

# **Taylor Park Vegetation Management**

Visual Resources Report

## **Grand Mesa, Uncompaghre, and Gunnison National Forests**

**Prepared by:**

/s/ \_\_\_\_\_

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## Scenery

The revised 1991 Grand Mesa, Uncompahgre and Gunnison (GMUG) Forest Plan includes standards and guidelines for the management of scenic resources in the Forest-wide Direction and Management Area Prescriptions.

### Analysis Methodology

Landscape viewing is divided into distance zones, described from the viewer. These distance zones and their related concern levels are defined:

- Immediate Foreground: 0 to 300 feet (concern level 1) – This area receives the highest scrutiny.
- Foreground: 300 feet to one-half mile (concern level 1) – The limit of this zone is based upon distances at which details can be perceived. Individual forms dominate (for example individual tree boughs) and other sensory images, for example birds singing, are received.
- Middleground: one-half to four miles (concern level 2) – In this area, form, texture, and color remain dominant; human activities (such as timber harvest) may cause contrasting features if there are vantage points and they produce elements of line, form, texture, or color in contrast to the prevailing natural landscape characteristics.
- Background: four miles to infinity (concern level 3) – This zone extends from middleground to infinity. Texture in stands of uniform tree cover is generally weak or non-existent. In very open or sparse timber stands, texture is seen as groups or patterns of trees (Ag Handbook 462, 1973).

Past, current and reasonably foreseeable activities were reviewed to extrapolate reasonable cumulative effects.

### Affected Environment

The analysis area is characterized by rugged mountains and valleys, steep slopes, and dramatic changes in elevation. Low-lying glacial moraine around Taylor Park Reservoir and along the Taylor River's tributaries is enclosed on all sides by higher, more rugged terrain, including The Collegiate Peaks Wilderness to the north and the Fossil Ridge Wilderness to the south. The foreground and middleground are defined by the fine vegetative texture of stands of trees and meadows and color in the spring (wildflowers) and fall (fall color), with openings in forest cover revealing dramatic landforms in the background. Distinctive views from primary travel-ways in the analysis area consist of a foreground of open, rolling hills, and a middleground of rising, forested terrain framed by a background of steep, often snowcapped mountains and unique geological formations.

Past, present, and future management activities within the analysis area were reviewed for cumulative effects on scenic resources. The landscape characteristics remain in place with some changes resulting from natural events such as wildfires, winds, insects and disease; and human activities such as timber cutting, roads, trails, dispersed and developed recreation, mining, ranch/cabin developments, utilities, and livestock grazing and development.



*Project area, looking north over the Taylor Park Reservoir from Taylor Park Road. Collegiate Peaks Wilderness is in the background.*

The Forest Plan identifies 11 management area designations within the Taylor Park analysis area. Where Visual Quality Objective (VQO) maps are not available, the following VQOs will be used as interpreted from the 1991 LRMP and consistent with the Spruce Beetle Epidemic and Aspen Decline Management Response (SBEADMR) Final Environmental Impact Statement of 2016, which has a partially overlapping analysis area. Although they exist in the analysis area, no treatments are proposed in management areas 4B, 5A, 8, 8B, or 8C under any alternative. This analysis includes only those management area designations which have proposed treatments under the action alternatives. The Forest Plan provides the following visual resources guidance for the potentially affected management area designations:

- **2A, Semi Primitive Motorized Recreation Opportunities:** “Visual resources are managed so that management activities are not evident or remain visually subordinate. Past management activities such as historical changes caused by early mining, logging, and ranching may be present which are not visually subordinate but appear to have evolved to their present state through natural processes. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used.” This guidance is consistent with a VQO of retention.
- **2B, Roaded Natural and Rural Recreation Opportunities:** “Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities.

Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the natural setting. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements on the landscape to improve visual variety is also used.” This guidance is consistent with a VQO of partial retention.

- **3A, Semi-primitive Non-Motorized Recreation Opportunities:** “Design and implement management activities to provide a visually appealing landscape. Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas.” This guidance is consistent with a VQO of retention.
- **4D, Aspen Management:** “Maintain big game cover next to aspen viewing areas, and along the edge of arterial and collector roads...vary location of treated clones to maintain natural-appearing diversity in age classes...emphasize aspen viewing areas.” This guidance is consistent with a VQO of modification.
- **6B, Livestock Grazing - Maintain Forage Composition:** “Design and implement management activities to blend with the natural landscape.” This guidance is consistent with a VQO of modification.
- **7A, Timber Management on Slopes Under 40 Percent:** “The area will generally have a mosaic of fully stocked stands that follow natural patterns and avoid straight lines and geometric shapes. Management activities are not evident or remain visually subordinate along Forest arterial and collector roads and primary trails.” This guidance is consistent with a VQO of modification or maximum modification, with partial retention in the immediate foreground as seen from Forest arterial and collector roads and primary trails (GMUG Forest Plan pp III-100 to III-151).

MGMT AREA	DESCRIPTION	VQO	VISUAL MGMT GUIDELINE CLASS
2A	Semi-Primitive Motorized Recreation Opportunities	Retention	1, 2, and 3
2B	Roaded Natural and Rural Recreation Opportunities	Partial Retention	2, 4, and 5
3A	Semi-primitive Non-Motorized Recreation Opportunities	Retention	1, 2, and 3
4D	Aspen Management	Modification	3, 5, 6, and 7
6B	Livestock Grazing - Maintain Forage Composition	Modification	3, 5, 6, and 7
7A	Timber Management on Slopes Under 40 Percent	Modification or Maximum Modification	7

*Applicable Management Area Designations in the Project Analysis Area*

Under the action alternatives, treatment would occur in areas with VQOs of Retention, Partial Retention, Modification, and Maximum Modification.

**Retention:** Management activities must not be visually evident. They 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. Reduction in form, line, color, and texture contrast should be accomplished during operation or immediately after. It may be done by such

means as seeding vegetative clearings and cut-and-fill slopes, hand planting of large stock, painting structures, etc.

**Partial Retention:** Management activities 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. Reduction in form, line, color, and texture contrast to meet partial retention should be accomplished as soon after project completion as possible or at a minimum within the first year.

**Modification:** Management activities may visually dominate the characteristic landscape. However, activities of vegetative and landform alteration 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. 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. Reduction of contrast in form, line, color, and texture (or compliance with regional guidelines) should be accomplished in the first year.

**Maximum Modification:** Management activities of vegetative and landform alterations may dominate the characteristic landscape. However, when viewed as background, the visual characteristics must be those of natural occurrences within the surrounding area or character type. When viewed as foreground or middle ground, they may not appear to completely borrow from naturally established form, line, color, or texture. Alterations may also be out of scale or contain detail which is incongruent with natural occurrences as seen in foreground or middle ground. Introduction of additional parts of these activities such as structures, roads, slash and root wads must remain visually subordinate to the proposed composition as viewed in background. Reduction of contrast should be accomplished within five years (Agriculture Handbook 462, pp 30-37).

