

# **Uinta National Forest**

State of the Forest Report  
For  
Fiscal Year 2003

September 2004

## **Introduction and Purpose**

On April 7, 2003, Intermountain Regional Forester Jack Troyer signed the Record of Decision approving the Uinta National Forest's 2003 Land and Resource Management Plan (Forest Plan). The Forest Plan identifies the Desired Future Condition (DFC) for the resources on the Forest, and establishes goals and objectives, standards and guidelines, and a Monitoring and Evaluation Plan. This State of the Forest Report reviews the questions in the Monitoring and Evaluation Plan and summarizes the monitoring that was conducted in Fiscal Year 2003 (10/1/2002 – 9/30/2003). This Report evaluates this data to determine if the Forest is making progress toward or meeting those goals and objectives, and/or appropriately applying Forest Plan direction. This report is made available to the public by posting on the Forest's web page (<http://www.fs.fed.us/r4/uinta/>).

Each indicator has a different monitoring and reporting frequency based on the characteristics of the indicator. The reporting frequency is in parentheses following the indicator. In some cases, interim data collected this year for indicators with reporting frequencies of 5 to 10 years have been included in this report for information purposes. This data will be compiled and analyzed in its entirety at a later date as specified in the monitoring plan.

The State of the Forest Report is intended to help National Forest managers, other agency managers, and the public evaluate environmental conditions and trends, and the effects of Uinta National Forest land management activities and supporting programs.

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1. Are Forest management activities affecting **Management Indicator Species**, and what are the population trends and habitat relationships?

**DFC:** As required by the planning regulations, each National Forest, through its Land and Resource Management Plan (Forest Plan), must identify species to be used to evaluate and monitor management practices. These species serve as ecological indicators of the effects of management actions on communities. A description of each of these species and the communities they represent is included with the monitoring data.

Indicator	Monitoring
<p><b>Northern Goshawk:</b></p> <ul style="list-style-type: none"> <li>a. Goshawk territory activity (every 5 years).</li> <li>b. Habitat conditions (every 5 years).</li> </ul>	<p><b>Description:</b> The northern goshawk is classified as sensitive by the Intermountain Region of the Forest Service. The northern goshawk is widely distributed throughout North America and Eurasia. In Utah, they are widely distributed throughout the mountainous areas. Goshawks are typically permanent residents or conduct short-distance movements. The goshawk is broadly associated with forested vegetation types on the Uinta National Forest. They occur in stable aspen, seral aspen, spruce/fir, Douglas-fir/white fir, and forested riparian vegetation types. Goshawks nest in relatively dense, mature stands, but forage in a variety of habitat types, including open habitats and early-seral vegetation types. They prey on a wide variety of birds and small mammals. Most common prey species include woodpeckers, jays, grouse, snowshoe hares, and red squirrels (Graham et al. 1999, Reynolds et al. 1992).</p> <p>Goshawk populations are most likely to be potentially impacted by three of the primary management activities on the Forest: timber management, fire suppression, and vegetation management. These activities should lead to increased prey for goshawk. Reproductive success and population levels of goshawks are typically correlated with levels of prey abundance. Thus, monitoring population trend of goshawks will not only provide information on the effects of increased levels of vegetation treatments on goshawk populations, but will also provide information about the effects of treatments on populations of goshawk prey species.</p> <p>Goshawk territory occupancy has been monitored on the Uinta National Forest since 1996. It is assumed that territory occupancy is positively associated with habitat quality. Higher quality habitat should have higher territory occupancy rates than lower quality habitat. Territory occupancy has not declined between 1996 and 2002, as shown in the following table, providing no evidence that overall habitat quality for goshawks has been declining in recent years on the Uinta National Forest.</p>

Indicator	Monitoring																																							
	<p data-bbox="581 266 1923 297"><b>Territory Occupancy of Northern Goshawks on the Uinta National Forest Between 1996 and 2002</b></p> <table border="1" data-bbox="627 331 1875 630"> <thead> <tr> <th data-bbox="627 331 978 423" rowspan="2">Territories</th> <th colspan="7" data-bbox="978 331 1875 375">Number of Territories per Year</th> </tr> <tr> <th data-bbox="978 375 1106 423">1996</th> <th data-bbox="1106 375 1234 423">1997</th> <th data-bbox="1234 375 1362 423">1998</th> <th data-bbox="1362 375 1491 423">1999</th> <th data-bbox="1491 375 1619 423">2000</th> <th data-bbox="1619 375 1747 423">2001</th> <th data-bbox="1747 375 1875 423">2002</th> </tr> </thead> <tbody> <tr> <td data-bbox="627 423 978 493">Number of active nests</td> <td data-bbox="978 423 1106 493">4</td> <td data-bbox="1106 423 1234 493">1</td> <td data-bbox="1234 423 1362 493">3</td> <td data-bbox="1362 423 1491 493">3</td> <td data-bbox="1491 423 1619 493">3</td> <td data-bbox="1619 423 1747 493">6</td> <td data-bbox="1747 423 1875 493">7</td> </tr> <tr> <td data-bbox="627 493 978 563">Number of territories monitored</td> <td data-bbox="978 493 1106 563">13</td> <td data-bbox="1106 493 1234 563">13</td> <td data-bbox="1234 493 1362 563">14</td> <td data-bbox="1362 493 1491 563">14</td> <td data-bbox="1491 493 1619 563">15</td> <td data-bbox="1619 493 1747 563">18</td> <td data-bbox="1747 493 1875 563">19</td> </tr> <tr> <td data-bbox="627 563 978 630">Percent territory occupancy</td> <td data-bbox="978 563 1106 630">31</td> <td data-bbox="1106 563 1234 630">8</td> <td data-bbox="1234 563 1362 630">21</td> <td data-bbox="1362 563 1491 630">21</td> <td data-bbox="1491 563 1619 630">20</td> <td data-bbox="1619 563 1747 630">33</td> <td data-bbox="1747 563 1875 630">37</td> </tr> </tbody> </table> <p data-bbox="581 667 657 695"><b>2003:</b></p> <ul style="list-style-type: none"> <li data-bbox="581 703 1688 730">a. All 19 known territories were surveyed; 5 were active – a 26% territory occupancy.</li> <li data-bbox="581 735 1556 763">b. Habitat conditions will be evaluated, summarized, and reported in 2008.</li> </ul>	Territories	Number of Territories per Year							1996	1997	1998	1999	2000	2001	2002	Number of active nests	4	1	3	3	3	6	7	Number of territories monitored	13	13	14	14	15	18	19	Percent territory occupancy	31	8	21	21	20	33	37
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<p data-bbox="174 1052 495 1146"><b>American beaver:</b> Number of active beaver dams (every 5 years).</p>	<p data-bbox="581 781 1902 1045"><b>Description:</b> Beaver were widely distributed across Alaska, Canada, and the continental U.S. prior to 1800. They were quickly trapped out, however, and by the mid 1800s many beaver populations had been eliminated or dramatically reduced. Populations have reestablished throughout much of the U.S. and Canada and are increasing range-wide. On the Uinta National Forest beaver are widely distributed. They inhabit a broad variety of riparian habitats as long as there is permanent water and food. On the Uinta National Forest, primary food sources are willow, aspen, and, in lower-elevation riparian forests, cottonwood. Beaver are trapped in Utah, but trapping pressure is not considered to be heavy enough to significantly impact overall population levels on the Forest.</p> <p data-bbox="581 1084 1913 1317">Livestock grazing and vegetation management are the management activities on the Forest most likely to impact beaver. Livestock grazing can impact levels of herbaceous vegetation, willow, and aspen, all of which are important food sources for beaver. Prescribed burning and mechanical treatments in aspen vegetation types may also affect beaver food supplies. The beaver is useful as an indicator species because it is a riparian obligate species, and livestock grazing, particularly cattle, can significantly impact riparian vegetation communities. Population trends for beaver provide an indication of how the Uinta National Forest is managing its important riparian communities.</p> <p data-bbox="581 1356 1881 1414">Several project areas and drainages have been surveyed in the past for beaver presence and/or population trends. In 2003, a new beaver monitoring protocol was developed, and its implementation</p>																																							

Indicator	Monitoring
	<p>was initiated. As this is the first year of data collection under the new protocol, therefore no Forest-wide population trends based on this protocol can yet be determined.</p> <p>Beaver abundance in Strawberry Valley has been assessed over time based on counts of beaver colonies from aerial photos. This data shows that the number of potential beaver colonies and dams peaked at approximately 90 colonies and 545 dams in 1984, and had declined to approximately 66 colonies and 259 dams in 1998.</p> <p><b>2003:</b> New protocols for monitoring beaver were tested on the Nebo Unit. 15 sections were randomly selected. They were reviewed with aerial photos to determine which sections should be surveyed on the ground. Portions of 10 streams were surveyed on the Heber Ranger District (Willow Creek, Tut Creek, Bjorkman Hollow, Bryants Fork, Mill B Creek, 2 miles of the Strawberry River, Lake Creek, West Fork of Duchesne River, Hobble Creek, and Point of Pines Creek) and 2 streams were surveyed on the Spanish Fork Ranger District (Left Fork White River and Nebo Creek). A total of 81 active and 21 old beaver dams were found.</p>
<p><b>Three-toed woodpecker:</b></p> <ul style="list-style-type: none"> <li>a. Index of population abundance (annually).</li> <li>b. Habitat conditions (every 5 years).</li> </ul>	<p><b>Description:</b> The three-toed woodpecker is classified as sensitive by the Intermountain Region of the Forest Service. The three-toed woodpecker is also classified as a Utah Partners in Flight Priority Species. The three-toed woodpecker is widely distributed throughout boreal and subalpine forests of North America and Eurasia. They occur throughout mountainous areas of Utah. Three-toed woodpeckers do not migrate, although periodic irruptions occur, presumably due to failure of the food supply. On the Uinta National Forest, three-toed woodpeckers occur in conifer forest types and are most closely associated with the spruce/fir forest type. The woodpeckers excavate cavities in snags and sometimes in dead portions of live trees. Most of their diet consists of wood-boring beetles and caterpillars that attack dead or dying conifers. Densities of three-toed woodpeckers can increase substantially in response to spruce beetle (<i>Dendroctonus rufipennis</i>) outbreaks.</p> <p>The three-toed woodpecker is closely associated with old forest structural characteristics in spruce/fir forests, the forest type in which most of the timber harvesting on the Uinta occurs. Although population levels of three-toed woodpeckers are known to fluctuate considerably over short periods of time, its long-term population trend is likely to reflect changes in forest management practices on the Forest.</p> <p>In the past, many project areas have been surveyed for three-toed woodpecker presence. These surveys provided information on three-toed woodpecker populations and densities in the survey areas. In addition, breeding bird surveys have been conducted on three routes since 1992. Data from these surveys is shown in the following table:</p>

