

ISSUES AND KEY QUESTIONS

SOIL

A variety of soil types occur within the analysis area. Sensitivity of these variations and protection of their integrity will minimize management impacts. Resource management in the analysis area has the potential to increase the amount of soil compaction and erosion in the analysis area.

1. Is the amount of ground cover that protects soils from erosion adequate to maintain stable soil conditions within the watershed?
2. Are riparian soils being adversely compacted/eroded from livestock grazing and dispersed camping?
3. Is livestock grazing causing erosion on upland sites and, if so, to what extent? Have past watershed protection efforts improved soil conditions?
4. Is recreation use adversely affecting soil productivity in the watershed? Have off-road and trail restriction been effective to control soil erosion/disturbance? Have all areas that require watershed restoration been identified in the watershed and has there been a restoration plan developed for the watershed?
5. What has been the effects on the soil resource from past burning from both wildfire and prescribed fire?
6. What is the extent and amount of mining, prospecting and landslides within the watershed?

WATER

Fall Creek is an Idaho Department of Environmental Quality 303(d) stream. Causes of impacts to water resources include overgrazing, sedimentation, and mass wasting. Resource management on the Forest has the potential to increase the amount of sedimentation and decrease water infiltration on the Forest.

1. What are the important sediment delivery mechanisms? What are the historic sediment delivery mechanisms?
2. How do the sediment delivery rates compare with natural processes?
3. Where are the high risk areas?
4. How has land management affected water quantity and quality? To what extent have these changes affected stream channel function?
5. What management and restoration measures should be implemented to address impacts to riparian areas and stream channels and what are their priorities?

FIRE

Fire occurrence has been limited to small acreage due to fire suppression except with occasional large wildland fires such as Currant Creek Fire in 1966 and June Creek Fire in 1987 and prescribed fire occurring in Pritchard Creek and Garden Creek 1999/2000.

1. What is the past pattern and intensity of fire disturbance in the watershed?
2. How has fire suppression affected fuel loadings and associated effects on fire frequency, severity, and burn patterns?
3. Are there individual species or communities of plants and animals that are decreasing or increasing due to fire suppression?
4. How has smoke management and, more specifically, air quality been affected in the past and how do we expect it to be affected in the future with the lack of fire, increased fuel loadings and the high risk of large fire occurrence.
5. What types of vegetative treatment fire/mechanical could be best utilized to restore the ecosystem to its natural state.

FORESTS

The vegetation pattern is indicative of a dry area. Tree cover is scattered and generally tree stand size is small in acreages. Wetter aspects support tree cover (north and east) while south and west aspects are sagebrush and grass. Alpine fir occurs in some forest understories and, in some cases, are beginning to dominate some Douglas fir stands.

1. How do we obtain the optimum growth on the suitable tree stands and still meet the needs of the public on other resource activities?
2. How do we deal with the increased growth in the insect populations? Many areas are inaccessible.
3. How do we make these stands of timber economical to harvest?
4. How do we deal with the increasing age of the trees and still maintain Forest Health?
5. How has composition and patch size changed from historical size?
6. How has exclusion of fire affected Timber production?

RANGELANDS

Livestock grazing by cattle and sheep has occurred in the Fall Creek analysis area since the late 1800s. Livestock numbers have declined dramatically in the last 50 years, however the increase in recreation use in the form of camping and summer off road vehicle travel has greatly increased.

1. Is biodiversity being maintained or enhanced, with a broad range of age class species?
2. Is the vegetation component in good to excellent condition or at least moving toward improvement?
3. Are disturbance effects weather it be caused by animal or human actions within limits to maintain or enhance the range of natural variability?
4. Is off road travel and recreational camping causing damage to plants and soils?
5. Are natural occurrences, such as fire, wind or landslides having a negative affect on the vegetative component?
6. Is livestock number and grazing strategy adequate to provide proper management of riparian and uplands of the analysis area.

FISHERIES

Yellowstone cutthroat trout, a Regional Foresters Sensitive Species, occur in the analysis area. An isolated resident population of Yellowstone cutthroat trout occur in Fall and Garden Creeks. Pritchard and Garden Creeks are considered Yellowstone cutthroat trout strongholds by the Caribou-Targhee National Forest. Pritchard Creek provides habitat for both resident and fluvial (river dwelling) cutthroat. Past and current management activities in the analysis area, including dispersed camping, vegetation management, grazing, road building and maintenance, and motorized recreation, have affected the quality of habitat available to these fish.

1. How and to what extent has the historic habitat of Yellowstone cutthroat trout been affected by land management activities, particularly motorized recreation, dispersed camping, transportation system development, and grazing?
2. What are the dominant sediment delivery mechanisms in the analysis area and how did they compare with natural processes? Where are the high risk areas?
3. What upstream migration barriers for fish exist in the analysis area? What actions are required to address these barriers?
4. How and to what extent has native fish in the analysis area been affected by the introduction of non-native fish? What actions are required to address these concerns?
5. What survey and monitoring should be conducted to gain a better understanding of the quality and quantity of aquatic species habitat and populations?