The Forest Plan defines seven Visual Management Guideline Classes (VMGCs) based on VQOs, distance zones, and the Visual Absorption Capability (VAC) of a particular landscape:

VQO/Distance Zone	Low VAC	Moderate VAC	High VAC
Retention/Foreground	1	1	2
Retention/Midleground and Background	3	3	3
Partial Retention/Foreground	2	2	4
Partial Retention/Midleground, Background, and Seldom Seen	4	4	5
Modification/Foreground	3	3	5
Modification/Midleground and Seldom Seen	6	6	7

Maximum Modification/Background and Seldom Seen	7	7	7
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The following guidance applies per VMGC, and would be followed in all treatments, per design feature SVR-2:

<b>VMGC 1</b>	<ul style="list-style-type: none"> <li>-retain a minimum of 10% of the larger old growth Ponderosa pine, Spruce-fir, and Douglas fir;</li> <li>-clearcutting units must not expose more than 15% of the seen area for a travel corridor;</li> <li>-develop corridor or viewshed reports for all travel corridors before starting ground disturbing activities;</li> <li>-cutting units must not dominate natural patterns of form, line, color, and texture;</li> <li>-retain or improve diversity of understory size and species;</li> <li>-return all ground disturbances to natural appearances where feasible;</li> <li>-reduce stump height to minimum possible in visible areas;</li> <li>-locate landings outside seen areas or rehabilitate after timber sales;</li> <li>-locate wildlife snags to conform to natural vegetation patterns;</li> <li>-locate gravel, borrow, and stockpile areas outside of seen areas; and</li> <li>-roads must not dominate natural patterns of form, line, color, and texture within clearcut areas one year after cutting.</li> </ul>
<b>VMGC 2</b>	<ul style="list-style-type: none"> <li>- retain a minimum of 10% of the larger old growth Ponderosa pine, Spruce-fir, and Douglas fir;</li> <li>-clearcutting units must not expose more than 20% of the seen area for a travel corridor;</li> <li>- develop corridor or viewshed reports for all travel corridors before starting ground disturbing activities;</li> <li>- cutting units must not dominate natural patterns of form, line, color, and texture;</li> <li>- retain or improve diversity of understory size and species;</li> <li>- return all ground disturbances to natural appearances where feasible;</li> <li>- reduce stump height to minimum possible in visible areas;</li> <li>-provide diversity of species and age classes;</li> <li>- locate landings outside seen areas or rehabilitate after timber sales;</li> <li>- locate wildlife snags to conform to natural vegetation patterns;</li> <li>- locate gravel, borrow, and stockpile areas outside of seen areas; and</li> <li>- roads must not dominate natural patterns of form, line, color, and texture within clearcut areas one year after cutting.</li> </ul>
<b>VMGC 3</b>	<ul style="list-style-type: none"> <li>- clearcutting units must not expose more than 20% of the seen area for a travel corridor;</li> <li>- develop corridor or viewshed reports for all travel corridors before starting ground disturbing activities;</li> <li>- cutting units must not dominate natural patterns of form, line, color, and texture;</li> <li>- return all ground disturbances to natural appearances where feasible;</li> </ul>

	<ul style="list-style-type: none"> <li>- provide diversity of species and age classes;</li> <li>- locate landings outside seen areas or rehabilitate after timber sales;</li> <li>- locate wildlife snags to conform to natural vegetation patterns;</li> <li>- roads must not dominate natural patterns of form, line, color, and texture within clearcut areas one year after cutting; and</li> <li>- revegetate all cut and fill slopes.</li> </ul>
<b>VMGC 4</b>	<ul style="list-style-type: none"> <li>- clearcutting units must not expose more than 25% of the seen area for a travel corridor;</li> <li>- cutting units must not dominate natural patterns of form, line, color, and texture;</li> <li>- return all ground disturbances to natural appearances where feasible;</li> <li>- provide diversity of species and age classes;</li> <li>- locate landings outside seen areas or rehabilitate after timber sales;</li> <li>- roads must not dominate natural patterns of form, line, color, and texture within clearcut areas one year after cutting; and</li> <li>- revegetate all cut and fill slopes.</li> </ul>
<b>VMGC 5</b>	<ul style="list-style-type: none"> <li>- clearcutting units must not expose more than 25% of the seen area for a travel corridor;</li> <li>- cutting units must not dominate natural patterns of form, line, color, and texture;</li> <li>- return all ground disturbances to natural appearances where feasible;</li> <li>- provide diversity of species and age classes;</li> <li>- locate landings outside seen areas or rehabilitate after timber sales;</li> <li>- roads must not dominate natural patterns of form, line, color, and texture within clearcut areas one year after cutting; and</li> <li>- revegetate all cut and fill slopes.</li> </ul>
<b>VMGC 6</b>	<ul style="list-style-type: none"> <li>- cutting lines may dominate natural patterns, but must repeat natural form, line, color, and texture;</li> <li>- return all ground disturbances to natural appearances where feasible;</li> <li>- provide diversity of species and age classes; and</li> <li>- revegetate all cut and fill slopes.</li> </ul>
<b>VMGC 7</b>	<ul style="list-style-type: none"> <li>- cutting lines may dominate natural patterns, but must repeat natural form, line, color, and texture;</li> <li>- return all ground disturbances to natural appearances where feasible; and</li> <li>- provide diversity of species and age classes.</li> </ul>

*Applicable Visual Management Guidance Class Direction (GMUG Forest Plan, pp III-12 to III-15)*

Potential treatment units in the action alternatives are in a dissected landscape of forested, rolling hills with moderate slopes; a landscape with moderate to high VAC. Consequently, Moderate VAC is assumed in this analysis. However, design feature SVR-2 requires pre-implementation consultation with the forest visual resource specialist to ensure Forest Plan compliance. This provision would allow for adjustment of project activities to meet visual quality standards in the event of site, unit, or activity-specific scenic conditions, or changed conditions due to mass mortality events.

## Effects of the No-Action Alternative

Under the no-action alternative, no acres would be treated under the Taylor Park project, although other recovery, resiliency, and hazard tree removal projects would continue under existing authorizations. Natural events and human activities would continue to change the scenic landscapes. Most standing dead and dying trees would remain standing for up to a decade and would pose a hazard to forest users and travelers until removed or blown down. Strong winds could blow down dead and dying trees across trails and roads, campsites, trailhead parking areas, and administrative sites. The forest's ability to respond to multiple and interactive stressors including climate change, drought, insect attack, and disease would not be improved, and fuel loading in the WUI and across the project area would continue to increase.

Without treatment and its anticipated beneficial effects to landscape resiliency, the forest would be at increasingly greater risk for large scale, stand-replacing events. This would reduce or eliminate the likelihood of achieving and/or maintaining the desired mosaic of even-aged, two-aged, and uneven-aged stands with a balance of stand age classes ranging from young forest to over-mature forest. These desired conditions describe a landscape with maintained or improved scenic variety, which directly correlates to scenic interest. Consequently, the no-action alternative would lead to decreased ability to improve or maintain scenic quality over the long term.