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	<b>Three-toed Woodpeckers Observed on Breeding Bird Surveys on the Uinta NF, 1992-2003</b>																																																																											
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="background-color: #cccccc;">Route</th> <th colspan="12" style="background-color: #cccccc;">Number of Birds per Year</th> </tr> <tr> <th style="background-color: #cccccc;">1992</th> <th style="background-color: #cccccc;">1993</th> <th style="background-color: #cccccc;">1994</th> <th style="background-color: #cccccc;">1995</th> <th style="background-color: #cccccc;">1996</th> <th style="background-color: #cccccc;">1997</th> <th style="background-color: #cccccc;">1998</th> <th style="background-color: #cccccc;">1999</th> <th style="background-color: #cccccc;">2000</th> <th style="background-color: #cccccc;">2001</th> <th style="background-color: #cccccc;">2002</th> <th style="background-color: #cccccc;">2003</th> </tr> </thead> <tbody> <tr> <td>Soapstone</td> <td>0</td> <td>NR</td> <td>NR</td> <td>NR</td> <td>2</td> <td>0</td> <td>NR</td> <td>0</td> <td>0</td> <td>1</td> <td>2</td> <td>2</td> </tr> <tr> <td>Heber Mountain</td> <td>NR</td> <td>NR</td> <td>NR</td> <td>NR</td> <td>0</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Sheep Creek</td> <td>0</td> <td>NR</td> <td>NR</td> <td>NR</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>												Route	Number of Birds per Year												1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Soapstone	0	NR	NR	NR	2	0	NR	0	0	1	2	2	Heber Mountain	NR	NR	NR	NR	0	1	1	0	0	0	0	0	Sheep Creek	0	NR	NR	NR	0	0	0	0	0	0	0	0
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	<p>Although this woodpecker species is widely distributed, it occurs at relatively low densities in most areas. Because the breeding bird surveys on the Forest have limited observations for this species, data for the western Breeding Bird Survey region was evaluated. This data shows no evidence that population trends of this species have been declining during the past 20 years.</p> <p>In 2003, a systematic, repeatable, and more intensive three-toed woodpecker monitoring protocol was developed and implemented. This protocol indexes population abundance using call stations to determine the percentage of systematically or randomly located stations at which a three-toed woodpecker responds to a recorded call. This is the first year of monitoring at stations, so no trend data from this new monitoring protocol is yet available.</p> <p><b>2003:</b></p> <ol style="list-style-type: none"> <li>a. 11 surveys were conducted on the Heber Ranger District using the new protocol. 8 three-toed woodpeckers were recorded on one of the surveys. No three-toed were encountered on the other 10 surveys.</li> <li>b. Habitat conditions will be evaluated, summarized, and reported in 2008.</li> </ol>																																																																											

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<p><b>Colorado River cutthroat trout:</b></p> <ul style="list-style-type: none"> <li>a. Population estimates (every 5 years).</li> <li>b. Habitat conditions (every 5 years).</li> </ul>	<p><b>Description:</b> Colorado River cutthroat trout are a Region 4 and State sensitive species. Conservation Agreements have been developed for this species within the State of Utah. The conservation and recovery for this species depends on eliminating or reducing the impact of activities that threaten the species' existence. Colorado River cutthroat trout will be used as MIS in sub-basins that have been identified as containing either persistence or conservation populations of this species.</p> <p>Colorado River cutthroat trout were selected as aquatic MIS because: (1) the species is closely associated with a particular community type and can be impacted by several major management activities on the Forest; (2) population trends of this species may reflect management activities on the Forest; (3) the species is relatively well-distributed across the Forest within the community type it represents and is a permanent resident in that community type; and (4) it is feasible to collect survey data for the species that is of sufficient quality to accurately reflect changes in population abundance. Data from previous years indicate that there may be a slight upward trend in condition of cutthroat trout, but that population abundance appears static.</p> <p><b>2003:</b></p> <ul style="list-style-type: none"> <li>a. Eight streams, equating to 53% of the populations on the Forest, were surveyed for Colorado River cutthroat trout.</li> </ul> <p style="text-align: center;"><b>2003 Colorado River Cutthroat Trout Survey Results</b></p> <table border="1" data-bbox="583 938 1896 1252"> <thead> <tr> <th>Stream</th> <th>2003 CRCT fish/m*</th> <th>2003 CRCT K-factor**</th> </tr> </thead> <tbody> <tr> <td>Right Fork White River</td> <td>No estimate</td> <td>1.01</td> </tr> <tr> <td>Left Fork White River</td> <td>Channel dry in sample reach</td> <td>Channel dry in sample reach</td> </tr> <tr> <td>Middle Fork White River</td> <td>Channel dry in sample reach</td> <td>Channel dry in sample reach</td> </tr> <tr> <td>West Fork Duchesne #1</td> <td>0.21</td> <td>0.97</td> </tr> <tr> <td>West Fork Duchesne #2</td> <td>0.23</td> <td>0.91</td> </tr> <tr> <td>Little West Fork Duchesne</td> <td>0.66</td> <td>1.08</td> </tr> <tr> <td>Vat Creek</td> <td>0.21</td> <td>0.99</td> </tr> <tr> <td>Low Pass Creek</td> <td>Channel dry in sample reach</td> <td>Channel dry in sample reach</td> </tr> </tbody> </table> <p>* fish/m = fish per meter                      ** K-factor = condition factor, a weight to length index to determine general fish health. A K-factor of 1 indicates an average, healthy fish.</p>	Stream	2003 CRCT fish/m*	2003 CRCT K-factor**	Right Fork White River	No estimate	1.01	Left Fork White River	Channel dry in sample reach	Channel dry in sample reach	Middle Fork White River	Channel dry in sample reach	Channel dry in sample reach	West Fork Duchesne #1	0.21	0.97	West Fork Duchesne #2	0.23	0.91	Little West Fork Duchesne	0.66	1.08	Vat Creek	0.21	0.99	Low Pass Creek	Channel dry in sample reach	Channel dry in sample reach
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Indicator	Monitoring									
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<p><b>Bonneville cutthroat trout:</b>                      a. Population estimates (every 5 years).                      b. Habitat conditions (every 5 years).</p>	<p><b>Description:</b> Bonneville cutthroat trout are a Region 4 and State sensitive species. Conservation Agreements have been developed for this species within the State of Utah. The conservation and recovery for this species depend on eliminating or reducing the impact of activities that threaten the species' existence. Bonneville cutthroat trout will be used as MIS in sub-basins that have been identified as containing either persistence or conservation populations of this species.</p> <p>Bonneville cutthroat trout are a focal species that can be used to assess the effects of a proposed action and to evaluate the effectiveness of management activities that have been implemented. Bonneville cutthroat trout were selected as aquatic MIS because: (1) the species is closely associated with a particular community type and can be impacted by several major management activities on the Forest; (2) population trends of this species may reflect management activities on the Forest; (3) the species is relatively well-distributed across the Forest within the community type it represents and is a permanent resident in that community type; and (4) it is feasible to collect survey data for the species that is of sufficient quality to accurately reflect changes in population abundance. Data from previous years indicate that there may be a slight upward trend in condition of cutthroat trout, but that population abundance appears static.</p> <p><b>2003:</b>                      a. Two streams were surveyed for Bonneville cutthroat trout, which equates to 1% of the population.</p> <p style="text-align: center;"><b>2003 Bonneville Cutthroat Trout Survey Results</b></p> <table border="1" data-bbox="583 1052 1848 1190"> <thead> <tr> <th data-bbox="583 1052 1033 1122">Stream Sampled</th> <th data-bbox="1033 1052 1440 1122">2003 BCT Populations (fish/m*)</th> <th data-bbox="1440 1052 1848 1122">2003 Fish Condition Index (K-factor**)</th> </tr> </thead> <tbody> <tr> <td data-bbox="583 1122 1033 1154">North Fork American Fork River</td> <td data-bbox="1033 1122 1440 1154">0.37</td> <td data-bbox="1440 1122 1848 1154">0.98</td> </tr> <tr> <td data-bbox="583 1154 1033 1190">Holman Creek</td> <td data-bbox="1033 1154 1440 1190">0.19</td> <td data-bbox="1440 1154 1848 1190">1.00</td> </tr> </tbody> </table> <p>* fish/m = fish per meter                      ** K-factor = condition factor, a weight to length index to determine general fish health. A K-factor of 1 indicates an average, healthy fish.</p> <p>In addition to the above, Bear Lake cutthroat trout populations were monitored in three Strawberry Reservoir tributaries. This species is not native in the Strawberry River drainage.</p>	Stream Sampled	2003 BCT Populations (fish/m*)	2003 Fish Condition Index (K-factor**)	North Fork American Fork River	0.37	0.98	Holman Creek	0.19	1.00
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2. Is the Forest protecting **Federally-listed Threatened and Endangered Species** and their habitat while implementing the Forest Plan?

