

CHAPTER 2 ISSUES AND KEY QUESTIONS

There may only be one issue/question for each key issues so delete the unnecessary lines.

2.1 ISSUE- VEGETATION AND FOREST HEALTH

2.1.1 Fire

Issue or Key Question: What are the fire regimes and condition classes in the analysis area? How many acres are in condition class 2 and 3, and what sub-watersheds are they in?

Discussion: The fire regime and condition classes vary across the analysis area.

Issue or Key Question: What types of treatments are recommended to lower condition classes?

Discussion: Mechanical treatments may be necessary initially followed by maintenance burning.

Issue or Key Question: Where are the highest risks and occurrence of fires in the watershed?

Discussion: Risk is based on how often starts occur and condition class of vegetation.

Issue or Key Question: Where is the Wildland Urban Interface (WUI) in the analysis area?

Discussion: Medical Springs, South Fork, and Keating are identified WUI areas.

2.1.2 Ecological Sustainability

Issue or Key Question: What is the historic landscape pattern across the analysis area in terms of structural stages and biophysical groups by sub-watershed?

Discussion:

Issue or Key Question: Which sub-watershed are deficit in late and old structure?

Discussion:

Issue and Key Question: What are the forest stand density levels by subwatershed?

Discussion: site productivity

Issue and Key Question: Where are the potential insect or disease epidemic areas for bark beetles, mistletoe, or root diseases?

Discussion:

2.1.3 Change in Hydrologic Function/Water Yield/ Water Quality

Issue or Key Question: Are overstocked stands contributing to changes in hydrologic function and the water yield in the watersheds?

Discussion: Watershed studies from many areas in the western U.S. support the assumption that overstocked stands can lead to reduced water yield (For an example Troendle and Nankervis, 2000). The exact changes in the magnitude, frequency and duration and timing of changes in streamflow are unknown. However, some percent decrease in total streamflow has probably occurred compared to reference conditions.

Issue or Key Question: MIKE need a issue/question

Discussion: A reference condition for changes in streamflow amounts is difficult to accurately assess for the analysis area. A change in the type or density of forest vegetation can alter the amount of runoff in the analysis area. Vegetation changes can result from natural causes, such as vegetative succession; from climate variations; from natural disturbances such as wildfire, windthrow, and insects and disease; and from human influences such as logging, grazing, or prescribed fire. To estimate hydrologic changes in the analysis area, it is assumed that vegetation cover is more dense than in pre-settlement periods. The increase in vegetation density has probably led to diminished streamflows in the analysis area. However, the precise amount of runoff decrease is unknown. Other studies such as Troendle and Nankervis (2000) have shown that runoff had decreased by 13% in a forested study area compared to pre-settlement conditions. The amount of hydrologic change can probably be assumed to be around a 10% decrease in overall water yield, mainly due to overstocked stands

Reference conditions for hydrologic function are difficult to determine. Changes in hydrologic function have occurred due to roads and other impacts in the analysis area. Roads concentrate surface flows, and often are hydrologically connected to streams. This can lead to more efficient delivery of flow to channels, which may result in peak flow increase. Increased peak flows can lead to erosion of stream channels and gullying of channels and other channel adjustments.

Issue and Key Question:

Discussion:

Issue and Key Question:

Discussion:

2.1.4 Vegetative Condition and Species Composition

Issue or Key Question: Are there area where the vegetative composition has changed from the historic condition.

Discussion: (ie-sensitive, invasive (noxious/non-native), Non-Vascular Plants)

Issue or Key Question:

Discussion:

Issue and Key Question:

Discussion:

Issue and Key Question:

Discussion:

2.3 ISSUE- RIPARIAN AND AQUATIC HABITAT

2.3.1 Fish Passage

Issue or Key Question: Are culverts restricting access to streams by all life stages of aquatic organisms?

Discussion: It is not known at this time how many miles of stream are blocked to passage of all life stages of aquatic organisms. Culvert inventories have indicated that passage may be a concern for several culverts in the watershed covered by this analysis, especially in Goose and Conundrum Creeks.

