

APPENDIX B3

Overview of the USDA-FS Visual Management System

The United States Department of Agriculture-Forest Service (USDA-FS) Visual Management System (VMS) is a methodology for: (1) inventorying the visual resource, referred to as “Inventory VQOs”; (2) establishing management objectives for the visual resource, referred to as “Forest Plan VQOs”; and (3) assessing visual impacts associated with proposed actions. Two important assumptions inherent to this methodology are:

- A landscape viewed by many people is more visually sensitive than a landscape viewed by a few.
- A unique or aesthetically high-quality landscape is more sensitive than a regionally common landscape, whether or not it is viewed by many people.

The VMS is used in two separate, but connected ways to manage a Forest’s visual resources. The VMS is first used to inventory the visual landscape based on the character of the landscape, the sensitivity of the viewers that most commonly view the landscape, and the distance from which the landscape is most commonly viewed. The results of the inventory are summarized by one of the four visual quality objective (VQO) designations (preservation, retention, partial retention, and modification) used by the Forest Service. These are referred to in this report as “Inventory VQOs”.

The VMS, through the Inventory VQOs is then used in the development of the Forest Plan. The Inventory VQOs provide the starting point or baseline, for visual management in the Forest planning effort. Since Forest Plans must balance competing resource objectives, the Inventory VQOs can be modified or “traded off” during the Forest Plan development process. Therefore, an area that may have an Inventory VQO of retention may have a Forest Plan VQO of partial retention, or vice versa. As a result, the VQOs in the Forest Plan may or may not be different from Inventory VQOs. However, Forest Plan VQOs represent the management direction for the visual resource through the designation of “**objectives**” for the visual resource. In this report, these are referred to as “Forest Plan VQOs”.

Both the Inventory VQOs and Forest Plan VQOs provide visual resource management information necessary to evaluate the existing visual condition of the Project and the visual effect of proposed Project betterments. The primary difference between the two is that Inventory VQOs reflect actual landscape conditions on the ground, where as Forest Plan VQOs are the adopted management direction for visual resources throughout the life of the Forest Plan and are used to evaluate the consistency of proposed management actions with Forest Plan direction. The visual terminology used in establishing Inventory VQOs, and the definitions for Forest Plan VQOs used on the ENF and TNF are discussed below.

Inventory VQOs

Inventory VQOs are established by each respective Forest using GIS information and field verification. Inventory VQOs represent composite rating of three separate visual resource components: (1) landscape variety, (2) viewer sensitivity, and (3) distance

zone. Landscape variety is a classification of the inherent scenic integrity or visual interest of the landscape. Viewer sensitivity levels reflect the number and relative concern of viewers for the scenic qualities of the landscape. Distance zones reflect the typical distance from which the landscape is viewed. Each of these VQO components is described below.

Landscape Variety Classes

Landscape variety classes are a relative classification of the landscape into areas of importance from a scenic quality perspective. The classification is based on the premise that all landscapes have some value, but those with the most variety or diversity have the greatest potential for high scenic value. The USDA-FS has established three variety classes:

- Class A – Distinctive
- Class B – Common
- Class C – Minimal

Sensitivity Levels

Sensitivity levels are an indication of people's concern for the scenic quality of the landscape. The levels are based on the amount of use an area receives and the type of user. The USDA-FS has established three levels of sensitivity: Level 1 – for primary travel routes and recreation use areas, where visitors are anticipated to have a high concern for the visual quality; Levels 2 and 3 – for areas that are not heavily used, and where users have a moderate or low concern for the visual quality due to a commodity orientation to the landscape.

Distance Zones

The USDA-FS has established three distance zones used in a VQO designation:

- Foreground (Fg) is defined as the landscape within 0.5 mile of the observer
- Middle ground (Mg) is defined as the distance between 0.5 mile and 3 miles
- Background (Bg) is defined as the distance beyond the middle ground

Inventory VQO Designations

The matrix below depicts the resultant Inventory VQOs based on consideration of the combined results of the VQO components (landscape variety, sensitivity level and distance). The Inventory VQOs include:

- P = preservation VQO
- R = retention VQO
- PR = partial retention VQO
- M = modification VQO

**USDA-FS Inventory VQOs
Resulting from Combinations of
Distance Zone, Sensitivity Level and Variety Class**

Landscape Variety Classes		Distance Zone and Sensitivity Level						
		Fg1	Mg1	Bg1	Fg2	Mg2	Bg2	3*
A	Distinctive	R	R	R	PR	PR	PR	PR
B	Common	R	PR	PR	PR	M	M	M
C	Minimal	PR	PR	M	M	M	M	M

*There are no distance zone designations associated with Sensitivity Level 3.

Source:

USDA Forest Service 1974.