**DFC:** Known populations of all federally-listed threatened, endangered, proposed, or candidate species occurring on the Forest are maintained or increased.

Indicator	Monitoring
<p><b>Bald eagle:</b> Index of winter roosting activity on the Forest (annually).</p>	<p><b>Status:</b> The bald eagle is currently classified as threatened under the Endangered Species Act (ESA). The U.S. Fish and Wildlife Service was petitioned in January 2001 to remove the bald eagle from the List of Threatened and Endangered Species.</p> <p>Very few bald eagles have nested in Utah in recent years, and none of the nests are located on or near the Uinta National Forest. Bald eagles do occur as migrants and winter residents on and near the Forest. They are most commonly observed foraging and roosting along rivers between November and March. They have often been seen during the winter in Heber Valley, the Vernon Unit, in canyons along the Wasatch Front (including Provo Canyon, American Fork, Hobbble Creek, White River, and Diamond Fork), and in the Nebo Unit along Salt Creek.</p> <p>Bald eagle populations across North America continue to increase from lows in 1970s that resulted from effects of pesticide use. Winter bald eagle surveys are conducted on parts of the Uinta National Forest by personnel from the Utah Division of Wildlife Resources (UDWR) and the Forest. Bald eagle roost and nesting surveys, which occur primarily off-Forest, indicate populations are increasing. Although there has been improvement in the overall habitat and environment used by this and other species, it is not likely that population increases are due to Forest management activities as roost sites on the Forest are limited. An increase in sightings and use of the Forest has occurred concurrently with the overall increase in the population.</p> <p><b>2003:</b> January 2003 bald eagle data from UDWR showed 5 bald eagle sightings on the Forest, and 3 additional sightings within 1-2 miles of the Forest. The sightings on the Forest included observation of a roosting adult on two occasions in Provo Canyon, a roosting adult in Diamond Fork, and two roost sites with more than three individuals on the Vernon Unit.</p>

Indicator	Monitoring
<p><b>Canada lynx:</b> Documentation of observations (every 5 years).</p>	<p><b>Status:</b> The Canada lynx was listed as threatened under the ESA in 2000. Lynx use boreal and montane habitats dominated by coniferous or mixed forest with thick undergrowth. Their primary prey is snowshoe hare.</p> <p>Lynx used to occur in the Uinta Mountains, and they have been recorded on the Uinta National Forest in the past. The Forest contains two Lynx Analysis Units. The Uinta National Forest conducted surveys for lynx during 1999, 2000, and 2001, but none were detected (University of Montana 2000, 2001, and 2002).</p> <p><b>2003:</b> No observations were documented.</p>
<p><b>Clay phacelia:</b> Documentation of observations and project surveys in potential habitat (every 5 years).</p>	<p><b>Status:</b> The endangered clay phacelia is endemic to Spanish Fork Canyon on substrates derived from shales of the Green River Formation. The plant occurs on steep, sparsely vegetated slopes among mountain brush and pinyon/juniper communities, at elevations from 5,900 to 6,500 feet. No populations are known to occur on the Forest, but they do occur adjacent to it (within a few hundred yards of the boundary). Potential habitat exists on the Forest, as confirmed by a study comparing soils, vegetation, and physical parameters of potential sites on the Forest with those of occupied sites.</p> <p>Surveys for the species were conducted on the Forest as part of the aforementioned survey, and surveys have also been conducted as part of several project-specific analyses, but no plants were found as a result. The Utah Natural Heritage Program also conducted surveys of the Forest and found no plants on National Forest System lands. There is an approved recovery plan for clay phacelia, and the Uinta National Forest participates actively in recovery efforts, both as a member of the recovery team and in implementing recovery tasks. The U.S. Fish and Wildlife Service plans to update the Recovery Plan for this species. The Forest is taking part in the development of the updated recovery plan.</p> <p>Dr. Kim T. Harper of Utah Valley State College buried pots containing soil and seeds from an existing clay phacelia colony in three potential habitat areas on the Forest in the late 1990s. Two of these sites were revisited in 2002. No clay phacelia plants were found.</p> <p><b>2003:</b> Experimental planting sites were surveyed. No plants were found.</p>

Indicator	Monitoring
<p><b>Ute ladies'-tresses:</b> Documentation of observations and project surveys in potential habitat (every 5 years).</p>	<p><b>Status:</b> Populations of Ute ladies'-tresses (<i>Spiranthes diluvialis</i>) are found in a few locations in Utah and Wasatch Counties, including sites within the Provo, American Fork, and Spanish Fork River drainages. The species occurs elsewhere in the state, as well as in Washington, Idaho, Montana, Wyoming, Colorado, and western Nebraska. A draft recovery plan has been developed for the species. The U.S. Fish and Wildlife Service is in the process of completing a status review for this species.</p> <p>The only known occurrences of this orchid on the Uinta National Forest are along Diamond Fork, with adjacent populations located just off-forest along the Spanish Fork River. Extensive surveys have failed to locate it elsewhere on the Forest. In the Diamond Fork drainage, 77 plant colonies have been identified, each occurring on a distinct depositional (flood-created) surface. In 1998, a year of record flowering in Diamond Fork, an extensive survey resulted in a population estimate of 16,500 flowering individuals in these colonies. Based on population estimates and acres of occupied habitat, the Diamond Fork complex is the largest along the Wasatch Front (the six other occurrences total less than 1,000 flowering individuals) and one of the largest, most concentrated occurrences throughout the species' range. The U.S. Fish and Wildlife Service considers this population to be one of the most valuable metapopulations range-wide, and as such it is a high priority for conservation and protection.</p> <p><b>2003:</b> 20 bee boxes and 20 bundles of elderberry twigs were placed near existing habitat to increase pollinator habitat. They are scheduled to be checked in 2004 to see if they were used by pollinators. No project related surveys were conducted.</p>
<p><b>Ute ladies'-tresses:</b> Population trends (every 5 years).</p>	<p><b>2003:</b> This species is dependent on sub-irrigated soils in wet meadows along perennial streams, rivers, lakes, or springs. It often grows on point bars and sedimentary surfaces created by recent flooding. Surveys for Ute ladies'-tresses have been conducted by the Central Utah Water Conservancy District (CUWCD) in Diamond Fork Canyon. Approximately 40 acres of potential habitat were surveyed. Survey results are displayed below. The number of colonies identified indicates an increasing trend. The number of individuals, however, has fluctuated significantly from year to year. The dramatic drop in the number of plants found in 2003 is attributed to extended drought conditions that have lowered the water table.</p>

Indicator	Monitoring																																			
	<p><b>CUWCD Ute Ladies'-tresses Survey Results</b></p> <table border="1" data-bbox="896 332 1608 750"> <thead> <tr> <th data-bbox="896 332 1136 402">Year</th> <th data-bbox="1136 332 1371 402">Number of Plants</th> <th data-bbox="1371 332 1608 402">Number of Colonies</th> </tr> </thead> <tbody> <tr> <td data-bbox="896 402 1136 435">1992</td> <td data-bbox="1136 402 1371 435">303</td> <td data-bbox="1371 402 1608 435">8</td> </tr> <tr> <td data-bbox="896 435 1136 467">1993</td> <td data-bbox="1136 435 1371 467">6,049</td> <td data-bbox="1371 435 1608 467">32</td> </tr> <tr> <td data-bbox="896 467 1136 500">1994</td> <td data-bbox="1136 467 1371 500">804</td> <td data-bbox="1371 467 1608 500">33</td> </tr> <tr> <td data-bbox="896 500 1136 532">1997</td> <td data-bbox="1136 500 1371 532">13,481</td> <td data-bbox="1371 500 1608 532">46</td> </tr> <tr> <td data-bbox="896 532 1136 565">1998</td> <td data-bbox="1136 532 1371 565">16,892</td> <td data-bbox="1371 532 1608 565">53</td> </tr> <tr> <td data-bbox="896 565 1136 597">1999</td> <td data-bbox="1136 565 1371 597">6,003</td> <td data-bbox="1371 565 1608 597">61</td> </tr> <tr> <td data-bbox="896 597 1136 630">2000</td> <td data-bbox="1136 597 1371 630">19,793</td> <td data-bbox="1371 597 1608 630">71</td> </tr> <tr> <td data-bbox="896 630 1136 662">2001</td> <td data-bbox="1136 630 1371 662">26,344</td> <td data-bbox="1371 630 1608 662">74</td> </tr> <tr> <td data-bbox="896 662 1136 695">2002</td> <td data-bbox="1136 662 1371 695">18,063</td> <td data-bbox="1371 662 1608 695">77</td> </tr> <tr> <td data-bbox="896 695 1136 750">2003</td> <td data-bbox="1136 695 1371 750">1,040</td> <td data-bbox="1371 695 1608 750">77</td> </tr> </tbody> </table>			Year	Number of Plants	Number of Colonies	1992	303	8	1993	6,049	32	1994	804	33	1997	13,481	46	1998	16,892	53	1999	6,003	61	2000	19,793	71	2001	26,344	74	2002	18,063	77	2003	1,040	77
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3. Are **National Register eligible sites** and districts being protected?

**DFC:** Visitors to the Forest find opportunities to touch, explore, enjoy, and learn about their cultural heritage. They recognize and respect the diversity of past Forest users, and understand the fundamental relationship between people and the land. This access to the past is constantly growing through an active heritage program, which is fully integrated into other management areas including recreation, interpretation, and environmental education. A long-term management plan is developed in consultation with local Tribes, Historical Societies, and other interested publics to address management of heritage resources, including historic Forest Service structures. Information about past human activities provides a context for understanding current ecological issues, and provides a foundation for ecological restoration projects. Knowledge of past activities is increased through archaeological and historical research. Known sites are protected against erosion and impacts from recreation.