2.3.2 Sedimentation

Issue or Key Question: Are streams at risk from sedimentation from the watershed?
Discussion: There must not be a measurable increase in stream sediment delivery in this watershed and efforts should be made to reduce the existing sources of non-natural sediment. Large woody material must not be removed from stream channels. New roads that cross-streams or enter RHCAs should not be constructed unless absolutely necessary. If they must be constructed, then they must be designed with restrictive mitigation to protect water quality. Existing protection measures should protect other instream habitat needs such as stream cover, bank stability, and water temperature. Implementation guidelines below lists general management measures (Standards and Guidelines) that must be followed for all activities associated with this analysis.

2.3.3 Structural Habitat/Channel Changes

Issue or Key Question: Is stream channel habitat in good condition in the analysis area?
Discussion: Stream surveys have indicated that channels in the analysis area are in poor condition with regard to several variables used to determine habitat quality.

2.3.4 Water Temperature

Issue or Key Question: Is stream water temperature increased by human-caused activities? Are stream temperatures adequate to provide habitat?
Discussion: Stream temperature plays a critical role in the life stages of various species of fish and other aquatic organisms. Summer stream temperatures can limit fish productivity and suitable habitats

2.3.5 Riparian Vegetation/Riparian Fuels Treatments

Issue or Key Question:
Discussion:

Issue or Key Question:
Discussion:

Issue and Key Question:
Discussion:

Issue and Key Question:
Discussion:

2.4 ISSUE- HUMAN USES

2.4.1 Roads

Issue or Key Question: Where are the current road densities affecting resources within the watershed
Discussion:

Issue or Key Question: Are roads leading to increased sediment and hydrologic change?
Discussion: Roads have been shown to generally increase sediment yield from watersheds, and can lead to increases in streamflow.

Issue and Key Question:

Discussion:

Issue and Key Question:

Discussion:

2.4.2 Livestock Grazing

Issue or Key Question: Are there areas where permitted livestock grazing is retarding recovery of riparian resource conditions towards meeting Proper Functioning Condition (PFC)?

Discussion: Many of the perennial fish bearing streams were assessed by an interdisciplinary team in 1999 and 2000 using the 1998 BLM Riparian Area Management Technical Reference Manual 1737-15. Of the streams assessed, most were rated as "functioning at risk" with an upward or static trend or "functional at risk" with a downward trend. Ratings are on file at the La Grande and Pine Ranger District offices.

Issue or Key Question: Where in the watershed are opportunities for livestock distribution improvements?

Discussion:

2.4.3 Recreation

Issue or Key Question: What concerns area there surrounding recreation use within the watershed

Discussion: Examples include woodcutting, hunting, OHV use.

Issue or Key Question:

Discussion:

Issue and Key Question:

Discussion:

Issue and Key Question:

Discussion:

2.4.4 Mining

Issue and Key Question: How is current and past mining influencing resource conditions on National Forest Lands? Is there a need for mining rehabilitation?

Discussion:

2.5 ISSUE-WILDLIFE

2.5.1 TES Species

Issue or Key Question:

Discussion:

Issue or Key Question:

Discussion:

Issue and Key Question:
Discussion:

Issue and Key Question:
Discussion:

2.5.2 Old Growth

Issue or Key Question:
Discussion:

Issue or Key Question:
Discussion:

Issue and Key Question:
Discussion:

Issue and Key Question:
Discussion:

2.5.3 Connectivity

Issue or Key Question:
Discussion:

Issue or Key Question:
Discussion:

Issue and Key Question:
Discussion:

Issue and Key Question:
Discussion:

2.5.4 Cover

Issue or Key Question:
Discussion:

Issue or Key Question:
Discussion:

Issue and Key Question:
Discussion:

Issue and Key Question:
Discussion:

2.4.5 Neo-tropical Migratory Birds

Issue or Key Question:
Discussion:

Issue or Key Question:

Discussion:

Issue and Key Question:

Discussion:

Issue and Key Question:

Discussion: