

Appendix C. FOREST PLAN, FOREST SERVICE MANUAL and OTHER DIRECTION

Forest Plan Direction

Aquatics

One of the primary emphasis areas in the Forest Plan was to provide restoration of vegetation impacted through human activities. Riparian areas next to streams and lakes were identified as high value areas in view of the many functions they provide and the interest from the public to use them.

All of the recreational resident tracts, being analyzed in this document, were built in riparian area and flood plains. Much of the natural vegetation is altered as recreational resident owners constructed cabins, outbuilding and road, converted willow bottoms into lawn, and installed flood prevention structures around the lots. Larger trees have been removed to provide for power line clearing or reduce potential hazards. Remaining vegetation is trampled as people create access routes to the stream and vehicle parking. Stream-side vegetation has also been cleared to provide for better views of the river and play areas.

Management Prescription

The recreational resident tracts are located in four different management prescriptions (MP). These are MP 2.5 emphasizing the Logan Canyon Scenic Byway, MP 2.7 emphasizing the special Interest Areas and MP 3.1A emphasizing aquatic habitat. In Scenic Byways (MP 2.5) most actions are allowed with an emphasis on maintaining the scenic quality. In Special Interest areas (MP 2.7) actions are allowed that increase awareness and educational values of the area. In aquatic habitat emphasis areas (MP 3.1A) most actions are allowed if they help maintain, improve or restore riparian and aquatic habitat to desired conditions or to protect property.

The MP 3.1A were used to identify cutthroat trout and spotted frog habitats. They also overlap Riparian Habitat Conservation Areas (RHCA), which are established for all bodies of water on the Forest. The desired conditions in MP 3.1A and RHCA are identified as part of the riparian management objectives (RMO). The RMO are established on a site-by-site basis to address local conditions.

Riparian Habitat Conservation Areas

Part or all of the land within the tracts form part of Riparian Habitat Conservation Areas (RHCA) as defined in the Forest Plan (Table 1). These areas include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, (2) providing root strength for channel stability, (3) shading

the stream, and (4) protecting water quality. This designation still allows for a full range of activities but it emphasizes the achievement of riparian management objectives.

Within or adjacent to the recreational resident tracts is the main stem Logan River and some of its tributaries. The RHCA, parallel to the river and tributaries, would consist of the stream and the area on either side of the stream extending from the edges of the active stream channel up to 300 feet slope distance (600 feet, including both sides of the stream channel).

The definitions and defined widths for the various categories of RHCA is listed below.

Category 1. FISH-BEARING STREAM: RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to 300 feet slope distance (600 feet, including both sides of the stream channel).

Category 2 - PERMANENTLY FLOWING NON-FISH-BEARING STREAMS: RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to 150 feet slope distance (300 feet, including both sides of the stream channel)

Category 3 - PONDS, LAKES, RESERVOIRS, AND WETLANDS GREATER THAN 1 ACRE: RHCAs consist of the body of water or wetland and the area to 150 feet slope distance from the edge of the maximum pool elevation of constructed ponds and reservoirs or from the edge of the wetland, pond or lake,.

Category 4 - SEASONALLY FLOWING OR INTERMITTENT STREAMS, WETLANDS LESS THAN 1 ACRE, LANDSLIDES, AND LANDSLIDE-PRONE AREAS: This category includes features with high variability in size and site-specific characteristics. At a minimum the interim RHCAs must include, landslides and landslide-prone areas, 100 feet slope distance in watersheds containing Bonneville or Colorado River cutthroat trout, and 50 feet slope distance for watersheds not containing Bonneville or Colorado River cutthroat trout.

Riparian Management Objectives

The RMO's for recreational residents tracts, associated off-lot improvements and the areas adjacent to the access routes to these tracts were established through discussions with forest staff. The objective is to maximum vegetative cover in the RHCA and in the channel while at the same time allow for access of emergency vehicles and reducing wildland fires that could threaten public safety and property. To help permittees and Forest staff understand the RMOs and how actions on the ground would help meet this objective, this section was divided into the basic direction that applies to all RHCA areas within the tract along with four sections with their associated definitions and directions is also provided.

Direction Applicable to All RHCA

1. Access roads can be cleared to allow access for Type 4 Wildland Agency Engines. The roads can have a maximum clearance width of 10 feet and a height of 14 feet to allow for emergency vehicles.
2. Beyond the access road clearance zone, light ladder fuels (leaves and branches) may be cleared between 2 and 10 feet in height.
3. Fill on roads and spurs, including parking areas when graveled, in RHCA will consist of washed rock with no fines. Trails in the RHCA will be minimized and should not exceed one stream access trail per cabin. Clearing of vegetation on these trails should not be permitted.

Direction Applicable To The RHCA Directly In and Over The Water (Area 1)

Area 1 is defined as the area directly above the water surface. No defined distance is identified. The objective for material in Area I is full retention. Because of the moisture in around a round the stream, fire spread into or out of this area is not a concern.

Guideline 6 directs: "In Riparian Habitat Conservation Areas (defined in Glossary) when projects are implemented, retain natural and beneficial volumes of large woody debris."