Indicator	Monitoring
Mitigation measures including pre-disturbance surveys applied/not applied (every 5 years).	<p><b>2003:</b> All ground disturbing projects in 2003 were surveyed for cultural resource sites, and the potential effects to the sites were evaluated. Only two projects had potential adverse effects to cultural resource sites. These include a vegetation management project (American Fork Canyon Remediation) and a special uses project (Buckley Diversion Trench). No range projects occurred that had the potential to affect heritage sites.</p> <p>The American Fork Canyon Mine Tailings Remediation Project was redesigned to protect the concrete concentrator foundation at the Dutchman Mine. Post-project monitoring showed that the redesign successfully preserved the foundation. The Buckley Draw Diversion runs adjacent to a historic lime kiln complex, and was designed to divert potential mud flows away from subdivisions at the mouth of the canyon. The project was monitored after its completion, and after a debris flow episode. Both the trench construction and debris flow occurred without affecting the overall historic integrity of the lime kiln.</p>
Unapproved impacts to sites (every 5 years).	<b>2003:</b> See discussion above.

4. Is **permitted grazing** in compliance with the Forest Plan? Are Forest Plan **utilization standards** effective in mitigating impacts of grazing?

**DFC:** Grazing opportunities are maintained on 71 open cattle and sheep allotments and continue to support the livestock industry in the local communities. Livestock grazing continues to be a viable and sustainable use of vegetation on these allotments, and is managed to ensure that the long-term resource goals for soil productivity, vegetative communities, wildlife habitats, and water quality are achieved. See also the DFC for Vegetation.

Indicator	Monitoring
Compliance with utilization standards (every 5 years).	<b>2003:</b> All term grazing permits on the Forest include the Forest Plan utilization standards. The permits require the permittee to monitor their livestock use, and to move their livestock to another grazing unit or from the allotment before these standards are exceeded. These requirements are reviewed with each permittee prior to each grazing season. The Forest Service monitored utilization on eight allotments on the Spanish Fork Ranger District and nine allotments on the Heber Ranger District (24% of active allotments forest-wide). All were found to be within compliance.
Allotments administered to standard (annually).	<b>2003:</b> Three allotments on the Spanish Fork Ranger District and eight allotments on the Heber Ranger District were administered to standard.
Range condition and trend (every 5 years).	<p><b>2003:</b> Nineteen studies were read on the Heber Ranger District. The trend of 36.8% of the studies was down, of 31.6% was stable, and of 31.6% was up. The ecological status was determined by comparing these studies with other sites that were originally set up as Potential Natural Communities (PNC). However, the degree to which the PNC sites accurately represent many of the study sites is questionable. The ecological status of 36.8% of the studies was early seral, of 47.4% was mid-seral, and of 5.3% was late seral. There was no PNC for 10.5% of the sites.</p> <p>Eight studies were read on the Spanish Fork Ranger District. The trend of 12.5% of the studies was down, of 62.5% was stable, and of 12.5% was up. No trend is available on 12.5% as this was the first reading. The ecological status was determined by using the professional judgment of the Range Conservationist as no appropriate PNC comparison sites were available. Ecological status on 25% was mid-seral/fair, and the ecological condition on 75% was late seral/good. Fair and Good are the terms used on sites that were seeded with non-native species.</p> <p>Nineteen additional sites were read on the Vernon Unit of the Spanish Fork Ranger District. Fourteen of these sites were newly established, and five have data from previous years. Ocular cover data was collected in addition to the nested frequency data normally collected. The purpose of these surveys was to gather data about cover as it relates to sage grouse populations. The trend on 80% of the five</p>

Indicator	Monitoring
	<p>existing studies was down. The trend on the other 20% was up. Drought may be the cause for the downward trend of these sites.</p>
<p>Riparian condition and trend (every 5 years).</p>	<p><b>2003:</b> Six riparian studies were read on the Heber Ranger District. One of the creeks had dried up due to the drought, so that creek was not included in the analysis. The greenline status was very early seral on 20%, late seral on 20%, and PNC on 60%. The greenline stability was moderate on 40%, good on 40%, and excellent on 20%. The trend was stable on 40% and up on 60%.</p> <p>Sixteen riparian studies were read on the Spanish Fork Ranger District. The greenline status was very early seral on 31.25%, early seral on 25%, mid-seral on 18.75%, late seral on 12.5%, and PNC on 12.5%. Greenline stability was poor on 18.75%, moderate on 62.5%, good on 12.5%, and high on 6.25%. The trend was down on 6.25%, stable on 56.25%, and up on 37.5%.</p>



5. Are infestations of **noxious weeds** being contained, controlled, or eliminated?

**DFC:** Noxious weeds and undesirable invasive plants are effectively combated using integrated pest management. Priority is first given to eliminating weeds from critical habitats and preventing new infestations, then to reducing density or eliminating longer-established populations. The Forest uses public education to motivate the public to employ weed prevention practices.

Indicator	Monitoring
<p>Application of Forest Plan direction and project mitigation measures including permit and contractual requirements (every 5 years).</p>	<p><b>2003:</b> Monitoring was conducted on the American Fork Mine Reclamation project. In accordance with the 2003 Forest Plan, the contractor was required to clean all equipment before entering the Forest. In addition, noxious weed free hay was required.</p> <p>The Silver Lake and Tibble Fork Summer Homes are authorized under special use permits, and the Operation and Maintenance Plans associated with these permits require removal of noxious weeds. Site inspections were conducted for each of the homes. One item monitored in these inspections is noxious weeds. The inspections found permittees were removing noxious weeds in accordance with Forest Plan and permit requirements. In FY 2003, Silver Lake Summer Home permittees removed about 3 acres of Canada thistle and burdock, and Tibble Fork Summer Home permittees removed about 6 acres of Canada thistle.</p> <p>One non-structural range improvement project on the Forest conducted in FY 2003 was seeding of the Springville burn. This seeding involved application of native grass and forb species on about 491 acres on the Forest. The approved plan for this project called for use of certified weed-free seed mixes of common barley and native grass and forb species. Seed was procured and tested for viability and weed content prior to application. The seed was aurally applied. Cereal barley, which is a non-persistent non-invasive annual, was chosen for its ability to provide a quick cover for erosion control and help stabilize the upper watersheds of the area burned by a fire. Executive Order 13112 (2/3/1999) on invasive species, was considered and a determination was made that the introduced species (barley) would not be “likely to cause economic or environmental harm or harm to human health.”</p>
<p>Acres of weeds treated (annually).</p>	<p><b>2003:</b> 1,222 acres of noxious weeds and 93 acres of other invasive plants were treated (see the table in the “Estimated acres infested” row below). These acres are approximately 50% of what was treated in 2002 and 80% of what was treated in 2001. The reduction in acres treated is due to a decrease in available funding.</p>
<p>Estimated acres infested (every 5 years).</p>	<p><b>2003:</b> It is estimated that 24,506 acres are infested with noxious weeds and about 3,760 acres are infested with other undesirable plants (see the following table). Estimated acres infested with noxious weeds remained stable from 2002, but increased by about 20% from the 2001 estimate.</p>

Indicator	Monitoring	
	<b>Estimated Acres Infested and FY 2003 Treatments of Noxious Weeds and Other Undesirable Species</b>	
	<b>Species</b>	<b>Estimated Acres Infested</b>
		<b>Acres Treated in FY 2003</b>
	<b>Utah Listed Noxious Weed Species</b>	
	Canada thistle	5,300
	Diffuse knapweed	10
	Dyer's woad	30
	Hoary cress (white top)	1,000
	Leafy spurge	10
	Medusahead	5
	Musk thistle	18,000
	Perennial pepperweed	6
	Russian knapweed	5
	Scotch thistle	30
	Spotted knapweed	12
	Squarrose knapweed	48
	Yellow starthistle	50
	<b>TOTAL NOXIOUS</b>	<b>24,506</b>
	<b>Other Undesirable Species</b>	
	Blue spurge	5
	Common burdock	60
	Dalmatian toadflax	1,500
	Hounds tongue	2,000
	Jointed goatgrass	25
	Russian olive	5
	Tamarisk (salt cedar)	15
	Yellow sweetclover	150
	<b>TOTAL OTHER</b>	<b>3,760</b>
	<b>COMBINED TOTAL</b>	<b>28,266</b>
		<b>1,315</b>

6. Is long-term **soil productivity** being maintained?

**DFC:** Most soils have adequate protective ground cover, soil organic matter, and large 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 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.

Indicator	Monitoring
<p>Detrimental soil disturbance (every 5 years).</p>	<p><b>2003:</b> Detrimentially disturbed soil is soil that has been detrimentially displaced, compacted, puddled, or severely burned. No more than 15% of an activity area should have detrimentially disturbed soil after the completion of all management activities.</p> <p>The QWK Pipeline project was approved in 2001 and implemented in Fiscal Years 2002 and 2003. The Record of Decision (ROD) approving this project noted: “Short-term (1-3 year) increases in soil erosion would occur in areas disturbed by construction. ... By implementing the mitigation measures described in Appendix A of the FEIS, long-term impacts to soil resources from any of the alternatives will be small.” Mitigation measures included use of waterbars, stockpiling and reapplication of topsoil, prompt revegetation of disturbed areas, and limiting vehicle access, to the extent feasible, to existing roads and/or areas to be restored following pipeline construction. Uinta National Forest personnel monitored implementation of the portion of this project occurring on the Forest and found that BMPs called for in the ROD were appropriately applied.</p> <p>Monitoring was conducted on the White River Prescribed Burn Vegetation Management Project. This project involved no earth-disturbing fireline construction, fire containment equipment was confined to existing roads, and the burn was aerially ignited. Therefore, there were no project activities that would have caused soil compaction or puddling. Post-burn monitoring indicates that only about 15% of the project area (i.e., the area within the fire perimeter) burned with sufficient intensity to reduce fuels and regenerate the vegetation. No accelerated erosion or detrimental soil displacement was observed during the monitoring visits. Only a small fraction of the acreage (15%) burned at high intensity, therefore, detrimental soil disturbance was well within the 15% threshold.</p> <p>No special use or range projects were implemented in FY2003 that involved use of fire or could have resulted in severely burned soils. In 2002 data was collected to evaluate the effects of grazing on soil erosion in the Strawberry watershed. This data, analyzed in 2003, showed that areas grazed by cattle have significantly more bare soil (average 25% bare ground) than areas grazed by sheep (average 19%</p>

Indicator	Monitoring
	<p>bare ground) and non-grazed lands (average 14% bare ground) in aspen and sagebrush ecosystems (probability = 95%). This study also indicates that although the average percent bare ground is greater for areas grazed by sheep than non-grazed lands, the differences are not statistically significant. Soil erosion rates are generally closely related to the amount of bare ground.</p>
<p>Down woody debris (every 5 years).</p>	<p><b>2003:</b> Coarse woody debris is defined in Forest Service Handbook 2509.18 as organic materials such as plant stems, branches, and logs with a diameter greater than 3 inches. Coarse woody debris guidelines apply to ecological types that are capable of producing forested and woodland ecosystems. The minimum amount of large woody debris required to maintain nutrient and moisture supplies adequate to sustain site productivity varies by ecological type.</p> <p>Monitoring was conducted on the White River Prescribed Burn project. In Guideline Veg-18, the 2003 Forest Plan calls for retention of at least 30 tons/acre of large woody debris per 10 treated acres. Monitoring indicates that the amount of down woody debris over 3 inches in diameter changed little as a result of the burn. Both pre-burn and post-burn monitoring data indicates there were about 2 tons/acre of down woody debris greater than 3 inches in diameter. Although this does not meet the Forest Plan guideline, the data indicates the prescribed fire did not affect short-term compliance with this guideline. The data also suggests that in the long-term, down woody debris levels will be improved by the burn. Monitoring data shows that the number of dead trees per acre was substantially increased by the burn. These burn-killed trees will eventually fall and increase the amount of down woody debris. Only about 15% of the project area (i.e., the area within the fire perimeter) burned, and down woody debris levels were unaffected elsewhere within the treatment area.</p>
<p>Ground cover (every 5 years).</p>	<p><b>2003:</b> Changes in ground cover associated with grazing are monitored through the range condition and trend study sites across the Forest. Nineteen range study sites were monitored on the Heber Ranger District. The bare ground on the sites ranged from 6.5% to 41.5%, with an average of 24%. Eight range studies were monitored on the Spanish Fork Ranger District. Bare ground on these sites ranged from 0% to 36.25%, with an average of 12.88%. Additionally, ground cover data was collected on 19 studies on the Vernon Unit of the Spanish Fork Ranger District. The bare ground on these sites ranged from 28.5% to 56.75%, and averaged 44.71%.</p> <p>Ground cover was also monitored for the White River Prescribed Burn Vegetation Management Project. Nested frequency plot data from the aspen stands burned in this project show minor, non-significant changes in ground cover due to the burn. A small increase in vegetative ground cover (3.125%), a small decrease in litter cover (3.75%), and a small decrease in bare ground (0.625%) were observed.</p>

7. Is **water quality** being adequately protected and meeting desired conditions?

**DFC:** Water quality is managed to meet clean water standards established by the State of Utah. All existing water rights are validated. Streams are managed to maintain natural fluvial processes where possible, in turn providing high quality aquatic habitat and water quality. Upland vegetation in all management areas is managed to maintain sufficient ground and soil cover to limit erosion and sediment transport to streams. Riparian Habitat Conservation Areas (RHCAs), regardless of width, are in a stable or upward trend. RHCAs and their corresponding stream channels provide quality habitat for associated terrestrial and aquatic wildlife species. Forest management activities are implemented in a manner that prevents unacceptable watershed impacts.

Indicator	Monitoring
<p>Application of Best Management Practices (BMPs) designed to protect or improve water quality (every 5 years).</p>	<p><b>2003:</b> The American Fork Canyon Mine Reclamation project was monitored to ensure that Best Management Practices were implemented during the project. The purpose of the project was to remove contaminated mine wastes from direct contact with surface water. During the project silt fences, hay bales, and a drainage ditch (along with several other procedures) were used to protect water quality. All American Fork Mine sites were analyzed for pH and zinc. In addition, sites 5-8 were also analyzed for arsenic, cadmium, and lead. Only pH values not meeting state water quality monitoring standards are reported. None of the arsenic, cadmium, or lead reported values exceeded state Water Quality Monitoring standards. All zinc values are reported. Determination of state standards for zinc values is based logarithmically on water hardness. Water hardness for the sites was not analyzed, and therefore, compliance with standards cannot be determined. All reported zinc values generally trended downward with the exception of samples collected at #2 Lower Bog Mine Adit, which has remained relatively stable.</p> <p>The Diamond Fork Pipeline Project, a component of the Central Utah Project, is an ongoing special use activity on the Forest. A Record of Decision (ROD) and Environmental Impact Statement (EIS) for this project was completed by the U.S. Department of Interior (USDI), Bureau of Reclamation, Utah Reclamation Mitigation and Conservation Commission (URMCC), and Central Utah Water Conservancy District (CUWCD). The decision called for strict application of BMPs including silt fencing, locating ground disturbing (where feasible) and other activities such as fuel and chemical storage and filling areas away from floodplains and water courses, waterbarring roads, and revegetation following disturbance. The Forest Service participated in development of the EIS and ROD, and participated in weekly coordination meetings during the project’s ongoing implementation. Forest Service personnel also worked with the other agencies to ensure the project, including application of BMPs, was appropriately implemented. BMPs were installed as called for, and generally adequately maintained. Water quality was monitored by CUWCD and reported on the STORNET website.</p> <p>The purpose of the Strawberry River Fence range exclosure project implemented in 2003 was to protect</p>

Indicator	Monitoring
	<p>water quality and wildlife and fisheries habitat along part of the Strawberry River. The fence was designed to implement the BMP of minimizing livestock access to the riparian area and river banks by excluding livestock. The project design incorporated BMPs of keeping away from the river channel by using a buck and pole fence to negate or minimize the need for ground disturbance from fence construction in or near the riparian area. These BMPs were applied during implementation.</p>
<p>Compliance with water quality standards (every 5 years).</p>	<p><b>2003:</b> The Uinta National Forest maintains a network of 24 baseline water quality sites. These sites are monitored in cooperation with the Utah Division of Water Quality on a four-year rotation. Eight baseline sites were monitored from July 2002 to June 2003. Monitoring began on an additional seven sites in July 2003. In addition, eight sites were monitored in American Fork Canyon as part of the American Fork Mines Reclamation project.</p> <p>One site at Hall's Fork met all water quality standards. At Left Fork of White River, dissolved aluminum exceeded standards, but is decreasing from previous readings. At Currant Creek, total phosphorus levels exceeded standards but have decreased over the last five years. Dissolved oxygen is above set levels and appears to be increasing at Willow Creek. At Indian Creek near Strawberry Reservoir total phosphorus and dissolved oxygen are decreasing slightly and temperature has remained stable. On the Strawberry River, dissolved oxygen was at its highest in 2003 and total phosphorus decreased. PH and temperature are remaining stable above state levels. Chipman Creek has an excess of phosphorus, but levels are decreasing.</p> <p>Of the seven sites where monitoring was begun in July 2003, two are meeting all standards. Phosphorus levels have decreased at Trout Creek. Phosphorus levels are stable at Indian Creek above the mouth of Streeper Creek. At Clyde Creek, phosphorus levels are up since 1996, but have decreased from readings in 1994. Two sites that were monitored in 2002-2003 (Indian Creek near Strawberry Reservoir and Strawberry River) are being followed in 2003-2004 as well. Data for these sites is given in the previous paragraph. Additional data will be taken at these seven sites until the end of June. Final results will be presented in a subsequent State of the Forest Report.</p> <p>PH below the Lower Bog Mine did not meet state standards. Arsenic, cadmium, and lead levels were not above state levels at any of the sites used to monitor the Pacific Mine. Data was not collected to determine if zinc levels were exceeding state standards; however, the level on all sites was down except the Lower Bog Mine adit, which was stable.</p>

Indicator	Monitoring
<p>Number of 303(d) listed water bodies (annually).</p>	<p><b>2003:</b> The North Fork of the American Fork River and tributaries above Tibble Fork Reservoir are listed in the draft 2002 303(d) List of Waters for arsenic. The North Fork American Fork River will be listed for effects caused by historic mining activity in the watershed. Lakes on the Uinta National Forest listed on the 303(d) list include Strawberry Reservoir, Mill Hollow Reservoir, and Big East Lake due to dissolved oxygen levels/total phosphorus, total phosphorus, and dissolved oxygen, respectively. Diamond Fork Creek has been moved from the 303(d) list to the 305(b) list.</p>

8. Are **airsheds** on the Forest meeting or trending toward desired conditions?

**DFC:** Smoke emissions from prescribed and wildland fires are within the historical frequency and distribution for the various vegetation types across the Forest. Resulting ambient air quality and visibility values across the Forest are within federal and state standards for particulate matter and visibility.