Forest Plan VQOs

Forest Plan VQOs represent Forest management direction throughout the life of the Forest Plan. Forest Plan VQOs are used in Forest decision making to evaluate consistency of proposed actions with Forest management direction. VQOs are established to assure that visitors are afforded views of natural looking landscapes when seen from Sensitivity Level 1 and 2 roads, trails, water bodies (streams, lakes and reservoirs) and developed recreational use areas where public use is concentrated.

Forest Plan VQOs are one of many Forest resources that are inventoried and then weighed and balanced in combination with multiple resources to develop a Forest Plan. Forest Plans can differ in their structure and organization, but most dissect a forest into some type of management area for which a specific management direction is defined. The ENF Forest Plan identifies 6 emphasis zones within each are several management areas. Where as the ENF Forest Plan identified over 100 geographically defined management areas (MAs). Both types of Forest Plan structures identify management areas for which there are varying combinations of practices, standards, and guidelines which make up a management area prescription that is the Forest Plan direction for that unit of land. VQOs are one of the guidelines established within each management area and are referred to in this report as Forest Plan VQO.

Forest Plan VQO Definitions

Four different VQOs are used on the TNF and ENF: Preservation (P), Retention (R), Partial Retention (PR), and Modification (M). Each of these is defined below.

Preservation (P) – The Preservation VQO designation allows for ecological changes only. Management activities, except for very low visual impact recreation facilities are prohibited. The objective applies to Wilderness Areas, primitive areas, other special classified areas, areas awaiting classification and some unique management units that do not justify special classification (USDA-FS 1974).

Retention (R) – The Retention (R) VQO provides for management activities that are not visually evident. Under Retention, activities may only repeat form, line, color and texture which are frequently found in the characteristic landscape. Changes in their qualities of size, amount, intensity, direction, pattern, etc., should not be evident (USDA-FS 1974).

Partial Retention (PR) – Under the Partial Retention (PR) VQO, management activities are to remain visually subordinate to the characteristic landscape. Activities may repeat form, line, color, or texture common to the characteristic landscape but changes in their qualities of size, amount, intensity, direction, pattern, etc., remain visually subordinate to the characteristic landscape. Activities may also introduce form, line, color, or texture, which are found infrequently or not at all in the characteristic landscape, but they should remain visually subordinate to the visual strength of the characteristic landscape (USDA-FS 1974).

Modification (M) – Under the modification (M) VQO, management activities may visually dominate the original characteristic landscape. However, activities of vegetative and land form alterations must borrow from naturally established form, line, color, or texture so completely and at such a scale that its visual characteristics are those of natural occurrences within the surrounding area or character type. Additional parts of these activities such as structures, roads, slash, root wads, etc., must remain visually subordinate to the proposed composition. Activities which are predominantly introduction of facilities such as buildings, signs, roads, etc., should borrow naturally established form, line, color, and texture so completely and at such a scale that its visual characteristics are compatible with the natural surroundings (USDA-FS 1974).

Existing Visual Condition (EVC)

EVC is another component of the VMS that is independent of the VMS methodologies for establishing Inventory VQOs and Forest Plan VQOs. EVC is an analysis tool for evaluating the visual effect of existing and/or proposed management activities. It is used primarily to determine the degree to which a management activity is consistent with Forest Plan VQOs.

For the PCWA Project, the EVC assessment identifies the EVC Type attributed to Project facilities as seen from specific managed viewsheds identified by each of the respective Forests. Some Project facilities are seen from more than one viewshed.

Therefore, the appearance of the facility may have more than one EVC Type rating depending upon how it appears from each viewshed it is seen from.

The EVC assessment uses terminology and thresholds that are parallel to VQO definitions in that EVC Types I, II, III, and IV correspond to VQO definitions for preservation, retention, partial retention, and modification, respectively. In addition, EVC Type V corresponds to the VQO definition for maximum modification which can occur in an EVC assessment, but is not an acceptable objective for Forest Planning and is not used by either the TNF or ENF as a Forest Plan VQO in their Forest Plan. EVC Types are defined by the USDA-FS as follows (USDA-FS 1974):

Type I – Areas where only ecological change has taken place except for trails needed for access, and areas are visually untouched by man’s activities.

Type II – Areas in which change in the landscape are not visually evident to the average person unless pointed out. These areas are unnoticed.

Type III – Areas where changes in the landscape are noticed by the average Forest visitor, but they do not attract attention. The natural appearance of the landscape still remains dominant. These areas appear to be minor disturbances.

Type IV – Areas in which changes in the landscape are easily noticed by the average Forest visitor and may attract some attention. These areas visually appear as disturbances but resemble natural patterns.

Type V – Areas in which changes in the landscape are strong and would be obvious to the average Forest visitor. These changes stand out as a dominating impression of the landscape, yet they are shaped so that they might resemble natural patterns when viewed from 3–5 miles or more distance. These areas visually appear to be major disturbances.