This will provide:

- shade to stream and stream banks to help minimize temperature changes and fluctuations in the water
- provide structure for aquatic insects to hatch out
- recruitment of woody debris
- reduced water velocity

Best Management Practices in this area will include:

1. No removal of woody material out of the stream channel except as defined in Guideline 8. Guideline 8 directs: "In stream channels naturally occurring debris shall not be removed unless it is a threat to life, property, important resource values, or is otherwise covered by legal agreement." If large wood in the channel becomes the order of priority of actions will be: (1) cable in place to prevent drift. (2) remove portion of debris causing the problem or likely to cause a potential threat to life, property or other important resource value, (3) remove full tree. To the extent possible all trees will be left full length.
2. No trimming of vegetation in this area is permitted. Fire wood collection of material over 5 inches in diameter is not permitted. Standard S3.1A-2 directs Cutting fuelwood larger than 5 inches in diameter is not allowed.
3. Alteration of the streambed is not permitted without a stream alteration permit approved by the Authorized Officer. Weir construction to protect property is permitted is approved by the Authorized Officer.
4. Approval is required from the Authorized Officer to remove hazard trees from riparian areas.
5. Chemical treating of decks and bridges is not allowed. Deck material should be converted to materials that do not need upkeep (staining/painting) or they should be removed.
6. Water diversions, rock pools, ponds, water wheels, and ornamental water fountains are prohibited.
7. Sandbags are not allowed in this area.

Direction for the Area from the Waters Edge to the High Water Line or the Land Break
(Area II)

Area II includes the area from the waters edge to the high water line or the land break. It also includes all areas that become islands during high water. Because of the high moisture levels in the low vegetation around the stream, fire spread into or out of this portion of the RHCA is not a concern. Ladder fuels are a potential concern during late summer in carrying fire into the canopy layer. The objective for vegetation in this area is partial retention. Guideline 6 directs: “In Riparian Habitat Conservation Areas (defined in Glossary) when projects are implemented, retain natural and beneficial volumes¹ of large woody debris.” This will provide:

- shade to stream and stream banks to help minimize temperature changes and fluctuations along the stream banks
- provide structure for aquatic insects to hatch out
- recruitment of woody debris in and adjacent to the stream
- reduced water velocity during high flow
- provide for stable banks
- provide habitat conditions for amphibians

Best Management Practices in this area will include:

1. No removal of woody material low to the ground (within 2 feet). Guideline 8 directs: “In stream channels naturally occurring debris shall not be removed unless it is a threat to life, property, important resource values, or is otherwise covered by legal agreement.” If large wood in the channel is a potential problem the following priority of actions will be used: (1) cable in place to prevent drift. (2) remove the portion of the debris causing the problem or likely to cause a potential threat to life, property or other important resource value, (3) remove full tree. To the extent possible all trees will be left full length.
2. Vegetation may be trimmed between 3 and 10 feet above the ground to eliminate ladder fuels. Removal of trees is not permitted except with approval to remove a potential threat to life, property or other important resource value. Fire wood collection of material over 5 inches in diameter is not permitted. Standard S3.1A-2 directs Cutting fuelwood larger than 5 inches in diameter is not allowed.

Guideline 16 from the Forest Plan directs: When treating vegetation in the following cover types, maintain or restore snag and woody debris habitat components at the stand level (where they are available distributed over each treated 10 acres). If the minimum number of snags is unavailable, green trees should be substituted. If the minimum size is unavailable, then use largest trees available on site.

Table G16 The snag and woody debris requirements for spruce-fir, mixed conifer, Douglas fir, lodgepole, aspen-lodgepole and aspen forest types.

Forest Type	Snags			Woody Debris		
	Minimum Diameter (Inches)	Retention Density (minimum snags per 10 acres)	Minimum Snag Height (feet)	Minimum Coarse Debris (≥ 3 inches) Tons/10 Acres Down Logs	Minimum Down Logs (per 10 acres)	Minimum Log Size diameter/length (midpoint or largest available)
Spruce-Fir	18	30	30	100	50	12 inch/8 feet
Mixed Conifer	18	30	30	100	50	12 inch/8 feet
Douglas Fir	18	30	30	100	50	12 inch/8 feet
Lodgepole	8	30	15	50	50	8 inch/8 feet
Aspen-Lodgepole	8	30	15	50	50	8 inch/8 feet
Aspen	8	200	15	30	50	6 inch/8 feet

3. New driveways or parking spurs must be approved and expansion is generally not allowed within Riparian Habitat Conservation Areas Wasatch-Cache recreation residence Administrative Guide (WRAG))
4. Expanding the footprint of the cabin, decks and outbuildings is generally not allowed in Riparian Habitat Conservation Areas and requires additional analysis. (WRAG)
5. No short term parking areas are allowed in this area.
6. Decks, Porches, Patios, Sidewalks, and Stairs Expansion in Riparian Habitat Conservation Areas requires additional analysis and approval. These are generally not allowed because they do not meet the RMO.
 - a. Approved trails through this area should be graveled. They should not be left bare. Unauthorized trails need to be closed and the area restored to natural conditions.
 - b. Outside Fire Structures in Riparian Habitat Conservation Areas, they should be located only in appropriate locations, as far from streams as possible to avoid loss of vegetation and soils impacts.
 - c. No permanent play equipment is located in these areas.
 - d. Alteration of the stream bank is not permitted without a stream alteration permit and approval by the Authorized Officer.
 - e. Approval is required from the Authorized Officer to remove hazard trees from this area.
 - f. Fuel wood storage is only permitted in or on existing structures.
 - g. Approved vegetation cut in riparian areas should be left full length on the ground and not cut into shorter lengths.
 - h. Chemical washings of decks and bridges are not allowed.
 - i. Mowing is not allowed within 100 feet of any water body except to protect immediately around the primary recreation residency and outbuilding in this area.
 - j. Storage of gas, oil and yard chemicals are not allowed within Riparian Habitat Conservation Areas.