Indicator	Monitoring
Forest Service management activities do/don't result in exceedances from established NAAQs standards (every 5 years).	<b>2003:</b> The Cascade II prescribed fire initiated in September 2003 escaped control lines. Emissions during the planned burning period were within state standards; however, the wildfire resulting from the escape resulted in PM10 emissions of 350 and 160 micrograms per cubic meter of air at the Hawthorne monitoring station in Salt Lake City on September 25 and 26, respectively, exceeding the 150 microgram level deemed unhealthy by the Environmental Protection Agency. This was the first exceedance of NAAQs experienced by the Uinta National Forest as a result of a management action.
Degradation of lichen biomonitors sites (every 5 years).	<b>2003:</b> Data was collected in 2003, but analysis has not yet been completed.
Exceedances from NAAQs standards (every 5 years).	<b>2003:</b> See discussion above.



9. Are **vegetation conditions** stable or moving toward desired future conditions?

**DFC:** Deteriorated vegetated communities are assessed for estimated potential for recovery, and active restoration work is completed as appropriate. Suitable habitat conditions are provided for plant-pollinating insects. Vegetative communities exist in a full range of seral stages and age classes. Vegetation management focuses on improving the diversity of forested and non-forested communities, with an emphasis on aspen stand regeneration and insect and disease control in conifer species. Vegetation is managed to create a more diverse mosaic of species and size classes within the landscape in an effort to move the vegetation towards desired future conditions. Wildlife habitat needs are considered in designing treatment projects, but do not necessarily drive the purpose and need for treatment. Forested vegetation that is classified as capable and available is managed to provide a portion of the Forest’s Allowable Sale Quantity (ASQ). Forested vegetation throughout the remainder of the Forest is managed for general forest health and other forest resource needs.

The Uinta National Forest supports a wide variety of vegetation types. The most common vegetation community types on the Forest are aspen forest, oak/maple, sagebrush, conifer forest, pinyon/juniper woodlands, mountain brush, and riparian.

The desired future condition of each habitat type is a vegetation community where species composition and age-class distribution are within the historic range of variability for that community type and approach patterns described under properly functioning conditions. Vegetation conditions that are within the historic range of variability are desired because these are habitat conditions under which all native species evolved and to which they are adapted. Vegetation composition and structure are important because they largely determine types and amounts of food and cover available for each species.

Indicator	Monitoring
Clearcut size and timber management practices according to Forest Plan direction (annually).	<b>2003:</b> 79 acres were clearcut in aspen on the Forest.
Prescribed fire and wildland fire use according to Forest Plan direction (every 5 years).	<p><b>2003:</b> The Red Hollow prescribed burn (1,733 acres) was implemented in accordance with Forest Plan Direction and met burn objectives.</p> <p>The Cascade II prescribed burn (600 acres) was implemented September 23 and escaped control lines. As a result of the escape, Cascade III (820 acres) was also burned. In addition to these planned burn units, an additional 6,408 acres were burned, including 4,504 acres of state and private land. Overall, burn severity on 18% (1,406 acres) was high, 46% (3,580 acres) was moderate, and 36% (2,843 acres) was low or unburned. Generally, the planned burn units burned at moderate to low intensities that met the prescribed objectives, and the vegetation stands within these units are expected to move toward the desired conditions described in the Forest Plan.</p>

Indicator	Monitoring
	<p>Evaluation of the White River Prescribed Burn Vegetation Management Project was also completed in 2003. Monitoring and evaluation indicated that the burn achieved desired results on about 15% of the treatment area (i.e., the area within the burn perimeter). Overall, much of the burned unit either did not burn or burned at too low of an intensity to meet the objectives outlined in the Burn Plan.</p>
<p>Acres of hazardous fuels treated (annually).</p>	<p><b>2003:</b> Acres reported as being treated were 1,733 for Red Hollow, 600 for Cascade II, and 820 for Cascade III. Cascade III burned when Cascade II escaped containment lines and became a wildfire. Only the acres included within the original burn plan were counted towards meeting the target.</p>
<p>Acreage with approved wildland fire use plan (every 5 years).</p>	<p><b>2003:</b> Wildland fire use plans have been developed for the wilderness areas of the Forest. There are 58,400 acres with an approved plan.</p>
<p>Aspen, spruce/fir, Douglas-fir</p> <ol style="list-style-type: none"> <li>a. Extent of conversion (acres) to younger age classes (every 5 years).</li> <li>b. Extent and distribution of old and mature (every 5 years).</li> <li>c. Extent of insect/disease infestations (every 5 years).</li> </ol>	<p>For <b>aspen</b> forests, desired future conditions include a heterogeneous mosaic of age classes, with young, mid, and old age classes represented across the landscape. Aspen regeneration should be sufficient to withstand browsing pressure from wildlife and livestock and still provide sufficient recruitment to ensure stand maintenance or stand replacement across the landscape. At least 30% of stands should be in mature or old age classes, and at least 10% should have old growth structural characteristics. Mature and old stands should have densities of at least two large-diameter snags (<math>\geq 8</math> inches diameter at breast height) per acre, and at least five large-diameter logs (<math>\geq 6</math> inches mid-point diameter) per acre. Desired future conditions also include seral aspen forests that are being maintained by periodic disturbance and not being converted at large spatial scales to conifer forest due to lack of disturbance. Grass, forb, and shrub growth is productive, providing forage and browse for both wildlife and livestock.</p> <p>For <b>spruce/fir</b> and <b>Douglas-fir/white fir</b> conifer forests, desired future conditions include a balanced range of age classes, with at least 40% of stands mature or old, and at least 10% having old growth structural characteristics. Mature and old growth stands should have multi-layered canopies, with densities of at least three large-diameter snags (<math>\geq 18</math> inches diameter at breast height) per acre, and at least five large-diameter logs (<math>\geq 12</math> inch mid-point diameter) per acre. Insects and disease are not causing large-scale tree mortality across entire landscapes.</p> <p><b>2003:</b></p> <ol style="list-style-type: none"> <li>a. 79 acres of aspen were regenerated by clearcutting. In addition, about 630 acres of aspen (&lt; 1% of this type) and 47 acres of conifer (&lt; 0.1% of the conifer) were burned on the Forest in 2003.</li> <li>b. Extent and distribution of old and mature will be evaluated within the 5-year reporting period.</li> <li>c. Insect and disease surveys identified the following:</li> </ol>

Indicator	Monitoring																											
	<p style="text-align: center;"><b>2003 Insect and Disease Survey Results</b></p> <table border="1" data-bbox="766 337 1738 651"> <thead> <tr> <th data-bbox="766 337 1024 375">Species</th> <th data-bbox="1024 337 1593 375">Damage Agent</th> <th data-bbox="1593 337 1738 375">Acres</th> </tr> </thead> <tbody> <tr> <td data-bbox="766 375 1024 407">Fir</td> <td data-bbox="1024 375 1593 407">Fir engraver – mortality</td> <td data-bbox="1593 375 1738 407">3,159</td> </tr> <tr> <td data-bbox="766 407 1024 440">Subalpine fir</td> <td data-bbox="1024 407 1593 440">Western spruce budworm – defoliation</td> <td data-bbox="1593 407 1738 440">243</td> </tr> <tr> <td data-bbox="766 440 1024 472">Subalpine fir</td> <td data-bbox="1024 440 1593 472">Western spruce budworm – mortality</td> <td data-bbox="1593 440 1738 472">4,972</td> </tr> <tr> <td data-bbox="766 472 1024 505">Spruce</td> <td data-bbox="1024 472 1593 505">Spruce beetle – mortality</td> <td data-bbox="1593 472 1738 505">203</td> </tr> <tr> <td data-bbox="766 505 1024 537">Spruce</td> <td data-bbox="1024 505 1593 537">Spruce beetle/fir engraver – mortality</td> <td data-bbox="1593 505 1738 537">15</td> </tr> <tr> <td data-bbox="766 537 1024 570">Pinyon</td> <td data-bbox="1024 537 1593 570">Pinyon ips – mortality</td> <td data-bbox="1593 537 1738 570">1,994</td> </tr> <tr> <td data-bbox="766 570 1024 602">Lodgepole pine</td> <td data-bbox="1024 570 1593 602">Mountain pine beetle – mortality</td> <td data-bbox="1593 570 1738 602">12</td> </tr> <tr> <td data-bbox="766 602 1024 634">Douglas-fir</td> <td data-bbox="1024 602 1593 634">Douglas-fir beetle mortality</td> <td data-bbox="1593 602 1738 634">2,130</td> </tr> </tbody> </table> <p style="text-align: center;"><b><u>Heber Ranger District</u></b></p> <p><b>Bark Beetles</b></p> <ul style="list-style-type: none"> <li>• <u>Douglas-fir</u> – Mortality of Douglas-fir attributed to Douglas-fir beetle increased but remained at relatively low levels. The increases occurred in the South Fork Provo River Creek, Lower Strawberry Reservoir, Currant Creek Reservoir, and Center Canyon.</li> <li>• <u>Engelmann spruce</u> – Mortality due to Englemann spruce beetle decreased from the 2002 survey. Large groups were mapped near Little West Fork Duchesne River, Broad Hollow, and Wolf Creek Peak.</li> <li>• <u>Subalpine fir</u> – Mortality due to western balsam bark beetle decreased. Large groups were mapped throughout the host type District-wide.</li> <li>• <u>Lodgepole pine</u> – Mortality resulting from mountain pine beetle was recorded near Strawberry River.</li> <li>• <u>White fir</u> – Mortality attributed to fir-engraver beetle increased. Large groups were mapped near Little Hobble Creek and Nobeletts Creek.</li> </ul> <p><b>Defoliators</b></p> <ul style="list-style-type: none"> <li>• <u>Subalpine fir</u> – Defoliation from western spruce budworm was mapped on over 150 acres near Pass Creek.</li> </ul>	Species	Damage Agent	Acres	Fir	Fir engraver – mortality	3,159	Subalpine fir	Western spruce budworm – defoliation	243	Subalpine fir	Western spruce budworm – mortality	4,972	Spruce	Spruce beetle – mortality	203	Spruce	Spruce beetle/fir engraver – mortality	15	Pinyon	Pinyon ips – mortality	1,994	Lodgepole pine	Mountain pine beetle – mortality	12	Douglas-fir	Douglas-fir beetle mortality	2,130
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Indicator	Monitoring
	<p style="text-align: center;"><b><u>Pleasant Grove Ranger District</u></b></p> <p><b>Bark Beetles</b></p> <ul style="list-style-type: none"> <li>• <u>Douglas-fir</u> – Mortality of Douglas-fir attributed to Douglas-fir beetle decreased. Large groups were mapped near Shaffer Fork of American Fork Canyon and west of Timpooneke.</li> <li>• <u>White fir</u> – Mortality attributed to fir-engraver beetle increased. A 300-tree group was mapped in Dry Creek Canyon. Other large groups were mapped near North Fork Ridge.</li> <li>• <u>Subalpine fir</u> – Mortality resulting from western balsam bark beetle increased. Large groups were mapped near Dry Creek Canyon, North Fork Ridge, Ant Knolls, and Pole Line Pass.</li> </ul> <p style="text-align: center;"><b><u>Spanish Fork Ranger District</u></b></p> <p><b>Bark Beetles</b></p> <ul style="list-style-type: none"> <li>• <u>Douglas-fir</u> – Mortality of Douglas-fir attributed to Douglas-fir beetle increased. Large groups were mapped near Reservation Ridge, White River, Tie Fork, Sixth Water Creek, and Fifth Water Creek.</li> <li>• <u>Engelmann spruce</u> – Mortality of Engelmann spruce attributed to Englemann spruce beetle increased. Large groups were mapped in Page Fork of Nebo Creek.</li> <li>• <u>Subalpine fir</u> – Mortality of subalpine fir attributed to western balsam bark beetle and other agents increased slightly. Large groups were recorded near Strawberry Ridge, the Mount Nebo Wilderness Area, and Black Canyon.</li> <li>• <u>White fir</u> – Mortality attributed to fir-engraver beetle increased from 1,000 to over 5,000 trees killed on the District. Large groups were mapped near Pole Canyon, Bear Canyon, Maple Lake, Beaver Dam Creek, and Pumphouse Hill.</li> </ul> <p><b>Defoliators</b></p> <ul style="list-style-type: none"> <li>• <u>Subalpine fir</u> – Defoliation from western spruce budworm was mapped on approximately 50 acres near Spanish Fork Peak.</li> </ul>
<p>Riparian forest types Extent and distribution of old and mature (every 10 years).</p>	<p><b>2003:</b> Extent and distribution of old and mature will be evaluated within the 10-year reporting period. About 95 acres of riparian/bottomland vegetation (&lt; 1% of this type) were burned in FY 2003.</p>

