (Forest Service 2000). This specialist report describes the current and desired conditions for scenery within the project area.

Area of Analysis

The area of the analysis for this report is adjacent to Highway 180 near Antelope Well. The project is the proposed fence relocation similar to those accomplished in 2013. See Figure 1 for the locations.

Figure 1. Antelope Well area project location with US Highway 180.

Methodology Used for Data Collection and Analysis

Scenery Management

The scenery management system (Forest Service 2000) will be used to describe the following:

- landscape character types of the area including physical, biological and cultural attributes, disturbances, and land use patterns
Scenic Integrity Objectives (SIOs) are used in the SMS in much the same way as VQOs are used in VMS. The Scenic Integrity or "intactness" of national forest lands is the means by which proposed alterations to the land are evaluated for their effects to scenery. Scenic Integrity is produced from the combined inventory of scenic attractiveness, viewing distance from the observer, and concern level of forest visitors. Scenic Integrity Objectives (SIO) are established for the forest and can be applied at the forest, management area or treatment area (USDA-Forest Service 2000). SIOs range from Very High, meaning the landscape character is unaltered, to Very Low, meaning the landscape character is highly altered. Intermediate levels include High (landscape character appears unaltered), Moderate (landscape character is slightly altered), and Low (landscape character is moderately altered).

Another basic premise of the SMS is use of landscape character descriptions. These descriptions give a geographic area its visual and cultural image. They consist of a combination of physical, biological and cultural attributes that make each landscape identifiable and unique. Landscape character embodies distinct landscape attributes that exist throughout an area (USDA-Forest Service 2000).

Landscape visibility addresses the relative importance and sensitivity of what is seen and perceived in the landscape.

Existing scenic integrity indicates the current wholeness or intactness of the current landscape character. It is used as a baseline to analyze proposed actions and with which to compare the scenic integrity objectives.

**Regulatory Requirements**

National Environmental Policy Act: “(a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may --

1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
5. achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

The Environmental Quality Act (1970) – This act sets forth a national policy for the environment which provides for the enhancement of environmental quality.

The Forest and Rangeland Renewable Resources Planning Act (1974) – This act provides direction to conduct aesthetic analysis and assess the impacts on aesthetics for timber harvesting. It also provides the framework for natural resource conservation.

The National Forest Management Act (1976) – This act provides direction that the preservation of aesthetic values is analyzed at all planning levels. Part 219.21 requires that the visual resource shall be inventoried and evaluated as an integrated part of evaluating alternatives in the forest planning process, addressing both the landscape's visual attractiveness and the public's visual expectation.

**Forest Plan Direction**

Table 1 provides Coconino Forest Plan (Forest Service 1987) direction for scenery. It includes both forest-wide and management area specific direction,

<table>
<thead>
<tr>
<th>Forest Plan Section</th>
<th>Content</th>
<th>Page</th>
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<tbody>
<tr>
<td>Ch 4 Management Direction</td>
<td>Maintain and enhance visual resource values by including visual quality objectives in resource planning and management activities. Provide visitor information services (VIS) to interpret the resources, uses, and management of the Forest.</td>
<td>Replacement pg 22</td>
</tr>
<tr>
<td>Ch 4 Forest-wide Standards and Guidelines</td>
<td>Revise and update the visual resource inventory during the first decade. Inventory the visual absorption capacity and the existing visual quality level of the Forest in the first decade. Projects are planned to meet or exceed visual quality objectives (VQO). Review the VQO inventory as a part of project planning and make necessary corrections/refinements following field checking. Use VQO inventory to analyze impacts to VQO classes due to management activities such as timber sales, range projects, and firewood sales. Use the current Forest Visual Resource Management Inventory that lists VQO Forest-wide in conjunction with Forest Plan MA Map and descriptions to plan projects. Acceptable Forest-wide variation is + 15 percent in each VQO class and relates to the changes from the updated inventory, except no change is allowed in Preservation. VQO Percent of Net Forest Acres Preservation 8% Retention 13% Partial Retention 11% Modification and Maximum Modification 68% Allow only one classification movement downward unless a larger movement is justified after doing an environmental analysis for emergency situations such as removal of fire damaged timber or I&amp;DC control needs. Signing is used for information, management, and safety purposes. Evaluate requests for transmission corridors based on public need, economics, and environmental impacts of the alternatives. Use existing corridors to capacity with compatible utilities where additions are environmentally and visually acceptable before evaluating new routes. Overbuilding and underbuilding are considered for additions.</td>
<td>Pg 60-61</td>
</tr>
<tr>
<td>Foreground Retention and foreground Partial Retention treatment</td>
<td></td>
<td>Pg 155</td>
</tr>
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follow these Guidelines:
Roads, fences, or survey lines may be used as stand boundaries, where they help to create irregular shapes in character with the surrounding landscape. However, in most cases, fences and survey lines are in straight lines and are not irregular. Avoid treatment patterns that present a "farmed" or humanmade appearance.

<table>
<thead>
<tr>
<th>MA 3</th>
<th>Roads to be managed for foreground Retention within this MA and in MA 4 (other areas of foreground retention on the timber type are found in MA’s 13 and 19): US 180 (26 miles), US 89A (5 miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 20 Highway Corridor 180 (Amendment 10) Recreation Planning and Inventory</td>
<td>Manage for VQO of foreground Retention on Hwy 180.</td>
</tr>
<tr>
<td>Flagstaff/Lake Mary Ecosystem Analysis Goals, Objectives and Guidelines</td>
<td>There is a range of recreational setting opportunities for people to enjoy the area’s many scenic and aesthetic qualities. Evidence of human activities and developments such as roads, trails, and facilities, is visually subordinate to the natural-appearing landscape.</td>
</tr>
<tr>
<td>FLEA Scenery Goals and Objectives</td>
<td>Developments such as roads, trails, camping, day-use sites, and trailheads mimic local materials and landscape characteristics to blend with the adjacent natural-appearing landscape. Provide fast clean-up from management activities and limit short-term visual impacts (1 to 3 years), while meeting fire potential reduction needs, design thinning for long-term scenic quality adjacent to homes and along major highways or near developed recreation sites. State Highways 89A, 89, 180, and Lake Mary Road (FH3) provide a high-quality scenic experience. Provide input to ADOT and Coconino County, as appropriate, that highway improvements and maintenance should blend with existing natural appearing features except when there are safety concerns that cannot be mitigated. Provide input to ADOT and Coconino County to minimize the relative dominance of these highways to the extent possible/practical.</td>
</tr>
<tr>
<td>MA 32 Deadman Wash MA Scenery</td>
<td>Consider impacts to viewsheds of the National Monuments and consider input from Park Service personnel when designing or approving projects in these viewsheds.</td>
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</table>

**Forest Service Manual and Handbook Direction**
Policy:
FSH 1909.13.13a, Chapter 10: “When pertinent to the issues…the Scenery Management System (SMS) should be used to describe…desired conditions and objectives.”
FSH 1909.13.2.3: “…Also, see FSM 2380.61 for landscape aesthetics guidance.”
FSM 2380.43.5 “Ensure application of the principles of landscape aesthetics, scenery management, and environmental design in project level planning”
FSM 2380.61 “Refer to the following publications in the Department of Agriculture’s National Forest Landscape Management Series for technical guidance in managing landscape aesthetics and scenery.” The pertinent publication is USDA Ag Handbook 701, “Landscape Aesthetics: A Handbook for Scenery Management”. This Handbook directs identification of Desired Scenic Character (page 1-3 and 5-5), as does the recent update “Appendix K USFS Project Level Scenery Analysis Process, August 2007.

