Forest Plan Management Indicator Species Summary

The Land and Resource Management Plan (LRMP) for the Fishlake National Forest, adopted in 1986, identified 10 Management Indicator Species (MIS). The objective was to select species that through monitoring of populations and habitat relationships, the effects of management activities on the fish, plants, and wildlife could be evaluated. Two categories of MIS have been established for this Forest Plan: one to represent ecological indicators and another to represent species of high interest. Ecological indicator species or guilds of species were selected using the following criteria:

1. A strong (but not exclusive) affinity for a vegetative type
2. A life cycle that is keyed to a vegetative type
3. Sensitivity to habitat change
4. Relative ease of monitoring, i.e. easily recognized and present in adequate numbers
5. Somewhat representative of other species that use the same vegetation types

Within the Environmental Impact Statement prepared for the Fishlake Forest Plan (III-38) representative species for the cavity-nesting guild, sage nesting guild, and the riparian guild were discussed. These species included Three-toed woodpecker, bluebirds, Sage thrasher, and MacGillivray's warbler. In order to monitor the habitats that these species represent, the forest selected additional species under each of these guilds to ensure that monitoring efforts would be sufficient to detect changes in habitat. The forest identified these specific species to be monitored over time to meet the objectives of the monitoring plan described in the Fishlake LRMP chapter V-6. Biologists working on the Fishlake and Dixie National Forests collaborated to develop a list of additional species to monitor based on the vegetation types or habitat needs for these groups as identified in the Fishlake LRMP chapter II, table II-8A. The selection of these representative species for riparian, sage, and cavity habitats were based on direction found in the Forest Plan (III-38). It is this direction that helped biologists to select the following species for monitoring purposes:

1. Sage nesters: Brewer's sparrow, Vesper sparrow, and Sage Thrasher
2. Cavity nesters: Hairy woodpecker, Western and Mountain Bluebirds
3. Riparian guild: Lincoln's sparrow, Yellow Warbler, MacGillivray's Warbler, and Song Sparrow

The following is a complete list of MIS that are included in this document: Mule Deer, Rocky Mountain Elk, Northern Goshawk, Sage Nesters: Brewer's sparrow, Vesper's sparrow, and Sage Thrasher, Cavity Nesters: Hairy woodpecker, Western and Mountain bluebirds, Riparian Guild: Lincoln's sparrow, Yellow Warbler, MacGillivray's Warbler and Song Sparrow, Rydberg's Milkvetch, Bonneville Cutthroat Trout, Resident Trout; Rainbow, Brook, Brown, Lake, and Cutthroat trout.

The Fishlake LRMP identifies the vegetation types these species represent in Table II-8A and II-10, on page II-29-35. These include:

Mule Deer: Sagebrush, mountain brush, aspen, conifer, meadow, riparian, and pinyon-juniper

Rocky Mountain Elk: Sagebrush, mountain brush, aspen, conifer, meadow, and pinyon-juniper

Northern Goshawk: Mature-old growth conifer

Sage Nesters: Mature sagebrush

Cavity Nesters: Snags

Riparian Guild: Riparian communities

Rydberg's Milkvetch: This species was a federally listed species at the time that the plan was developed and has since been delisted. It was selected as an MIS in part due to its Federal status, and it represented a selected habitat type of igneous intrusive and volcanic gravels between 8,000 to 11,000 feet.

Bonneville Cutthroat Trout: Cool, clear water with high oxygen content

Resident Trout: Rainbow, Brook, Brown, Cutthroat: Streams, lakes, and reservoirs

Data used in this analysis have been collected since the plan was adopted in 1986. These data reside in files on each Ranger District across the forest. In chapter II, page 29 of the Fishlake LRMP, estimated population numbers are given for elk, deer, Bonneville cutthroat trout, and Rydberg's milkvetch. The population estimates for deer and elk were based upon animals that occupied winter ranges found on the Forest in 1986. Current trends were identified in chapter II page II-32. Habitat estimates by acres for existing and potential habitat are contained within this document. These habitat estimates on existing conditions represent the most current data available to the Forest. It should be noted that the data included in this document could change very rapidly due to a number of environmental events, some examples of which include; fire, flood, wind events, drought, cold wet winter conditions, geologic movement, human caused changes such as effects from hunting seasons, fish population contamination (whirling disease), predation, or rapid large scale vegetation changes on the landscape.