## Cumulative Effects of the No-Action Alternative

There are no proposed management activities, and therefore no effects to scenic quality from implementation, under the no action alternative. Direct and indirect effects of natural processes combined with past, on-going, and future activities could result in cumulative effects to scenic quality. Given reasonable foreseeable vegetation management, fewer acres would be treated, leaving more visible dead and downed stands on the landscape in the long-term.

## Activities Common to Both Action Alternatives

The following design features are applicable to both action alternatives.

Design Feature	Trigger for Use	Description	Effect
SVR-1	All Treatment Areas	<p>For all treatments, if VQO maps are not locatable, the following VQO's will be used as interpreted from the 1991 LRMP. These will be applied to the Visual Management Guideline Classes identified in the Visual Resource Management Section discussed below.</p> <p>These requirements apply to vegetation treatments.</p> <p>2A – Retention            2B – Partial Retention            3A - Retention            4D – Modification            6B – Modification            7A – Modification or Maximum Modification</p> <p>Other Management Areas are not planned for treatment.</p> <p>See other requirements for Sensitivity Level 1 Roads, Trails and View Points below. Those requirements are more restrictive than the general management area requirements shown here.</p>	Limit immediate and longer-term visual effects of treatments.

SVR-2	All Treatment Areas	<p>In all treatment areas, follow General Direction and associated standards and guidelines in the Visual Resource Management Section of the 1991 Land and Resource Management plan. This direction is found on pages III-12 through III-15.</p> <p>Consult with the forest visual resource specialist when implementing projects to ensure that these standards are being met. The visual resource specialist will adapt this direction to the situations where the forest has been heavily impacted with dead or dying trees. The visual system was not designed for these situations; however, the principles are to be applied.</p>	Reduce visual evidence of management activities such that they repeat form, line color and texture typical of the characteristic landscape.
SVR-3		<p>In developed recreation sites, including trailheads and administrative sites (typically VQOs of Modification or Maximum Modification), cut stumps as low to the ground as feasible.</p> <p>Remove or chip slash at developed campgrounds and designated recreation areas, extending outwards 300 feet of any constructed feature; at designated dispersed sites; and other dispersed sites deemed important at the time of implementation.</p> <p>Alternatively, at designated dispersed sites or other dispersed sites deemed important and at developed recreation sites (except developed campgrounds or designated recreation areas) and at administrative sites, move heavy slash to designated slash piles and burn as soon as conditions allow.</p> <p>Note: designated recreation areas include but are not limited to: Taylor Canyon.</p>	Limit immediate and longer-term visual effects of treatments.
SVR-4		<p>In developed recreation and administrative sites (typically VQOs of Modification or Maximum Modification), minimize damage from mechanical treatments to young healthy trees and understory trees and shrubs.</p>	Provide present and future shade and screening, and to maintain high quality recreational setting and desired scenic condition.
SVR-5		<p>In areas of Retention and Partial Retention, minimize damage to natural features such as rock outcrops, young healthy trees and understory of trees and shrubs; cut stumps as low to the ground as feasible. Remove heavy slash (greater than 1 foot deep) within the immediate foreground (to 300 feet) of roads, trails, and dispersed sites to slash piles (which will be burned or are expected to be minimally apparent within 5 years) or chip. Slash may be scattered to depths of less than 1 foot.</p>	Reduce visual evidence of management activities such that they repeat form, line color and texture typical of the characteristic landscape.
SVR-6		<p>Do not use roads or trails for skidding. Minimize skid trails across roads and trails. Rehabilitate any skid trails or temporary roads that intersect with these features or are present in the foreground</p>	Reduce visual evidence of

		(up to ½ mile). Do not locate landings along or within the immediate foreground (to 300 feet) of these travel ways.	management activities such that they repeat form, line color and texture typical of the characteristic landscape.
SVR-7		For all treatments, revegetate and till disturbed and compacted soils on landings, burned slash pile sites, skid trails and temporary roads with native seed mixture after the completion of treatments. Block access to decommissioned or re-claimed temporary roads with naturalistic barriers.	Reduce soil contrast and encourage regrowth.
SVR-8	Prescribed Burn Areas	Align prescribed burn boundaries with naturally occurring features such as ridgelines and rivers/streams to the maximum extent possible.	Reduce visual evidence of management activities such that they repeat form, line color and texture typical of the characteristic landscape.
SVR-9	Prescribed Burn-Related Danger Tree Abatement Areas	In areas with Retention and Partial Retention VQOs, flush cut or low cut stumps to 6" within immediate foreground (300 feet) of roads, trails, developed recreation sites and private property. When feasible, treat both sides of open system roads and trails to avoid contrast.	Reduce visual evidence of management activities such that they repeat form, line color and texture typical of the characteristic landscape.
SVR-10	Prescribed Burn Treatment Areas	Blend fuel breaks with natural landscape features such as natural openings, rock outcrops, and topography where possible. Minimize use of straight lines or geometric shapes along edges during unit design where feasibility and safety allow.  Once management activities are complete, rehabilitate fire control features, safety zones, and staging areas by returning to original contours, installing erosion control features as necessary, scarifying to eliminate compaction as necessary, and planting with native grass seed. Block access with naturalistic barriers.	Reduce visual evidence of management activities such that they repeat form, line color and texture typical of the characteristic landscape.

Treatments would occur within six management area designations with VQOs ranging from retention to maximum modification. Adherence to applicable Forest Plan direction and design features (DFs) as described in Appendix B would ensure the attainment of applicable VQOs.

Direct effects of anticipated treatments for both action alternatives would include the removal of trees that once dominated the forest landscape and reduced stand density in treated units. Openings resulting from removal of live and dead trees would be noticeable by visitors traveling along road and trail corridors and using dispersed campsites. In foreground views, cut stumps, slash, and downed logs would be noticeable in the short-term, until obscured by natural decay and vegetative regrowth. These immediate visual effects would range from negative to positive, dependent upon individual viewer perception of scenery change, preference for more or less dense stand settings, and general philosophy of resource management.

In the short-term, temporary roads would be visible on the landscape, and mechanical treatments would be apparent to visitors traveling through active work areas. Slash piles would be noticeable in foreground views from roads, trails, dispersed sites, and other unscreened vantage points until burned. Some trees would remain to provide present and future shade and screening, and removal of dead and diseased trees would reduce competition for light and moisture. This would allow the remaining trees to maintain health and grow faster, improving scenic quality over the long-term.

Should shallow-rooted trees adjacent to larger treated sites be naturally blown down by strong winds, their exposed roots could dominate the created openings and lower scenic integrity when viewed from roads, trails, recreation areas, and viewpoints. However, silvicultural prescriptions as described in Appendix B are designed to reduce the prevalence of post-treatment blowdown.