- k. Permanent sandbags are not allowed in riparian zones. They can only be used around structures.
- l. In areas where cabins are in close proximity (less than 30 feet) to the stream allow for the clearing next to the cabin of 1/6 of the distance from the cabin to the stream. A maximum of 5 feet will be cleared for fire protection.

Direction for the Area the High Water Line or the Land Break Away From the Stream to the End of the Designated RHCA as defined above (Area III)

This area extends from Area II (high water mark or land break) away from the stream out to the end of the designated RHCA as defined above. Because of the moderate moisture levels in the vegetation around the stream, fire spread into or out of this area is more of a concern. Ladder fuels are a potential concern during late summer in carrying fire into the canopy layer. The objective for vegetation in this area is partial retention. Guideline 6 directs: “In Riparian Habitat Conservation Areas (defined in Glossary) when projects are implemented, retain natural and beneficial volumes¹ of large woody debris.” This will provide:

- 1. Guideline 16 from the Forest Plan directs: When treating vegetation in the following cover types, maintain or restore snag and woody debris habitat components at the stand level (where they are available distributed over each treated 10 acres). If the minimum number of snags is unavailable, green trees should be substituted. If the minimum size is unavailable, then use largest trees available on site.

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Aspen-Lodgepole	8	30	15	50	50	8 inch/8 feet
Aspen	8	200	15	30	50	6 inch/8 feet

- 2. New driveways and parking spurs must be approved and expansion is generally not allowed within Riparian Habitat Conservation Areas. (WRAG).

3. Expanding the footprint of the cabin, decks and outbuildings is generally not allowed in Riparian Habitat Conservation Areas and requires additional analysis. (WRAG)
4. No short-term parking areas are allowed.
5. Decks, Porches, Patios, Sidewalks, and Stairs Expansion in Riparian Habitat Conservation Areas requires additional analysis and approval.
6. Trails through this area can be covered with wood chips or graveled. They should not be left bare.
7. Outside Fire Structures in Riparian Habitat Conservation Areas, they should be located only in appropriate locations, as far from streams as possible to avoid loss of vegetation and soils impacts.
8. No permanent play equipment is located in these areas.
9. Approval is required from the Authorized Officer to remove hazard trees from riparian areas.
10. Approved vegetation cut in riparian areas should be left full length on the ground and not cut into shorter lengths.
11. Chemical washings of decks and bridges are not allowed.
12. Mowing is not allowed within 100 feet of any water body except to protect immediately around the primary recreation residency and outbuilding in this area.
13. Storage of gas, oil and yard chemicals are not allowed within Riparian Habitat Conservation Areas.
14. Permanent sandbags are not allowed in this area. Sand bags can be used temporarily around structures.
15. In areas where cabins are in close proximity (less than 30 feet) to the stream allow for the clearing next to the cabin of 1/6 of the distance from the cabin to the stream. (Note: A maximum of 5 feet can be cleared for fire protection, access around the house and maintenance in these situations.)

Direction for Wetlands found in Recreational Resident Tracts (Area IV)

Area IV are wetlands. These areas are extremely moist and may flood annually. From the above definitions, they could have been included in areas I-III above. Area IV would meet the legal definition of a wetland (Those areas that are inundated by surface or ground water with a frequency sufficient to support and that, under normal circumstances, do or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. FSM 2527.05) Fire spread into or out of this area is only a seasonal concern. Ladder fuels are a potential concern during late summer in carrying fire into the canopy layer. The objective for vegetation in this area is partial retention. Guideline 6 directs: "In Riparian Habitat Conservation Areas (defined in Glossary) when projects are implemented, retain natural and beneficial volumes¹ of large woody debris." The objectives for this area are:

- maintain functioning wetlands
- provide habitat conditions for amphibians
- meet executive order EXECUTIVE ORDER No. 11990 (May 24, 1977, 42 F.R. 26961). The intent of the Executive Order is “to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or Indirect support of new construction in wetlands wherever there is a practicable alternative . . .”
- filter water

Best Management Practices in this area will include:

1. No expansion of footprint of man created structures/features in wetlands.
2. Removal of all unauthorized structures in wetlands
3. Vegetation modification allowed to reduce threat to life, property, important resource values, or where covered by legal agreement.
4. No short-term parking areas are allowed in these areas.
5. Trails through this area can be covered with wood chips or graveled. They should not be left bare.
6. No permanent fire rings should be located in wetlands.
7. No play equipment is located in these areas.
8. Approval is required from the Authorized Officer to remove hazard trees from riparian areas.
9. Fuel wood storage is only permit in or on existing structures.
10. Approved vegetation cut in riparian areas should be left full length on the ground and not cut into shorter lengths.
11. Chemical washings of decks and bridges are not allowed.
12. Mowing is not allowed within these area.
13. Storage of gas, oil and yard chemicals are not allowed in these areas.
14. Permanent sandbags are not allowed. Sand bags can be used temporarily around structures.
15. In areas where cabins are in close proximity (less than 30 feet) to the wetland allow for the clearing next to the cabin of 1/10 of the distance from the cabin to the stream. A minimum of x feet will be cleared for fire protection.
16. No dredging or filling of wetlands is allowed without a 404 permit and approval by the authorized officer.

Soil and Water

The following section contains information from the Wasatch-Cache NF Forest Plan for desired condition of soil, water, riparian, and aquatic resources.