FSM 2020.5 “Sustainability. Meeting needs of the present generation without compromising the ability of future generations to meet their needs. Sustainability is composed of desirable social, economic, and ecological conditions or trends interacting at varying spatial and temporal scales, embodying the principles of multiple-use and sustained yield (FSM 1905).” Forest Service manual direction provides further clarification to utilize the Scenery Management System in forest and project planning and implementation, including sections 2380.3, 2382, and 2382.3:

2380.3, Policy: It is Forest Service policy to:
Inventory, evaluate, manage, and, where necessary, restore scenery as a fully integrated part of the ecosystems of National Forest System lands and of the land and resource management and planning process.

Employ a systematic, interdisciplinary approach to scenery management to ensure the integrated use of the natural and social sciences and environmental design.
Ensure scenery is treated equally with other resources.

Apply scenery management principles routinely in all National Forest System activities.

2382, Scenery Management: Managing scenery on National Forest System lands entails:
1. Completing and maintaining an inventory of landscape aesthetics and scenery resources. Establishing goals and objectives for the management of scenery on all National Forest System lands.
2382.3 - Forest Plan Revisions and Scenery Management System. Update the scenery inventory using the Scenery Management System in Agriculture Handbook 701 (FSM 2380.61, para. 2). The recommended timeframe for updating the scenery inventory is prior to or at initiation of Forest land and resource management plan revisions.

USDA Handbook 701, Landscape Aesthetics: A Handbook for Scenery Management (as revised 2000). This system is to be used to analyze scenery in a national forest, to assist in establishment of overall resource goals and objectives, to monitor the scenic resource, and to ensure high-quality scenery for future generations.

Affected Environment
Existing Conditions
Landscape Character

The Coconino Forest Plan (1987) describes the Highway 180 Travel Corridor as going “from the northwest side of Flagstaff to the most northwestern corner of the Coconino National Forest. It is one of the three main routes leading to the Grand Canyon National Park. The roadway and roadside are within the ADOT highway right-of-way.

Hwy 180 is a destination in itself for local residents and tourists to access the forest for scenery and wildlife viewing and outdoor recreation opportunities. Hwy 180 is used as a tour bus, commerce route, local and tourist drive between National Forest land, Flagstaff and the Grand Canyon, with over half of the drivers from out of State.”
Landscape character gives geographic areas their visual and cultural image, and consists of the combination of physical, biological, and cultural attributes. It embodies distinct landscape attributes that exist throughout an area.

The project is located in the ponderosa pine landscape character (LC) type (Hill 2011). The LC description (Hill 2011) includes:

**Valued Landscape Attributes**

The Ponderosa Pine Landscape Character Zone is the largest character zone on the Coconino National Forest and extends from the northern Forest boundary to the northern boundary of the East Clear Creek Watershed. This character zone along with the Anderson Mesa is what is referred to as the Plateau Country extending from the foot of the San Francisco Peaks to the south and east and is comprised of ponderosa pine forests and pinyon juniper woodlands clustered around broad expanses of prairies and picturesque lakes. San Francisco Peaks Scenic Road on Highway 180, Plateau Lakes Drive, and Rim Road and General Crook Trail Loop are popular scenic drives.

Management activities in this character zone include travel management, utility corridors, communication sites, prescribed fire activity, fuels reduction, timber harvest, and dispersed and developed recreation use. Recreation use is both motorized and non-motorized in multiple seasons with water features providing for water based recreation opportunities.

**Visibility**

Landscape visibility addresses the importance and sensitivity of what is seen and perceived in the landscape. It includes where the visitor is viewing the project area, the duration of the view, degree of discernible detail and number of viewers.

A large number of viewers travel Hwy 180 through the project area. They are travelling at high rates of speed (55+ miles per hour), and would travel through the project area in just a few minutes. The views from the highway to the San Francisco Peaks and other topographic features and their contrast with the openings are within the foreground (within ½ mile) and middleground (up to 4 miles) (Forest Service 2000). In this area there is some transition from the ponderosa pine dominated landscape to pinyon-juniper forest. The moderate contrast dominates the view, and viewers may also note residences and other buildings and historic structures, the right of way fence, and route of the highway.