The proposed treatments would, over the long-term, result in a more heterogeneous, multi-storied stand condition. Associated indirect effects to scenic quality would include persistence of the vegetation types currently associated with the area, with greater resiliency to current and anticipated future stressors.

**Lodgepole Pine Clearcut, Dwarf Mistletoe Edge Clearcut, and Clearcut of POL** would create irregularly-shaped clearcuts of less-than 40 acres in size in lodgepole pine dominated stands. The shape of edge clearcuts around healthy stands of vegetation would ensure a discontinuous, irregular appearance with at least partial vegetative screening from foreground vantage points, and from middleground and background vantage points at all but the highest acute viewing angles (directly overhead). At middleground and background distances, the irregular shape and small size of treated areas would repeat the naturalistic vegetation patterns of the surrounding landscape. Retention of 90-180 wildlife trees per 100 acres, lodgepole pine less than 7 inch DBH, Engelmann spruce, Douglas-fir, aspen, and limber pine would further reduce the contrast between treated and untreated areas, ensuring that treated areas repeat the form, line, color, and texture of the characteristic landscape. **Non-commercial Dwarf Mistletoe Edge Clearcuts** would differ in that felled trees would be piled on site in preparation for prescribed burning. This treatment was developed due to the inaccessibility of proposed units in Texas Creek. Given that inaccessibility, piles would not be visible from open roads or trails. **Hand Treatment of Dwarf Mistletoe in Wet Areas** would have scenic effects identical to Dwarf Mistletoe Edge Clearcut and Dwarf Mistletoe Sanitation.

**Group Selection** would produce an uneven-aged stand of irregularly spaced and shaped ¼-2 acre openings interspersed with more heavily vegetated areas. Harvested areas would consist of maximum of 40% of the treated areas, leaving at least 60% in a forested condition. Retention of 90-225 wildlife trees per 100 acres, limber pine, Douglas fir, and aspen would further soften the edges of treated areas. The irregular treatment pattern and distribution of retained vegetation would repeat patterns characteristic of the surrounding landscape to the extent that it would not be evident to the casual observer.



*Dwarf Mistletoe Edge Clearcut in Lodgepole Pine*

**Overstory Removal** treatments would result in primarily less than 40-acre, even aged tracts of lodgepole pine and Engelmann spruce-subalpine fir with 90-225 retained overstory wildlife trees and 150-540 tree per acre (TPA) of at least six-foot tall advanced conifer regeneration. Individual overstory units would exceed 40 acres only under the following conditions:

A minimum of 150 to 200 TPA of non-cull trees remain, preferable 300-540 TPA, with minimum stocking present on 75% of the harvested area, crown closure exceeds 30%, and average tree height is 25% of adjacent mature stands for areas of VQO retention or partial retention, or six-foot tall for VQO of modification and maximum modification.

Retention of overstory wildlife trees and advanced conifer regeneration would maintain a forested condition and reduce contrast between treatment units the characteristic landscape. Retention of Douglas-fir, aspen, and limber pine in low-windthrow-risk areas would further reduce contrast and soften transitions between treated areas and the surrounding landscape. Treated units would appear to be irregularly shaped areas of shorter vegetation interspersed with taller retained wildlife trees and retained species. These effects would repeat naturally occurring patterns of regrowth in natural openings and legacy openings from previous vegetation management.

**Shelterwood Cuts** would reduce treated stand density by approximately half, creating more open stands with irregular ¼ to 2 acre openings and longer sight distances. Along roads and trails and near adjacent private land, unpruned leave trees would provide additional visual screening. Treated stands would remain forested, in a two-aged condition in the short term. In the long term, stands would become even-aged with overstory removal. Treated areas would remain forested throughout, with retained overstory and wildlife trees softening transitions with the surrounding landscape until and the sheltered understory trees attain maturity. Inherent irregularities of the treatment prescription along with DFs and Forest Plan adherence would blend treatments into the characteristic landscape.

**Young Stand Pre-commercial Thinning and/or Dwarf Mistletoe Survey/Sanitation** would reduce stand density to an irregular spacing averaging 8 to 12 feet between stems, with associated increased sight distances. Treatment patterns would repeat form, line, color, and texture commonly found in the characteristic landscape and bring stand density closer to the historic range of variability created by naturally occurring fire pre-suppression.

**Fuel Treatment in the WUI** would treat surface, mid-canopy, and overstory fuels, creating more open stands, particularly at surface and mid-canopy levels, with fewer trees below 8-inch DBH. Stands would exhibit a park-like appearance, with open spacing between trees and a discontinuous canopy characterized by small, irregular openings allowing sunlight to the forest floor interspersed with clumpy distributions of more closely situated overstory trees. **Commercial Thinning** would occur as part of fuel treatments, targeting lodgepole pine to achieve 4 to twelve foot crown spacing, with similar scenic effects.

**Common Post-Commercial Harvest Treatments** as described in Appendix B would maintain the more open stand conditions created by the primary treatments, and would reduce visual effects of the primary treatments over the short term by burning slash piles and conducting tree planting where necessary based upon the results of reforestation surveys. In the long term these actions would have positive scenic effects by ensuring regeneration naturally and through site preparation, planting, or seeding.

**Salvage Clearcut or Salvage Overstory Removal** would occur if insects, disease, windthrow, or fire caused a significant mortality event, creating a need for dead and dying trees to be salvaged prior to their deterioration. Below 65% stand mortality, the variety of treatments used would preserve a mosaic of vegetated patches and irregular clearings which would repeat patterns found in the characteristic landscape. Above 65% stand mortality, salvage operations would create larger un-vegetated openings not characteristic of the surrounding landscape, although careful adherence to design features and Forest Plan guidance would reduce scenery effects such that salvage clearcuts would remain subordinate to the characteristic landscape.

Neither the Visual Management System (VMS) nor Forest Plan scenery direction were designed for situations where the forest has been heavily impacted with dead or dying trees. Should significant mortality events occur, the forest visual resource specialist would be consulted prior to salvage. The visual resource specialist would apply VMS principles to adapt applicable direction to each particular instance, ensuring adherence to the intent of that direction.

Salvage would result in a more open landscape being visible from nearby roads, trailheads, recreation sites and other vantage points. However, the difference between existing and project created conditions would be one of frequency rather than of type or scale. Without human intervention, the dead and dying trees that would be removed by cumulative project activities would fall; just less predictably and over a longer time period. Eventually, regeneration would occur, and the stand would return to a vegetated/forested condition. Salvage and associated mitigation, monitoring, and revegetation efforts would return treated stands to a forested condition faster, with healthier trees, and with the mix of

vegetation associated with the characteristic landscape. This acceleration of ongoing natural process would arrive at equivalent scenic balance and quality, sooner, thereby achieving positive long term scenic effects.