Soil, Water, Riparian, and Aquatic Resources –

Forestwide- Most soils have at least minimal protective ground cover, soil organic matter, and coarse woody material. Soils have adequate physical properties for vegetative growth and soil-hydrologic function. Physical,

chemical, and biological processes in most soils function similarly to soils that have not been harmfully disturbed. Degradation of soil quality and loss of soil productivity is prevented. Soil-hydrologic function and productivity in riparian areas is protected, preserving the ability to serve as a filter for good water quality and regulation of nutrient cycling. Soil productivity, quality, and function are restored where adversely impaired and contributing to an overall decline in watershed condition.

Bear Management Area - Watersheds will be properly functioning with adequate ground cover to prevent soil erosion, and provide infiltration and moisture holding for storage and release of water to streams and aquifers. Spring sources and associated bogs and wetlands will be protected from excessive use and have been restored to proper functioning. Riparian will be properly functioning with adequate deep-rooted vegetation or armoring along banks to allow for sediment filtering and erosion prevention. Riparian areas will be protected from overuse and trampling from livestock grazing and recreation uses.

Standards and Guidelines

Guidelines for Air Resource:

(G1) Minimize the amount and impact of smoke from “fire use” activities by identifying smoke-sensitive areas, using “best available control measures,” monitoring smoke impacts, and following guidance in State smoke management plans.

Standards for Watershed, Riparian, and Aquatic Habitat Health:

(S2) Apply runoff controls during project implementation to prevent pollutants including fuels, sediment, oils, from reaching surface and groundwater.

(S3) Unclassified roads and trails will be administratively closed and rehabilitated.

(S4) Place new sources of chemical and pathogenic pollutants where such pollutants will not reach surface or ground water.

(S5) Prior to issuance of a permit or license for activities such as mining, hydropower development, snowmaking, or water transmission facilities, instream flow determinations will be required of all future permitted and licensed activities. For existing authorized uses and activities, minimum instream flows will be established to meet the beneficial use of the stream, and will be a condition of any licensing and permit renewal.

(S7) Allow management activities to result in no less than 85% of potential ground cover for each vegetation cover type. (See Appendix VII for potential ground cover values by cover type.)

Guidelines for Watershed, Riparian, and Aquatic Habitat Health:

(G3) Proposed actions analyzed under NEPA should adhere to the State Nonpoint Source Management Plan to best achieve consistency with both Sections 313 and 319 of the Federal Water Pollution Control Act.

(G4) At the end of an activity, allow no more than 15% of an activity area (defined in Glossary) to have detrimental soil displacement, puddling, compaction and/or to be severely burned.

(G5) Do not allow activities that could result in water yield increases that would degrade water quality and impact beneficial uses.

(G6) In Riparian Habitat Conservation Areas (defined in Glossary) when projects are implemented, retain natural and beneficial volumes of large woody debris.

(G7) Manage Class 1 Riparian Area Greenlines for 70% or more late-seral vegetation communities as described in Intermountain Region Integrated Riparian Evaluation Guide (USDA Forest Service, 1992). Manage Class 2 Riparian Area Greenlines for 60% or more late-seral vegetation communities. Manage Class 3 riparian Area Greenlines for 40% or more late-seral vegetation communities.

(G8) In stream channels naturally occurring debris shall not be removed unless it is a threat to life, property, important resource values, or is otherwise covered by legal agreement.

(G9) Avoid soil disturbing activities (those that remove surface organic matter exposing mineral soil) on steep, erosive, and unstable slopes, and in riparian, wetlands, floodplains, wet meadows, and alpine areas.

(G10) Encourage water users that divert, augment, or operate reservoirs to regulate discharges to prevent or reduce damage to downstream properties.

(G11) Use Best Management Practices and Soil and Water Conservation Practices during project level assessment and implementation to ensure maintenance of soil productivity, minimization of sediment discharge into streams, lakes and wetlands to protect of designated beneficial uses.

(G12) Locate new actions (such as incident bases, fire suppression camps, staging areas, livestock handling facilities, recreation facilities, roads and improvements including trails) outside of Riparian Habitat Conservation Areas. If the only suitable location for such actions is within Riparian Habitat Conservation Areas, sites will be located to minimize resource impacts.

(G13) Any long-term crossing of stream channels containing fish habitat will provide for desirable aquatic passage.

Standards for Road/Trail and Access Management:

(S17) All decommissioned roads/trails will be properly drained.

(S20) When constructing or maintaining roads, trails and facilities, use Best Management Practices to minimize sediment discharge into streams, lakes and wetlands.

(G45) Access routes for heavy equipment should be selected to limit disturbance to riparian vegetation and to limit the number of stream crossings.

(G47) Waste material should be handled in a manner to avoid sidcasting materials to areas where they may enter a stream.

Management Prescriptions

Within the recreation residence areas, Forest Plan management prescriptions 2.5 is located below Card Guard Station and 3.1A (Aquatic Habitat) is found above Card Guard Station.

Specific standards and guidelines that apply to management Prescription 2.5 include:

2.5 Scenic Byways: Manage Scenic Byways to protect and maintain their outstanding scenic quality. Scenic Byway Corridor Management Plans may be developed for designated Byways to further define desired conditions and tailor management direction.

(G2.5-1) Timber harvest, vegetation/fuel treatments, prescribed fire and wildland fire use are allowed when these activities are necessary to maintain or enhance the scenic setting for the long term.

(G2.5-2) Grazing is allowed and managed for compatibility with other elements of Scenic Byway Corridor Management Plans.

(G2.5-3) Road building, new recreation development, and new trail construction are allowed for purposes of enhancing use and enjoyment of the scenic byway corridor, while maintaining or enhancing the scenic setting.