**Existing Scenic Integrity**

Scenic integrity indicates the degree of intactness and wholeness of the landscape character. Human alterations can sometimes maintain or raise integrity, but more often lower it by deviating from the character valued for its aesthetic appeal.

The existing scenic character for the project area is moderate, except where the APS buried fiber optic line corridor crosses the road, in that corridor the existing scenic character is very low as shown in Figure 2.
The landscape character appears mostly intact in most of the project area and human alterations repeat the form, line, color, texture and pattern common to the landscape character at a scale that they are not evident. Where the utility corridor crosses the road, there is a noticeable decrease in the intactness of the landscape character features.

**Desired Conditions:**

**Management Emphasis for the Project Areas**
- Maintain and manage Hwy 180 and Hwy 89A North as scenic highways.
- Manage Hwy 180 and its foreground as a sustainable and resilient ecosystem with a sustainable, healthy grassland community.
- Hwy 180 within the project area will retain a high scenic quality objective.

**Scenic Integrity Objectives**
Scenic integrity indicates the intactness or wholeness of the landscape character. A long-term level of integrity is achievable when the desired condition is met and is sustainable.
The scenic integrity objective for Antelope Tank is High with a few small areas of moderate, especially as the highway nears the utility corridor, as shown in Figure 3.

Figure 4. High scenic integrity objective for the Kendrick Park project.

**Design Features**

- Remove old wire and fence posts from the project area, and dispose of properly.
- As pronghorn travel corridors are identified, remove any excess PVC pipe that is not needed for pronghorn passage.

**Environmental Consequences**

**Alternative A (No Action)**

At the project area, there is currently right of way fencing adjacent to the roadway. The fencing detracts from roadside scenery, and does not provide pronghorn with adequate sight distance to cross the highways.

Selection of the No Action Alternative would continue the current deviation from the desired high scenic integrity objective at Antelope Wash. It would maintain the moderate and very low existing scenic.
integrity. The fencing, combined with the linear roadway creates a contrast to the characteristic landscape. It introduces linear features, un-natural colors and shiny surfaces that are not natural appearing.

Highway 180 is highly traveled, and scenery is important to travelers. The roadway is identified as a concern level one road, meaning that it is a primary road used by motorists and recreationists on the national forest. This route is of national importance and has also been designated as an Arizona Scenic Road (San Francisco Peaks Scenic Road). There would be no change in the current visibility of the right of way fence if this alternative were selected.

This alternative would not change from the existing condition.

**Alternative B (Right of Way Fence Modification)**

The proposed action would relocate the existing right of way fencing in an undulating manner from approximately 0.1 miles away from the highway to as much as 0.4 miles away. The relocation would be approximately 0.5 miles along Hwy 180.

The effect of the relocation would be to remove the linear fencing from being immediately adjacent to the highway in the project areas. It would improve the scenic quality (albeit for a short distance), and would help to improve the potential for pronghorn to be able to cross the highways safely. There would be an indirect improvement in wildlife viewing opportunities as pronghorn begin to use these crossing corridors.

There would be short term visual disturbance from the fence construction and removal, but these would not last more than one year after construction.

Addition of the white PVC to the bottom wires (at approximately 17 inches above the ground) may be visible in some areas and create some contrast in the first year. It is anticipated that grass and other vegetation would help conceal the PVC and since there is some transition from ponderosa pine to pinyon juniper in this area, the shrubby scattered pinyon-juniper trees would provide more screening.

The highway is highly traveled, and scenery is important to travelers on them. There would be a slight improvement in the visibility as a result of relocating the right of way fence if this alternative were selected.

This alternative would slightly improve and make progress toward scenic integrity objects from the existing condition. It would meet forest plan direction to maintain or improve scenery.

**Cumulative Effects**

The cumulative effects area is the project area, and would be measured over 20 years.

Cumulative effects of this action in conjunction with highway maintenance projects, range improvements or fire would be minimal and would not cause overall change or improvement in scenic integrity in these small project areas.
Reference Literature