Indicator	Monitoring
<p>Other forest types</p> <p>a. Extent and distribution of old and mature (every 10 years).</p> <p>b. Extent of insect/disease infestations (every 5 years).</p>	<p>For <b>oak/maple</b> cover types, desired future conditions include a heterogeneous mosaic of age classes, with young, mid, and old age classes represented across the landscape. Young age classes are not only important for ensuring sustainability of the oak communities across the landscape: they also provide young leaf and shoot growth for mule deer, elk, and moose. Young vegetative growth on oak and other woody species is more palatable and nutritious than older growth, and Gambel oak communities are important in providing critical winter range for big game on the Forest.</p> <p>For <b>pinyon/juniper</b> woodlands, desired future conditions include open stands with productive herbaceous growth. Disturbance is sufficient to prevent large-scale invasion of adjacent vegetation associations (e.g., sagebrush and mountain brush) by pinyon/juniper.</p> <p><b>2003:</b></p> <p>a. Extent and distribution of old and mature will be evaluated within the 5-year reporting period. Approximately 3,500 acres of mountain brush (approximately 1% of this type) and 500 acres of pinyon/juniper (approximately 1% of this type) burned on the Forest in FY 2003.</p> <p>b. None reported.</p>
<p>Sagebrush – Extent and distribution with &gt;15% sage canopy cover (every 10 years).</p>	<p>For <b>sagebrush</b> cover types, desired future conditions also include a heterogeneous mosaic of age classes, with young, mid, and old age classes represented across the landscape. Similar to Gambel oak, young vegetative growth is more palatable and nutritious than older growth, and sagebrush communities also provide critical and high value winter range for big game. Grass and forb growth is productive, providing forage for many species of wildlife including greater sage grouse. Non-native annual grasses like cheatgrass and noxious weeds are not increasing in cover.</p> <p><b>2003:</b> Extent and distribution of sagebrush with greater than 15% canopy cover will be evaluated within the 5-year reporting period. Range condition and trend data was collected at 11 sagebrush study sites in 2003. One of these sites was judged to be in early seral ecological status, six in mid-seral ecological status, and four in late seral ecological status. Range trend data for these sagebrush study sites indicated trends were upward at three sites, stable at three sites, and downward at three sites.</p> <p>Approximately 450 acres of sagebrush/grass (approximately 0.2% of this type) burned in FY 2003.</p>
<p>Other rangeland types – Extent, distribution, and trend (every 10 years).</p>	<p><b>2003:</b> Extent, distribution, and trend will be evaluated within the 10-year reporting period. Approximately 130 acres of grass burned in FY 2003. See discussion of range condition/trend presented previously in this document.</p>

10. Are management activities effective in preventing excessive **catastrophic fire** events?

**DFC:** Fire is effectively and safely reintroduced into the ecosystem wherever possible, and fuels levels and vegetation are moving towards desired future conditions. The reduction of fuels in the wildland urban interface protects homes, forest infrastructure, and sensitive watersheds from catastrophic wildfire. The Forest has implemented the National Fire Plan and associated Cohesive Strategy, President Bush’s Healthy Forests Initiative, and other forest policies. Fuels treatments consist of prescribed fire, wildland fire use, mechanical treatments, biological treatments, and other approved fuels treatment techniques. These treatments play an active role in the management of forested and non-forested vegetation health, rangeland health, wildlife habitat, watershed, and social concerns across the Forest. All fuels treatment methods are utilized to improve vegetation structure and age class diversity. Concurrent with this emphasis on fuels treatments, the Forest maintains an effective fire suppression organization that utilizes the appropriate management response to fires. Assessments for determining whether hazard fuel reductions are necessary have been completed. The Wasatch Front Fuels Assessment prioritizes treatment areas across state, local, and federal boundaries.

Indicator	Monitoring
Acreage of human and naturally ignited wildland fire and wildland fire use (every 5 years).	<b>2003:</b> A total of 77 fires burned on the Uinta in FY 2003; 72 of these fires were caused by lightning. A total of about 8,175 acres were burned.