*Example of 8 to 12 Foot Spacing*

## **Effects of the Proposed Action**

Direct and indirect effects of the proposed action would meet applicable VQOs. For visually sensitive areas with VQOs of Retention and Partial Retention, adherence to Forest Plan guidance and the DFs specifically developed for this project would ensure that project activities repeat the form, line, color, and texture of the characteristic landscape to remain subordinate (Partial Retention) or unapparent (Retention). The proposed action would temporarily re-open 72 miles of previously closed temporary roads and create 37 miles of new temporary roads. Because temporary roads would be closed and rehabilitated upon project completion, scenic affects would be limited to the duration of project activities. Rehabilitation efforts including tilling, re-seeding, and naturalistic barriers would be sufficient to meet applicable VQOs. Should a large-scale mortality event affect the existing conditions, pre-implementation consultation with visual resource specialists would be used to address specific instances and implement design features as appropriate to meet applicable VQOs. Project activities would bring treated stands

closer their natural historic range of variability and increase resiliency to stressors like insects, disease, and fire. Over the long term, treatments would enhance the landscape's ability to maintain scenic quality and integrity despite these and other current and anticipated stressors.

## **Cumulative Effects**

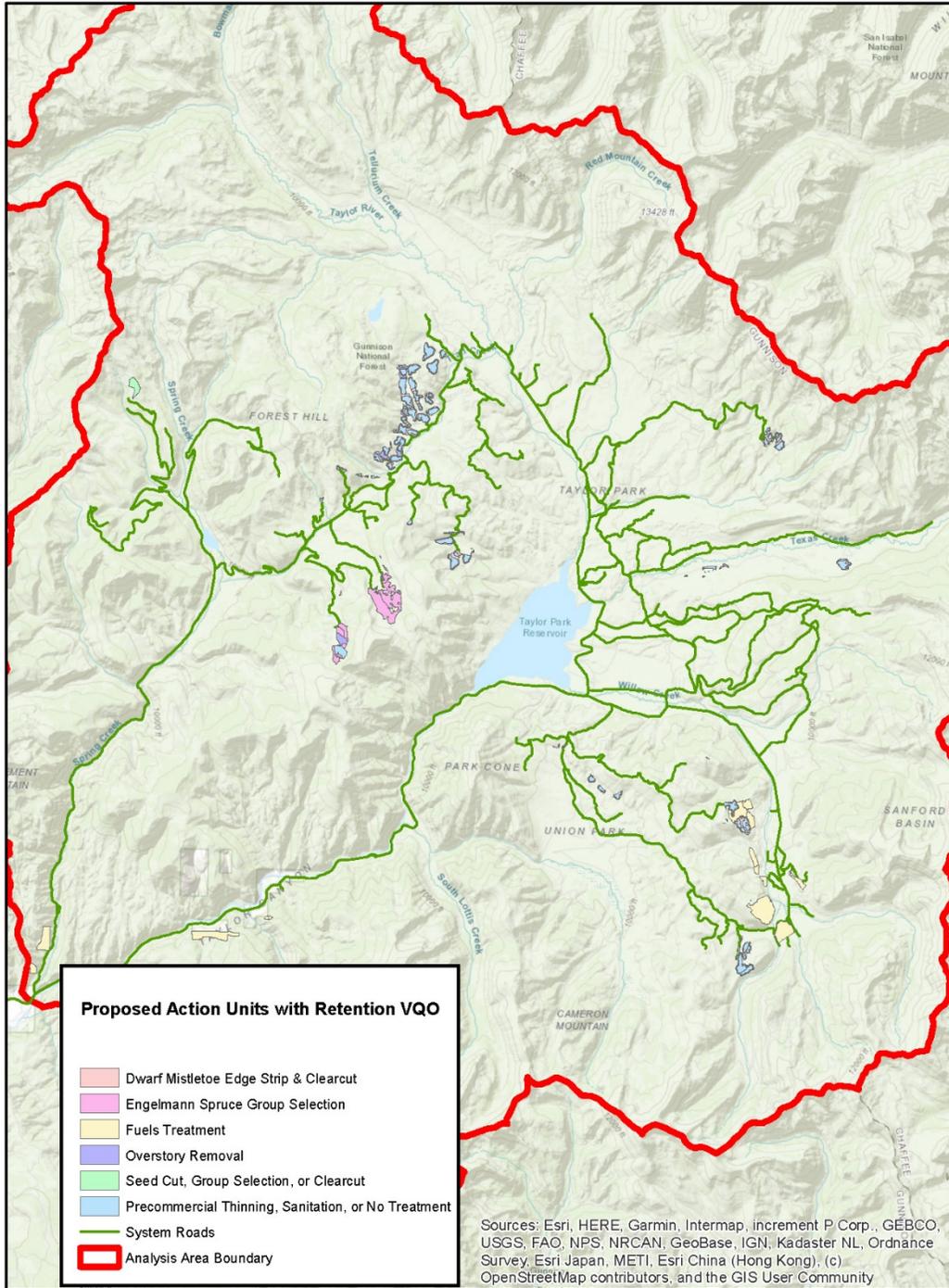
Proposed actions would occur in conjunction with projects authorized under previous decisions:

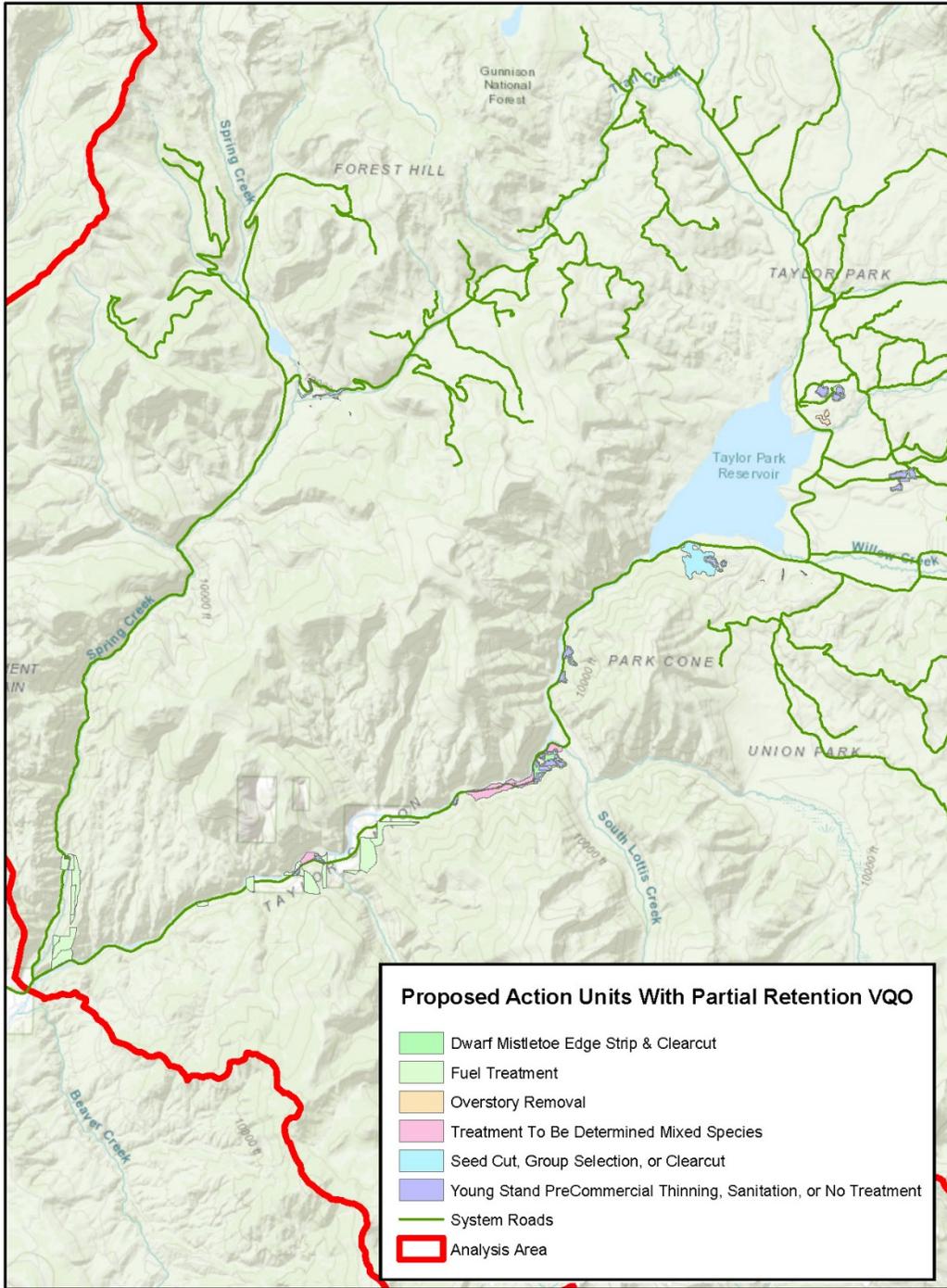
- SBEADMR: 4,300 acres of resiliency treatments,