Specific standards and guidelines that apply to management Prescription 3.1A include:

3.1A consists of the stream and adjacent riparian areas (or 300 feet either side of the stream whichever is greater). Because of the large number of existing facilities (roads, developed recreation sites, trails), already located within areas mapped as 3.1A, and because of their relatively high value and small proportion of the landscape, development outside already developed areas within this prescription is to be avoided. Protect or restore proper hydrologic functioning.

(S3.1A-1) New recreation facility development is not allowed.

(S3.1A-2) Cutting fuelwood larger than 5 inches in diameter is not allowed.

(G3.1A-1) Timber harvest, vegetation/fuel treatments, prescribed fire, and wildland fire use are allowed only for the purposes of maintaining, improving or restoring riparian and aquatic habitat to desired conditions or to protect property in the wildland urban interface.

(G3.1A-2) Livestock grazing is allowed with the utilization standard for Riparian Class 1, and to meet site-specifically developed desired conditions.

(G3.1A-3) Road construction is not allowed except for road crossings.

(G3.1A-4) New trail construction is allowed if consistent with site-specifically defined riparian management objectives.

Recreation

The following section contains information from the Wasatch-Cache NF Forest Plan for desired condition of recreation resources:

Recreation Resources

Forest-wide – People visiting the National Forest find opportunities for a wide spectrum of recreation experiences that are harmonious with predominantly natural settings. A balance of diverse landscapes offer a variety of settings for a wide range of activities, including primitive settings where there are opportunities for solitude, risk and challenge, to more modified settings where there are opportunities for social interaction, comfort and less risk.

Recreation facilities are constructed, reconstructed, relocated, eliminated or decommissioned as needed to provide a balance of safe, efficient, and environmentally responsible experiences and opportunities. Recreation facility maintenance meets established national standards and contributes to healthy, safe experiences. Recreation information and facility design and construction focus on people of all abilities and provide amenities and information to meet their needs.

Conflicts between recreationists and with other users are minimized. Local communities, partnerships, and volunteers are involved and benefit from their roles in providing recreational opportunities. Recreationists understand the potential for impacts to resources and other users and actively assist in caring for the land and resolving conflicts.

Cache Box Elder Management Area – A variety of recreation opportunities and settings will be provided. Management for recreation will be emphasized in developed areas and along popular routes. Opportunities for fall hunting and winter snowmobiling will continue to be popular activities. Recreation will be managed to ensure use is within acceptable limits for long-term watershed health and resource protection. Newly constructed facilities will emphasize day use. As recreation facilities are reconstructed and maintained, emphasis will be given to protect water quality and stream/riparian habitat. Access points to water will be identified and placed to provide for an enjoyable recreational experience. Some will be hardened to ensure properly functioning watershed conditions. Recreation special use permits will be administered to ensure permit compliance.

Standards and guidelines

Guidelines for Recreation Resource and Special Uses:

(G49) Manage recreation opportunities consistent with Management Prescriptions Categories (MPCs), recreation Opportunity Spectrum (ROS) Classes, Landscape Character Themes (LCTs), Scenic Integrity Objectives (SIOs) and in accordance with Winter Recreation Maps, as well as District Travel Management Plans.

(G50) design, construct, and operate recreation facilities, trails and concentrated use areas to provide a beneficial recreation experience, reducing social conflicts and minimizing or avoiding adverse effects on watershed integrity, soil productivity, aquatic/riparian systems, terrestrial species and their habitats and cultural resources.

(G52) Explore opportunities for separation of conflicting uses in time as well as space to resolve conflicts while continuing to offer varied recreation opportunities.

(G53) Where recreation demand exceeds resource capabilities or significantly changes the recreation setting available to users, determine limits of acceptable change and take actions to manage within those limits

(G54) Use interpretation and environmental education to assist in improved understanding and ownership of forest stewardship needs.

(G81) Before issuing recreation special use authorizations, ensure that each proposal clearly demonstrates why use of National Forest System lands is necessary and why lands under other ownership cannot be used. Use the process identified in FSH 2709.11 to determine whether special use proposals will be accepted for detailed review under NEPA. Provide only for authorizations that meet the tests of prudent, reasonable, and absolutely in the public interest.

(G82) The following recreation residence tracts will continue to be allocated as special use development areas (it lists all current Logan Canyon tracts except Forest Hills). Decisions to issue new recreation residence permits following expiration of current term permit require a determination of consistency with the Forest Plan. Follows the process depicted in FSH 2709.11, section 41.23c.

Standards for Recreation Resource and Special Uses:

(S29) Allow no net increase in the number of recreation residences.

Management Prescriptions

Forest Plan management prescription 3.1A (Aquatic Habitat) is found within the project area above the Card Guard Station. This prescription consists of the stream and adjacent riparian areas (or 300 feet either side of the stream whichever is greater). All lots in the Logan tracts are within riparian habitat conservation areas except:

Beirdneau – lots 1, 10

Browns Rolloff – lots 2, 3, 4, 5, 7, 8

Chokecherry – lots 6, 7, 8, 9, 11, 12, 13

Birch Glen – lots 1A, 2A, 3A, 14, 15, 17

Forest Plan management prescription 2.5 is located within the recreation residence areas below the Card Guard Station. These areas are to manage scenic byways and protect and maintain their outstanding scenic quality. Scenic Byway Corridor Management Plans may be developed to further define desired conditions and tailor management direction.

Recreation - Visual

Desired Conditions

The Wasatch-Cache National Forest provides a balance of diverse landscapes and natural settings. The scenic environment within the Forests ranges from

landscapes with high scenic quality displaying little or no evidence of management activities, to landscapes with different scenic quality that have dominant visible evidence of management activities. The high scenic quality in areas of outstanding value, and other highly used recreation areas and corridors are protected or enhanced.