WILDLIFE

These watersheds, particularly Fall Creek have had many past human influenced activities since white settlement (and before by Native Americans) and most continue today. Some of the earliest activities were by fur trappers in the 1830's such as Osborn Russell who called Fall Creek, Muddy Creek, in his journal. They trapped beaver, shot grizzly bear, killed wolves, hunted bighorn sheep and bison as well as other game in and around this area (Haines 1965). Early settlers basically removed the latter four species and beaver were often trapped to the point of de-watering upper watersheds during late summer.

More recent activity (past 100 years) includes domestic sheep and cattle grazing, fencing, mining (travertine and phosphate), noxious weed invasion, road and trail construction and maintenance, dispersed recreation including camping, hunting, fishing, trapping, horseback travel, hiking, motorized snowmobiles, all terrain vehicles (ATVs), motorcycles, off-road vehicles (OHVs), some logging, some firewood cutting, farming and prescribed burning. Wildfire and fire suppression has also had an effect. A major power-line with associated road parallels Fall Creek. Irrigation diversion ponds were built in both Pritchard and Garden Creeks. All of these activities have and do affect the quality and quantity of wildlife and their habitat.

The south-facing slopes and ridges of Fall Creek, Pritchard Creek and Garden Creek drainages provide key deer and elk winter range and this is the predominate Prescription Area (Prescription 2.7) in the Revised Targhee Land Management Plan (RTFP; USDA 1997). Key and important habitats include riparian willow and dogwood, cottonwoods/dogwood on South Fork of Snake River, brush, juniper and mahogany winter ranges, rock outcrops and cliffs, aspen clones, conifers including Douglas fir and alpine fir, and snags cavity habitat and associated down dead wood in all timber types.

1. To what extent and how has the historic and current activities influenced wildlife and habitats, particularly the dominate use of livestock grazing and related activities?
2. How is the increase of motorized travel in roadless, cross country or closed areas by vehicles (motorcycles, ATVs, etc) affecting wildlife and habitats? If negatively so, where are the high risk areas?
3. How is current snowmobile activity affecting wildlife (eg. big game, wolverine, etc.)?
4. How are the current grazing and motorized vehicle activities affecting key riparian habitats such as Fall Creek?
5. Are riparian habitat conditions and other activities conducive for sustainable beaver populations in the three drainages?

6. How is current fire management (eg prescribed fire and suppression) affecting habitats such as Douglas fir, alpine fir, lodgepole pine, aspen, mountain brush, sagebrush, mahogany, juniper, grassland, willow bottoms, aspen, conifer and dead wood habitats?
7. Based on results of the wildfire at the 1966 Currant Creek burn and 1999 Garden and Pritchard burns would prescribed fire in other conifer types in the analysis area be beneficial or harmful to wildlife? Short-term? Long-term?
8. What surveys need to be conducted to increase our knowledge of the quality and quantity of species habitat and populations?
9. Are the current conditions of existing habitats (eg. conifer, aspen, brush, riparian, winter range, etc.) meeting the needs of wildlife that are or should be in the area? Would manipulation of habitats provide better conditions? Would an increase or reduction of existing human activities benefit key wildlife species?
10. Are any federally listed threatened, endangered, sensitive or Forest management indicator species lacking viable habitat conditions? Are any wildlife species not found in the area that were found here historically?
11. Is sage grouse habitat available in Fall Creek basin?
12. What is the elk forage cover ratio in the analysis area?
13. What is the quality and quantity of lynx habitat in analysis area?
14. What will it mean for wildlife habitat in the Fall Creek watershed if the Quarter Circle O property were to remain in private ownership or transferred to the National forest?

RECREATION

There is a diversity of recreational use of the analysis area. This includes motorized vehicle use, fishing, hunting, and camping. The demand for recreational use of the analysis area has created challenges and opportunities for resource managers.

1. What has been the effect on the motorized public from the past closures placed on this group of publics? Has this had the affect of concentrating use on certain roads/trails/or dispersed areas? Has the support of this group to the Forest Service been lost?
2. How has the past management, i.e. burning, affect trails or the transportation system? Has dead and dying tress from this activity blocked these trails and caused increased maintenance problems?
3. How have the different activities affected user satisfaction (user conflict)?
4. How can we better identify areas where ATV use can be allowed and improved?
5. How can we control illegal ATV/snowmachine use on the analysis area.
6. Are there opportunities to improve recreation in the analysis area?
7. Does the area infra structure meet demands of the public?

TRANSPORTATION

Forest roads and trails are used to access and manage resources on National Forest Lands.

1. Is the transportation system appropriate for the uses of Forest.
2. Are there maintenance needs on the existing roads?
3. Are there restoration opportunities associated with the existing road system?