Step 2: Issues and Key Questions

Purpose

To focus the analysis on the key elements of the ecosystem that are most relevant to the management questions, human values, or resource conditions within the watershed.

To determine which core questions are applicable, establish the level of detail needed to address applicable core questions, and to document rationale for determining that a core question is not applicable.

To identify additional relevant topics and questions based on issues in the watershed.

To formulate key analysis questions for the watershed based on indicators commonly used to measure or interpret the key ecosystem elements.

Soil Resources

- Is the amount of ground cover that protects soils from erosion adequate to maintain stable soil conditions within the watershed?
- Are riparian soils being adversely compacted/eroded from livestock grazing and dispersed camping?
- Is livestock grazing causing erosion on upland sites and, if so, to what extent? Have past watershed protection efforts improved soil conditions?
- 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 and has there been a restoration plan developed for this watershed?
- What have been the effects on the soil resource in the watershed from private land developments and road construction?
- What is the extent and amount of mining, prospecting and landslides within the watershed?

Hydrology

- What are the important water and sediment delivery mechanisms and how do these compare to historic mechanisms?
- How do the water and sediment delivery rates compare with natural processes?
- How has land management affected these natural processes?
- To what extent have these changes, if any, affected stream channel function and water quality?
- Where are areas that constitute a "high risk" of altering processes that could have substantial effects on watershed function, channel processes and water quality?
- What management and restoration measures should be implemented to address impacts to riparian areas and stream channels and what are their priorities?

Vegetation

- How will the current insect epidemic affect forest vegetation and other resource values?
- How will white pine blister rust affect the whitebark pine vegetation type?
- How has composition and patch size of forested lands changed from historical size?
- How has exclusion of fire affected forested vegetation such as aspen and whitebark pine?
- How do we maintain forest health and meet other resource needs identified in the Revised Forest Plan?

Aquatic Species and Habitat

- What species of fish have been stocked and what are the impacts?
- How have dams, irrigation diversions and flow alterations affected native fish?
- What are the current habitat conditions and trends?

- What were the causes that led to the demise of Yellowstone cutthroat?

- What streams can be improved and what changes are needed to improve habitat?
- Where can native fish be recovered?

- Did native trout contribute to the famous sport fishery of the Henrys Fork and what might their future role be?

Terrestrial Species and Habitat

- How is the increase of motorized travel in roadless, cross-country or closed areas by vehicles (motorcycles, ATVs, etc) affecting wildlife habitats? If negatively so, where are the high-risk areas?

- Are the current conditions of existing habitats (e.g. 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?

- Is this watershed in suitable condition to serve as a linkage corridor for migrating wildlife populations (lynx, grizzly bear, and wolf)?

- Is cross-country snowmobiling impacting wildlife populations (big game, wolverine)?

Range and Livestock

- How well are the permittees following the AOI?

- How frequently are the grazing Best Management Practices (BMPs) implemented and effective?

Fire and Fuels

- What is the past pattern and intensity of fire disturbance in the watershed?

- How has fire suppression affected fuel loading and associated effects on fire frequency, severity, and burn patterns?

- 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 loading and high risk of large fire occurrence?

- Are there individual species or communities of plants and animals that are decreasing or increasing due to fire suppression?

- What types of vegetative treatment fire/mechanical could be best utilized to restore the ecosystem to its natural state.

- What are the management options to deal with the issue of encroachment of the Douglas-fir into the Aspen/shrub ecosystems?

Human Uses

- Potential increase in illegal ATV uses originating from local subdivisions.

- Potential conflicts with other resources as snowmobile use increases as a result of less large open areas being available to ride in.

- Resource issues as a result of heavy dispersed camping in the Bootjack area.