Standards and guidelines

Forestwide Goal - Recreation

Manage for an array of recreation opportunities and settings to improve the quality of life for a variety of Forest recreation users. Balance growth and expansion of recreation by managing within the capability of sustainable ecosystems found on the Forest for today and the future.

Forestwide Subgoal- Scenery Management System

Recognize and manage for the importance of scenic forest landscapes to overall recreation settings as well as to the quality of life for communities adjacent to the Forest.

Restore, maintain or enhance landscape scenic integrity across the variety of landscape character themes found on the Forest.

Management Prescriptions

2.0 Special Management Areas

Theme

This prescription includes areas that have been or will be administratively or Congressionally designated for the conservation of specific values. These areas are Wild and Scenic Rivers and their corridors, Research Natural Areas, Forest Service Scenic Byways, Special Interest Areas and Specially Designated Trails. Management emphasis is on maintaining or restoring those values for which the area was established or designated.

Although the theme for management prescription category 2 is special management areas, multiple-use means the harmonious and coordinated management of a variety of resources, without impairment of the productivity of the land. The Forest-wide standards and guidelines, as well as those developed specifically for this prescription category, provide the limits or constraints to guide this coordinated management. As long as other allowed (see table of Generally Allowed Activities in each Alternative) resource activities, such as livestock grazing, fire use, or road construction meet the direction in the standards and guidelines, then they are consistent with the Special Management Area prescription category.

2.5 Scenic Byways: Manage Scenic Byways to protect and maintain their outstanding scenic quality. Timber harvest and vegetation treatments are limited to circumstances where these activities are necessary to maintain or enhance the scenic setting.

3.0 Multiple Resource Uses Where Aquatic/Watershed and Terrestrial Habitat Integrity are Emphasized

This prescription includes lands where management emphasis is on maintaining or restoring aquatic/watershed and terrestrial habitat integrity. *Integrity* refers to the degree to which the elements of habitat and the ecosystem functions that link them together and sustain habitat values are complete and capable of performing desired functions. Although other uses and activities are allowed, the primary management needs and opportunities are to provide high quality watershed conditions, fish habitats, and wildlife habitats that allow proper functioning of ecosystems and ensure biological diversity and population viability. Commodity production is allowed as part of activities designed to improve or maintain aquatic habitats, watershed conditions and terrestrial habitats.

Although the theme for management prescription category 3 is aquatic/watershed and terrestrial habitat integrity, multiple-use means the harmonious and coordinated management of a variety of resources, without impairment of the productivity of the land. The Forest-wide standards and guidelines, as well as those developed specifically for this prescription category, provide the limits or constraints to guide this coordinated management. As long as other allowed (see table of Generally Allowed Activities for each Alternative) resource activities, such as livestock grazing, fire use, or road construction meet the direction in the standards and guidelines, then they are consistent with the habitat integrity prescription category.

Forest Service Manual Direction

Soil and Water

The Forest Service Manual contains direction for floodplain management and wetland protection. The following section in italics contains information from Forest Service Manual Section **2527 - FLOODPLAIN MANAGEMENT AND WETLAND PROTECTION** and Section 2527.06, the applicability and exemptions from executive order requirements, is evaluated for its applicability to the recreation residences in Logan Canyon.

2527.01 - Authority

Executive Orders 11514, 11988, and 11990, and the general authorities cited in FSM 2501 apply to floodplain management and wetland protection.

2527.02 - Objectives

1. To reduce risk of flood loss.
2. To minimize impacts of floods on human safety, health, and welfare.
3. To minimize destruction, loss, and degradation of wetlands.
4. To preserve and restore the natural and beneficial values of floodplains and wetlands.

2527.03 - Policy

1. Recognize floodplains and wetlands as specific areas.
2. Provide opportunity for early public review of plans or proposals for actions in floodplains.
3. Avoid adverse impacts that may be associated with the occupancy and modification of floodplains and with the destruction, loss, or degradation of wetlands. Avoid filling of land within floodplains and wetlands wherever practicable.
4. Do not permit floodplain development and new construction in wetlands wherever there is a practicable alternative.
5. Promote nonstructural flood protection methods to reduce flood hazard and flood loss.
6. Preserve and, where needed and feasible both economically and technically, enhance the natural and beneficial function and values of wetlands.
7. Provide technical assistance to Federal and State forestry programs.

2527.06 - Applicability and Exemptions From Executive Order Requirements

Use the following eight-step decisionmaking process in applying the floodplain management Executive order. The eight steps shall be included in any environmental assessment prepared under the National Environmental Policy Act (NEPA), as follow:

1. Determine whether the proposed action is located in the base floodplain (500-year floodplain for critical actions); or whether it has the potential to affect a floodplain or indirectly support floodplain development. If not, or if an action is of an emergency nature (FSM 2527.06b), requirements of the Executive order will have been satisfied. **Evaluation: All of the recreation residences tracts are located in a base floodplain with the exception of the Beirdneau tract.**
2. Notify the public at the earliest possible time of any plan or proposal to undertake, support, or allow an action which would result in the occupancy, modification, or development in a floodplain, and involve the affected and interested public in the decisionmaking process. **Evaluation: The affected and interested public has been notified through public scoping that is part of the NEPA process.**
3. Identify and evaluate practicable alternatives to locating a proposed action in a floodplain, including alternative sites outside the floodplain, alternative actions serving the same purpose as the proposed action, and the "no action" option. **Evaluation: Practicable alternatives will be identified and evaluated in the Environmental Assessment (EA).**
4. Identify the full range of potential direct or indirect adverse impacts associated with the occupancy or modification of the floodplain and the potential direct and indirect support of

floodplain development that could result from the proposed action. **Evaluation: The direct and indirect effects will be described in the EA.**