- Taylor Park CE: 186 acres of pre-commercial thinning, commercial thinning, and dwarf mistletoe sanitation, and

- Fuels reduction: 2,820 acres between 2000 and 2010.

The combined acreage of these projects and the proposed action would amount to 22,255 acres of vegetative and fuel reduction treatments which would reduce fuel loadings and stand density. The treated areas would be more open, with irregular openings and clumped distributions of heavier vegetation which would repeat patterns of the characteristic landscape, add scenic variety, and bring the overall landscape closer to the historic range of scenic variability vis a vis fuel loading, stand density, and species mix.





## Effects of Alternative 2

Most proposed treatments under alternative 2 are the same as those under the Proposed Action, with the same scenic effects. Prescribed fire is the only new treatment proposed under Alternative 2; the other differences from the Proposed Action are differences in scale, rather than type, of effect due to differences in treated acreage. Achievement of applicable VQOs would not be affected. There would be increased acreage of dwarf mistletoe edge strip/clearcut and group selection treatments, but reduced acreage of overstory removal and shelterwood cuts. Fuel treatments would be implemented on approximately 300 more acres.

Anticipated treatments under Alternative 2 would use fewer temporary roads, requiring the opening of 24 miles of existing temporary road prisms, and 23 miles of new temporary roads. As with the Proposed Action, new and re-opened temporary roads would be closed upon project completion, meeting applicable VQOs.

Alternative 2 would include a prescribed burn component on 4,180 acres. This treatment would be accomplished after other proposed treatments in order to create optimal conditions in the targeted stands. In order to accomplish prescribed burn treatments, the time period for implementation of Alternative 2 would be extended by 10 years. The scenic effects of this extension would be that the sights and sounds of personnel and equipment, to include helicopters, would be working in and above the project area for a longer period of time. These effects to scenery would be ephemeral, lasting only so long as that particular portion or phase of the project required them to be working in a given area.

Alternative 2 would treat 17,714 acres, 2,765 more than the Proposed Action. With the exception of Stand Replacing Prescribed Fire, the scenic effects of the proposed treatments would be the same as those of Alternative 1, albeit affecting more acreage.

**Stand Replacing Prescribed Fire** would occur in lodgepole pine-dominated stands, where it would create a mosaic of overstory mortality ranging from 0% to 100%. Some areas would burn intensely, with individual and group torching and high mortality, while some areas would be avoided, burning at low-intensity or not at all. This inherent variability in fire behavior would create scenic effects in highly varied patterns that would mimic the effects of pre-settlement forest fires. Differences in burn intensity would create an irregular pattern of fire-created openings interspersed with surviving overstory and understory in lower-intensity or bypassed areas. Areas of higher intensity burn would be characterized by fully burned undergrowth and leaf litter, and high overstory mortality. There would be progressively more leaf litter, understory, and overstory survival at lower burn intensities. Riparian and other wetter areas would likely burn at a lower intensity, adding to the post-treatment mosaic. The scenic effects of the treatment would be indistinguishable from those of a natural forest fire; casual forest visitors without knowledge that it had been a prescribed fire would be unable to tell the difference. Using natural terrain features for unit boundaries to the maximum extent possible would allow treatment to follow natural burn patterns and mimic naturally occurring patterns on a landscape scale.

Roadside danger tree abatement would be required along roads through the burn units where trees are within 200 feet of the road. This treatment would cover 2,340 acres. Per applicable DFs (SVR 7, 8, 9), danger trees would be cut as low to the ground as possible in partial retention and retention areas, burn unit boundaries would follow natural features to the extent possible, and fire control features would be rehabilitated after completion of project activities.

The scenic effects of stand-replacing prescribed fire would be highly visible on the landscape, and would dominate scenery in foreground, middleground, and background views where treated areas comprise a

majority of the seen area. However, those scenic effects would mimic the changes in form, line, color, and texture produced by naturally occurring fire so completely and at such a scale that they would be viewed as a natural occurrence by the casual forest visitor. With adherence to DFs, stand-replacing prescribed fire treatments would be in accordance Forest Plan direction and meet applicable VQOs.

**Salvage Clearcut or Salvage Overstory Removal:** If mass mortality events affect stands in the project area, salvage operations would potentially treat 29,095 acres, nearly double the potential salvage under the Proposed Action. The temporary road system needed would expand to the same size and road distance as that needed for the Proposed Action. Scenic effects of salvage operations would be the same in type but larger in scale; with salvage operations potentially occurring on a majority of available acreage in the Taylor Park Basin (FS lands, non-IRA, and non-wilderness). As with the Proposed Action, these salvage operations would be in reaction to large-scale mortality events, requiring potential effects to be measured against the new existing scenic condition; a forest of standing dead and dying trees.

Despite having the same scenic effects as described for salvage under the Proposed Action, the larger scale of salvage operations under alternative 2 could cause those effects to be perceived differently by forest visitors, with perception of effects being dependent on individual values. For example, from some vantage points on the southern side of Taylor Park Reservoir, most of the seen middleground between the reservoir and the Collegiate Peaks Wilderness would potentially be subject to salvage treatments. Individual viewer values, aesthetic leanings, and general philosophy of resource management would drive perception of the scenic effects as positive, negative, or neutral. Nevertheless, with adherence to DFs and pre-implementation visual resource specialist consultation per SVR-2, salvage treatments would meet applicable VQOs.