5. *Identify and evaluate mitigating measures that will minimize the potential adverse impacts of the action if avoidance cannot be achieved, and measures that will preserve and restore or enhance the natural and beneficial floodplain values that would be adversely impacted by the action.* **Evaluation: Mitigation measures are identified in the Wasatch-Cache Recreation Residence Administrative Guide and additional mitigation, if needed, will be described in the EA.**

6. *Reevaluate the proposed action to determine first, if it is still practical, even with the application of appropriate mitigating measures and in light of its exposure to flood hazards and its potential to adversely affect the floodplain and, second, if the alternatives identified in step 3 are practicable in light of information gained in the preceding steps 4 and 5.* **Evaluation: Recreation residences have been in place for about 50 years and recreation residences that are not practical have been identified and means to move the use from these residences are described in the Wasatch-Cache Recreation Residence Administrative Guide and the EA.**

7. *Prepare and provide the public with a finding and public explanation of any final decision that there is no practicable alternative to locating an action in, or adversely affecting, a floodplain.* **Evaluation: If this is the case, then this will be done through the decision made as part of the NEPA process. These are ongoing activities.**

8. *Provide ongoing review of implementation and post-implementation phases of the proposed action to ensure that all provisions associated with the action, including appropriate mitigating measures as identified in the environmental assessment, are fully implemented.* **Evaluation: The proposed action is the continuation of an existing use and the evaluation of the management in the EA will provide a review of the provisions of the Wasatch-Cache Recreation Residence Administrative Guide which contain several environmental protection provisions.**

The numbering of steps 1 through 8 does not firmly require that the steps be followed sequentially. As information is gathered throughout the decisionmaking process and as additional information is needed, reevaluation of lower-numbered steps may be necessary.

2527.06a - Test for Applicability

Analyze the proposed action's potential to result in longer short-term adverse impacts associated with:

- 1. The occupancy or modification of floodplains.*
- 2. The direct and indirect support of floodplain development.*
- 3. The destruction, loss, or degradation of wetlands.*
- 4. The direct or indirect support of new construction in wetlands.*

2527.06b - Exempted Emergency Actions

Assistance for emergency work performed pursuant to sections 305 and 306 of the Disaster Relief Act of 1974 (42 U.S.C. 5145 and 5146) are exempted from the requirements of the Executive orders. This exemption applies to unanticipated emergency situations that require immediate action to prevent or reduce risk to public health or safety or risk of serious property or resource losses.

Evaluation of Sections 2527.06a and 2527.06b: For the Logan recreation residences that are in floodplains, the analysis of items 2527.06a will be done in the EA. Section 2527.06b does not apply for this project because this is not an emergency action.

Recreation

The Forest Service Manual contains direction for recreation resources management and protection. The following sections contain information from Forest Service Manual Section that was evaluated for its applicability to the recreation residences in Logan Canyon:

FSM 2347.03(2) - Recreation Residences – General Policy.

FSM 2347.1 - Recreation Residences – General Policy.

FSM 2700 – Chapters 10 and 20 - Special Use Authorizations and Administration.

FSM 2721.23e – Recreation Residence Continuance.

FSH 2709.11 - Special Uses Handbook, Chapter 40 – Special Uses Administration.

FSH 41.23a - Permit Continuance, Chapter 50 – Terms and Conditions

Other Required Direction

Logan Canyon Scenic Byway Corridor Management Plan

This is not a regulatory document, but is a plan for the future of the byway and to maximize the enjoyment of the byway for community members and visitors.

Affected Environment

The affected environment is within the Cache Valley Front M331D-8 subsection ecological unit and is defined by Logan canyons deep sheer limestone cliffs from western Forest boundary in Logan Canyons mouth to the intersection at Temple Fork at its eastern end. The canyon provides unique habitats for a number of endemic plants. North facing slopes in the canyon support mixed conifer-aspen stands at the higher elevations contrasted with maple and mountain brush at lower elevations. Oak occurs in the southern portion of the canyon and Junipers dot the south and west facing grass covered slopes. The contrast between these vegetation types is especially apparent in the fall as the aspen, maple and oak leaves change colors, creating a remarkable scenic attraction. Logan Canyon National Scenic Byway (Highway 89) travels along the Logan River and Beaver Creek, and drops down into the Bear Lake Valley, providing outstanding opportunities for viewing scenery for some 41 miles as part of the affected environment.

Recreation is a major feature in the canyon. Developed recreation facilities located in the flats along the byway include campgrounds, summer homes, picnic areas, trailheads and trails. Popular recreation activities in this canyon include fishing and hunting, kayaking, picnicking, biking, rock climbing, hiking, back country skiing, snowmobiling, and ATV riding, as well as scenery and wildlife viewing.

“The summer home group and recreation area is located in Logan Canyon...” and “development of the canyon begins with the first available benches along the Logan River...” as described by W.B. Rice, Forest examiner in May of 1920. He continues to describe the canyon scenery as “rough rather than rugged and as a whole unusually pleasing.” “Elevations in the canyon range from 5,500 to 6,000 feet. During the summer months the days are seldom excessively hot and the nights are always cool making a

pleasing contrast with the... valley around Logan.” “The general policy...”for “recreational development...”was “to leave all areas on the north or road side of the river open to...the public for camping and picnic parties.” “ The south side of the river...has been laid out in blocks for summer home lots...with exception of Bierdneau camp (summer homes) which is on the north side of the river. Because of the lack of building materials in the canyon prior to the 1920’s Mr. Rice describes buildings as “cheap and unpretentious, consisting mainly of tent bases and small board structures.”

Summer homes have played an important part in the development of recreation in the canyon since European settlers entered Cache Valley in the mid 1800’s. Most of the built environment has occurred since the 1930’s when the Civilian Conservation Corp (CCC) built such notable structures as the Guinavah Amphitheater. All of the campgrounds in the canyon were constructed by the CCC as a result of public work projects during the depression and a short time thereafter. Development such as campgrounds, summer homes, and fish hatcheries along with private development like Zanafoo, hydro power plants and other private land holdings in the canyon have become part of the cultural character of the canyon over time.

Project Scenic Integrity Objectives:

High Scenic Integrity Level

Landscapes where the valued landscape character "appears" intact (*in relationship to the surrounding viewed landscape and its built environment that has a positive cultural connotation to the public at large*). Deviations may be present but must repeat the form, line color, texture, and pattern common to the landscape character so completely, and at such scale, that they are not evident.

Built Environment with potential positive connotation

Land Form: Dams with vegetated faces. Roads where the geometry of road in cuts and fills would not be evident but would appear to be part of the landscape.

Vegetation: Mechanical treatment and fire use mimics natural appearing openings, lines, edges and form found in the surrounding landscape. Fuel breaks are mitigated to mimic natural appearing lines, forms and edges found in the existing landscape. Duration of impact before ground cover and understory are established 2 years.

Water Form: Reservoirs that have minimum water levels maintained for conservation pools and canals that mimic natural appearing lines, forms and edges found in the existing landscape. Stock ponds that mimic natural appearing lines, forms and edges found in the existing landscape.

Cultural Features: Campgrounds & dispersed recreation sites, historic sites and cabins, recreation cabins, organizational sites with strong rustic architectural themes, roads, trails, bridges, fences. Dam spillway and outlet works and emergency spillways constructed from native stone or mimic natural appearing lines, forms and edges found in

the existing landscape for parking lots, trailheads and restrooms. Architecture is thematic and borrows from the form, line, color and texture of the surrounding landscape. Parking lots, roads, and other amenities appear to be part of the natural appearing landscape by eliminating the geometry of the built feature upon the landscape. For example, road cuts do not slice through the landscape but are shaped, contoured, and constructed so that the landscape is only interrupted by the track of road.

Key Assumptions and Methodologies

Key Assumptions:

- Is that the built environment can be a positive element that is part of the cultural image of the Forests landscape character in combination with the physical, and biological attributes found in the landscape.
- That the colors of the existing or proposed structures can be mitigated to harmonize and be subordinate with the surrounding landscape.
- That the size of existing structures will remain the same or when modified will be in compliance with “Forest recreation residence management Wasatch-Cache National Forest Administrative Guidelines”

- Distance zones
 - Immediate foreground is equal 0 to 300 feet from the viewer.
 - Foreground is equal to 300 feet to ½ mile from the viewer.
 - Middleground is equal to ½ mile to 4 miles from the viewer.
 - Background is equal to 4 miles to the horizon from the viewer.
- Effects described in the analysis are based on snow off season and after herbaceous plants are established within the disturb areas.
- That the seed mix used in the project for re-vegetation would be from local sources that reflect the elevation and climate of the project area.

Disclose your methodologies.

- Management actions would keep the desire landscape character intact and not introduce deviations that would detract from the landscape being viewed.

Management Emphasis You Will See (should this go here???)

Emphasis is on protection, maintenance, and/or restoration of quality aquatic habitats, watershed conditions, and terrestrial habitats. This prescription can include areas where resource and habitat values are not at desired conditions and need to be actively restored. It also can include areas where these values are at desired conditions and need to be conserved. Other uses and activities are allowed provided they can be conducted within the standards and guides. Vegetation treatment is allowed as needed to maintain or restore properly functioning ecosystems with emphasis on watershed conditions, fish habitat, and wildlife habitat. Commercial timber harvest is limited to activities that support watershed and habitat objectives. Road building is allowed if site-specific

analysis concludes they are needed to meet watershed and habitat goals and objectives and they can be constructed meeting standards and guidelines. Use of forage by livestock is allowed in suitable areas managed to meet standards and guidelines which support desired hydrologic, aquatic, and terrestrial conditions.

The importance of these areas is for meeting mid to long-term watershed and habitat objectives, with the strategy of taking a low to moderate risk approach to managing for biodiversity and population viability this planning period (10-15 years). The tools associated with this prescription are of moderate intensity and can provide for improvement of existing conditions through natural processes and moderate management activities. Management activities are designed to pose low risk of sediment delivery and low risk of adversely affecting the hydrologic regime, riparian areas, and important terrestrial habitat.

3.1 - Aquatic Habitat/Watershed Emphasis:

Emphasis is on maintaining or improving quality of watershed conditions and aquatic habitats. The watershed function and aquatic habitat values are recognized as important and may require restoration to reach desired conditions. Some areas of municipal watershed will be managed to maintain or improve soil processes and watershed conditions. Where improvement is needed, it is achieved by implementing watershed improvement projects, and by applying soil and water conservation practices to land-disturbing activities. Improve or maintain conditions to meet desired conditions of habitat for endangered, threatened, sensitive, and management indicator species.