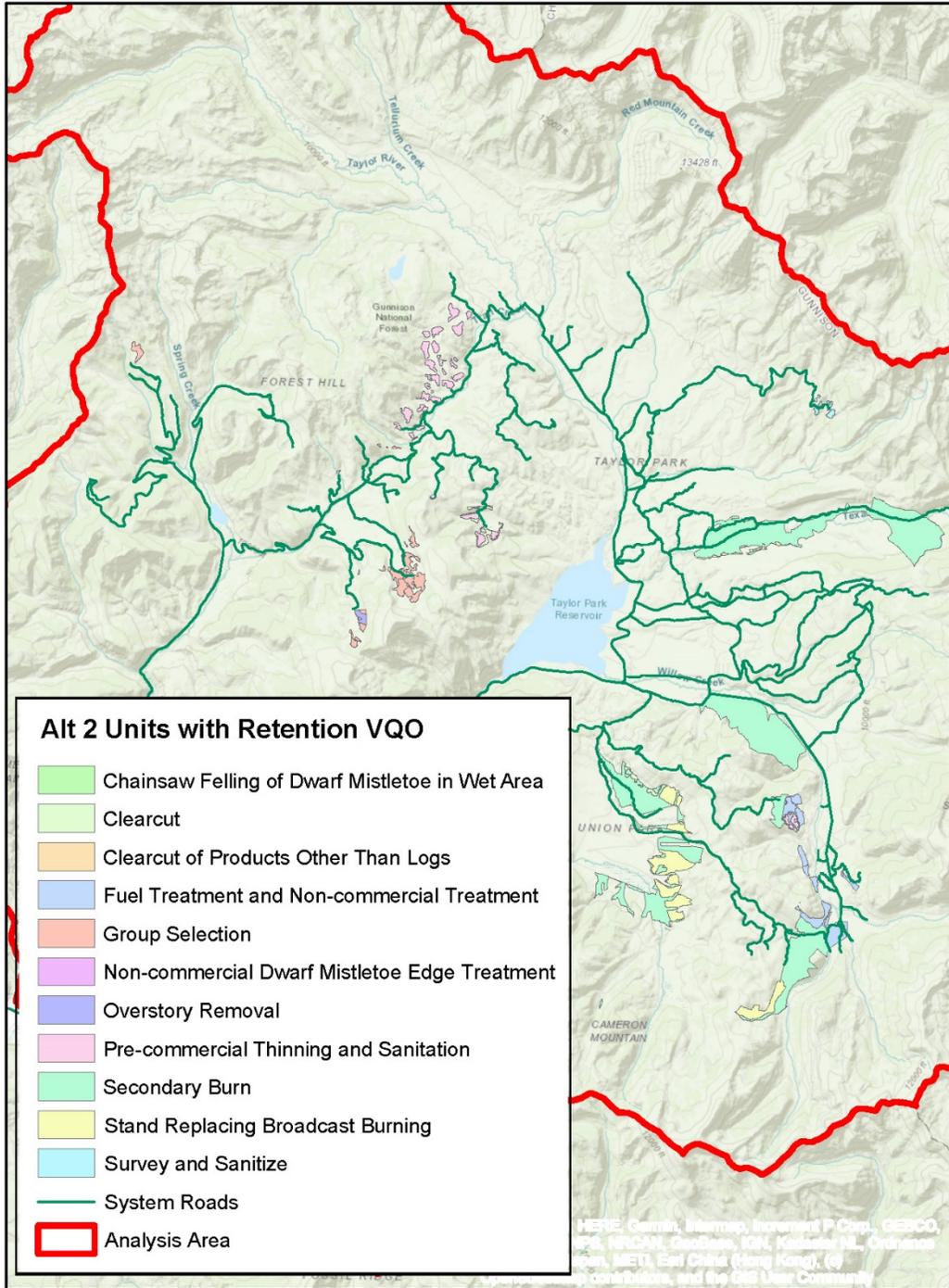
## **Cumulative Effects**

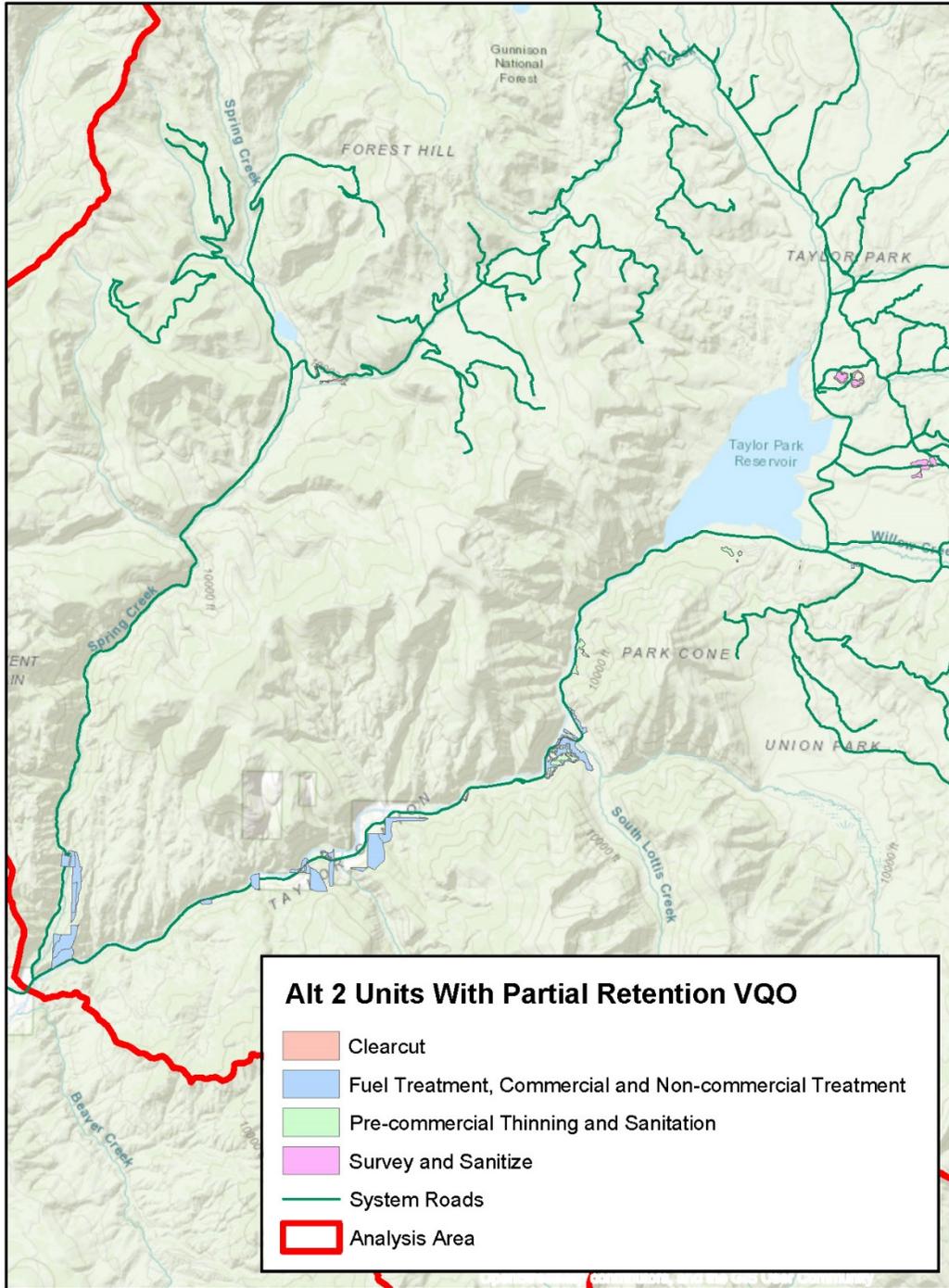
Proposed actions would occur in conjunction with projects authorized under previous decisions:

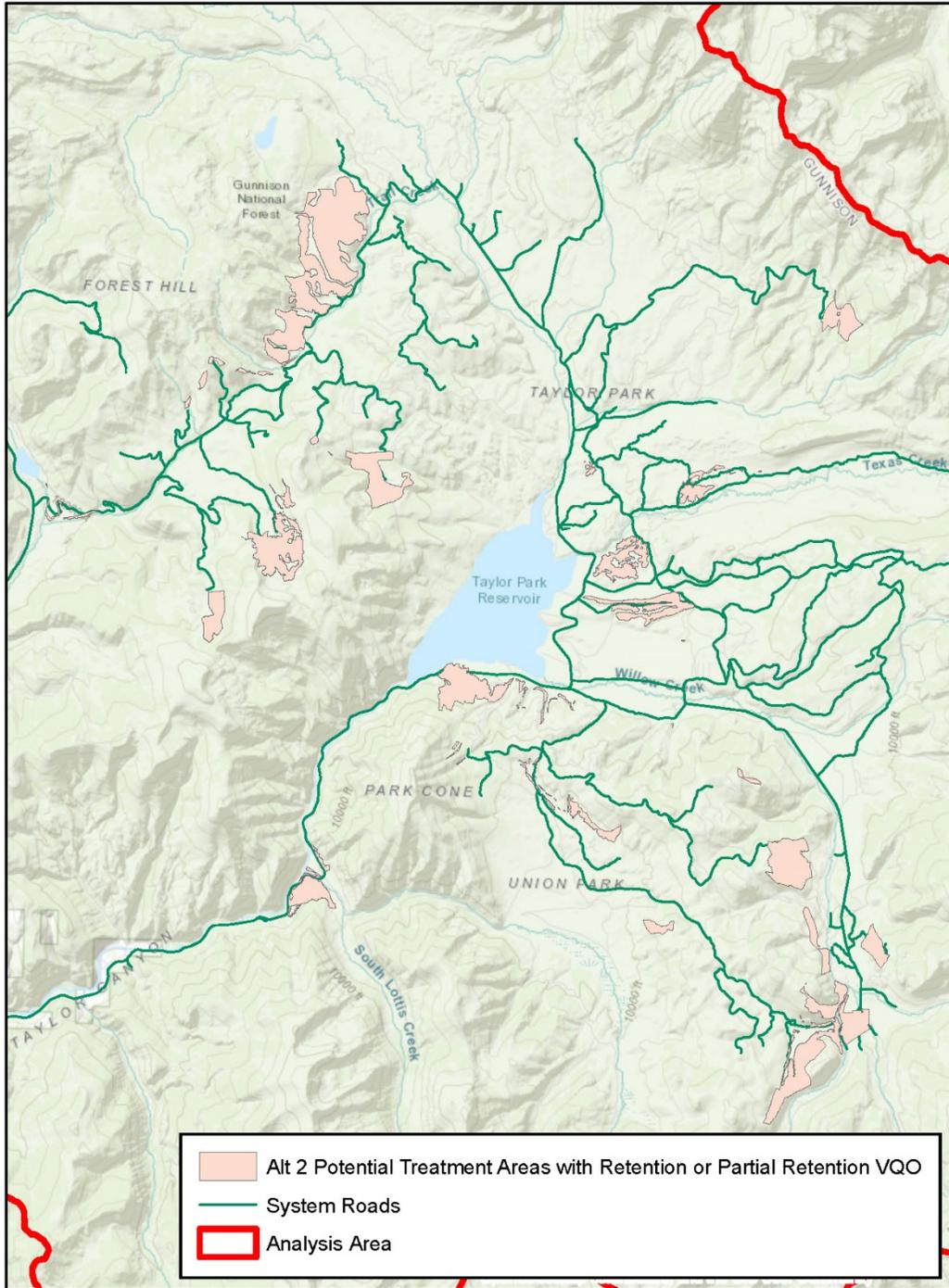
- SBEADMR: 4,300 acres of resiliency treatments,
- Taylor Park CE: 186 acres of pre-commercial thinning, commercial thinning, and dwarf mistletoe sanitation, and
- Fuels reduction: 2,820 acres between 2000 and 2010.

The cumulative effects of these projects and the current anticipated Alternative 2 treatments would amount to 25,020 acres of vegetative and fuels reduction treatments which would reduce fuel loadings and stand density. The treated areas would be more open, with irregular openings and clumped distributions of heavier vegetation which would repeat patterns of the characteristic landscape, add scenic variety, and bring the overall landscape closer to the historic range of scenic variability vis a vis fuel loading, stand density, and species mix.

In the event of large scale mortality events requiring salvage treatments, this cumulative treated acreage would potentially expand to 36,401 acres of greatly reduced fuel loadings, greatly reduced stand density, and large openings with clumped distributions of heavier vegetation.







## References

- USDA Forest Service. 1991. Amended Land and Resource Management Plan. Grand Mesa, Uncompahgre, and Gunnison National Forests; Delta, Colorado.
- USDA Forest Service. 2016. Spruce Beetle Epidemic and Aspen Decline Management Response Final Environmental Impact Statement. Available:  
[https://www.fs.usda.gov/nfs/11558/www/nepa/96623\\_FSPLT3\\_3083981.pdf](https://www.fs.usda.gov/nfs/11558/www/nepa/96623_FSPLT3_3083981.pdf)
- USDA Forest Service, 1973. National Forest Landscape Management Volume 1. Washington, DC. United States Department of Agriculture.
- USDA Forest Service, 1974. National Forest Landscape Management Volume 2. Washington, DC. United States Department of Agriculture.
- USDA Forest Service, 1980. National Forest Landscape Management Volume 2, Chapter 5: Timber. Washington, DC. United States Department of Agriculture.