Indicator	Monitoring																																																																
Fire condition classes (every 5 years).	<p data-bbox="573 237 1923 467"> <b>2003:</b> Fire condition class and regime were evaluated for the Forest as part of the revision of the Forest Plan. Condition class was derived from the professional expertise of the Plant Ecologist, Fire Ecologist, Fire Management Officer, and content found in <i>Fire Ecology of Forest and Woodlands in Utah</i> (Bradley, Nonan, and Fischer, USDA FS Intermountain Research Station, GTR INT-287.1992) and <i>Fire Effects Information System</i> (USDA Rocky Mountain Research Station, Fire Sciences Laboratory, web application available at: <a href="http://www.fs.fed.us/database/feis">http://www.fs.fed.us/database/feis</a>, 2002). The findings presented in the FEIS for the 2003 Forest Plan are summarized below.                     </p> <p data-bbox="894 505 1608 532" style="text-align: center;"> <b>Fire Condition Classes on the Uinta National Forest</b> </p> <table border="1" data-bbox="621 570 1881 1198"> <thead> <tr> <th data-bbox="621 570 1377 634">Vegetation Type</th> <th data-bbox="1377 570 1545 634">Acres</th> <th data-bbox="1545 570 1713 634">% of Forest</th> <th data-bbox="1713 570 1881 634">Condition Class</th> </tr> </thead> <tbody> <tr> <td data-bbox="621 634 1377 672">Aspen, aspen/conifer, conifer/aspen, and aspen/forb</td> <td data-bbox="1377 634 1545 672">269,260</td> <td data-bbox="1545 634 1713 672">30</td> <td data-bbox="1713 634 1881 672">2, 3</td> </tr> <tr> <td data-bbox="621 672 1377 709">Sagebrush/grass</td> <td data-bbox="1377 672 1545 709">160,660</td> <td data-bbox="1545 672 1713 709">18</td> <td data-bbox="1713 672 1881 709">2, 3</td> </tr> <tr> <td data-bbox="621 709 1377 779">Englemann spruce, subalpine fir, lodgepole pine, and mixed conifer</td> <td data-bbox="1377 709 1545 779">78,690</td> <td data-bbox="1545 709 1713 779">9</td> <td data-bbox="1713 709 1881 779">2, 3</td> </tr> <tr> <td data-bbox="621 779 1377 816">Barren land</td> <td data-bbox="1377 779 1545 816">36,840</td> <td data-bbox="1545 779 1713 816">4</td> <td data-bbox="1713 779 1881 816">N/A</td> </tr> <tr> <td data-bbox="621 816 1377 854">Oak brush-maple and mountain brush</td> <td data-bbox="1377 816 1545 854">226,540</td> <td data-bbox="1545 816 1713 854">25</td> <td data-bbox="1713 816 1881 854">2, 3</td> </tr> <tr> <td data-bbox="621 854 1377 891">Douglas-fir</td> <td data-bbox="1377 854 1545 891">13,750</td> <td data-bbox="1545 854 1713 891">2</td> <td data-bbox="1713 854 1881 891">2, 3</td> </tr> <tr> <td data-bbox="621 891 1377 928">Pinyon and juniper</td> <td data-bbox="1377 891 1545 928">43,370</td> <td data-bbox="1545 891 1713 928">5</td> <td data-bbox="1713 891 1881 928">2, 3</td> </tr> <tr> <td data-bbox="621 928 1377 966">Riparian</td> <td data-bbox="1377 928 1545 966">17,560</td> <td data-bbox="1545 928 1713 966">2</td> <td data-bbox="1713 928 1881 966">2, 3</td> </tr> <tr> <td data-bbox="621 966 1377 1003">Sagebrush/grass</td> <td data-bbox="1377 966 1545 1003">25,380</td> <td data-bbox="1545 966 1713 1003">3</td> <td data-bbox="1713 966 1881 1003">1</td> </tr> <tr> <td data-bbox="621 1003 1377 1040">Oak/mountain brush</td> <td data-bbox="1377 1003 1545 1040">16,690</td> <td data-bbox="1545 1003 1713 1040">2</td> <td data-bbox="1713 1003 1881 1040">1</td> </tr> <tr> <td data-bbox="621 1040 1377 1078">Other conifer</td> <td data-bbox="1377 1040 1545 1078">4,130</td> <td data-bbox="1545 1040 1713 1078">&lt;0.5</td> <td data-bbox="1713 1040 1881 1078">1</td> </tr> <tr> <td data-bbox="621 1078 1377 1115">Aspen/forbs</td> <td data-bbox="1377 1078 1545 1115">2,200</td> <td data-bbox="1545 1078 1713 1115">&lt;0.5</td> <td data-bbox="1713 1078 1881 1115">1</td> </tr> <tr> <td data-bbox="621 1115 1377 1153">Douglas-fir</td> <td data-bbox="1377 1115 1545 1153">1,500</td> <td data-bbox="1545 1115 1713 1153">&lt;0.5</td> <td data-bbox="1713 1115 1881 1153">1</td> </tr> <tr> <td data-bbox="621 1153 1377 1190">Unknown vegetation (not mapped)</td> <td data-bbox="1377 1153 1545 1190">815</td> <td data-bbox="1545 1153 1713 1190">N/A</td> <td data-bbox="1713 1153 1881 1190">N/A</td> </tr> <tr> <td data-bbox="621 1190 1377 1198">Total vegetation</td> <td data-bbox="1377 1190 1545 1198">897,385</td> <td data-bbox="1545 1190 1713 1198">100</td> <td data-bbox="1713 1190 1881 1198">N/A</td> </tr> </tbody> </table> <p data-bbox="573 1235 1703 1263">                     Condition classes will be reevaluated every 5 years in accordance with the Forest Plan.                 </p>	Vegetation Type	Acres	% of Forest	Condition Class	Aspen, aspen/conifer, conifer/aspen, and aspen/forb	269,260	30	2, 3	Sagebrush/grass	160,660	18	2, 3	Englemann spruce, subalpine fir, lodgepole pine, and mixed conifer	78,690	9	2, 3	Barren land	36,840	4	N/A	Oak brush-maple and mountain brush	226,540	25	2, 3	Douglas-fir	13,750	2	2, 3	Pinyon and juniper	43,370	5	2, 3	Riparian	17,560	2	2, 3	Sagebrush/grass	25,380	3	1	Oak/mountain brush	16,690	2	1	Other conifer	4,130	<0.5	1	Aspen/forbs	2,200	<0.5	1	Douglas-fir	1,500	<0.5	1	Unknown vegetation (not mapped)	815	N/A	N/A	Total vegetation	897,385	100	N/A
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11. Are **goods and services** being provided in accordance with Forest Plan goals and objectives?

**DFC:** Management of the Forest contributes both tangible and intangible social and economic benefits to communities. Quality of life is maintained and enhanced by factors such as the availability of a variety of recreational opportunities, the ability to view sustainable populations of wildlife and fish in quality habitats, maintenance and improvement of air quality and water quality and quantity, and the ability to retreat from fast-paced urban life in a variety of forest settings. The economic diversity of local communities is enhanced by providing sustainable and predictable levels of goods and services such as recreation, wood products, forage, and other products consistent with management direction and ecosystem health. Forest landscapes and activities contribute to a sense of place and members of the public are assured that the ecosystems of the Uinta National Forest are maintained and/or improved for the benefit of current and future generations. Timber harvest activities conducted to achieve management objectives provide opportunities for the local dependant timber industry. Grazing opportunities are maintained on 71 open cattle and sheep allotments and continue to support the livestock industry in the local communities.

Indicator	Monitoring
Allowable Timber Sale Quantity (annually).	<p><b>Goal:</b> Over a 10-year period, average 0 to 1,725 CCF (hundred cubic feet)/year</p> <p><b>2003:</b> No timber sales harvesting timber included in the allowable timber sale program quantity (i.e., chargeable) were awarded in FY2003. However, one sale with 1,830 CCF of chargeable volume was offered in FY2003, but the contract was not awarded until FY2004. This quantity will be reported in FY2004.</p>
Total Timber Sale Program Quantity (annually).	<p><b>Goal:</b> Over a 10-year period, average 3,190 CCF/year</p> <p><b>2003:</b> 388 CCF of timber sales were sold in FY2003, all of which was salvage volume. A salvage sale with an additional 952.33 CCF was advertised in FY2003, but the contract was not awarded until FY2004. An additional 1027.65 CCF of personal use firewood permits were sold (see following section).</p>
Other Forest products (Fuelwood and Christmas Trees Permits) (annually).	<p><b>Goal:</b> Fuelwood demand has dropped substantially, ranging between 649 and 1,615 CCF per year over the last 10 years. Average demand over the last 25 years was about 3,875 CCF. Supplies have been provided primarily by the Heber Ranger District through collection of dead and down material and utilization of logging debris. Currently, the fuelwood supply is limited by access, but is adequate to meet or exceed demand. Demand over the next few years for fuelwood is expected to stay at about the same level. The objective stated in the Forest Plan is to provide 800-1,200 cords of fuelwood per year. This is approximately equal to 1,025-1,535 CCF.</p> <p>Christmas tree permits are issued on the Heber and Spanish Fork Ranger Districts. Commercial Christmas tree sales are not offered on the Forest. Personal-use Christmas tree permits are offered. Demand for permits remains extremely high on the Heber Ranger District and permits are sold out within</p>



Indicator	Monitoring																																		
	<p>a few hours of going on sale.</p> <p><b>2003:</b> <b>Timber Products Sold On the Uinta National Forest</b></p> <table border="1" data-bbox="716 363 1787 591"> <thead> <tr> <th data-bbox="716 363 1041 440">Year</th> <th data-bbox="1041 363 1394 440">Fuelwood Sold (CCF)</th> <th data-bbox="1394 363 1787 440">Christmas Tree Permits Sold (Number of Trees)</th> </tr> </thead> <tbody> <tr> <td data-bbox="716 440 1041 483">1983-2002 (average)</td> <td data-bbox="1041 440 1394 483">1,117.3</td> <td data-bbox="1394 440 1787 483">1,772</td> </tr> <tr> <td data-bbox="716 483 1041 537">2003</td> <td data-bbox="1041 483 1394 537">1,079.5</td> <td data-bbox="1394 483 1787 537">1,989</td> </tr> <tr> <td data-bbox="716 537 1041 591">Forest Plan objective</td> <td data-bbox="1041 537 1394 591">1,025-1,535</td> <td data-bbox="1394 537 1787 591">N/A</td> </tr> </tbody> </table>	Year	Fuelwood Sold (CCF)	Christmas Tree Permits Sold (Number of Trees)	1983-2002 (average)	1,117.3	1,772	2003	1,079.5	1,989	Forest Plan objective	1,025-1,535	N/A																						
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2003	1,079.5	1,989																																	
Forest Plan objective	1,025-1,535	N/A																																	
<p>Level of permitted livestock grazing (annually).</p>	<p><b>2003:</b> There are 71 open and 69 active allotments. No grazing was permitted on the Pleasant Grove Ranger District.</p> <p><b>Grazing Animal Unit Months on the Uinta National Forest</b></p> <table border="1" data-bbox="730 773 1772 987"> <thead> <tr> <th data-bbox="730 773 905 857" rowspan="2">Type</th> <th colspan="2" data-bbox="905 773 1052 813">Heber</th> <th colspan="2" data-bbox="1052 773 1486 813">Spanish Fork</th> <th colspan="2" data-bbox="1486 773 1772 813">Total</th> </tr> <tr> <th data-bbox="905 813 1041 857">Cattle</th> <th data-bbox="1041 813 1178 857">Sheep</th> <th data-bbox="1052 813 1188 857">Cattle</th> <th data-bbox="1188 813 1486 857">Sheep</th> <th data-bbox="1486 813 1623 857">Cattle</th> <th data-bbox="1623 813 1772 857">Sheep</th> </tr> </thead> <tbody> <tr> <td data-bbox="730 857 905 901">Permitted</td> <td data-bbox="905 857 1041 901">--</td> <td data-bbox="1041 857 1178 901">--</td> <td data-bbox="1052 857 1188 901">--</td> <td data-bbox="1188 857 1486 901">--</td> <td data-bbox="1486 857 1623 901">62,286</td> <td data-bbox="1623 857 1772 901">124,386</td> </tr> <tr> <td data-bbox="730 901 905 945">Authorized</td> <td data-bbox="905 901 1041 945">19,995</td> <td data-bbox="1041 901 1178 945">29,841</td> <td data-bbox="1052 901 1188 945">29,181</td> <td data-bbox="1188 901 1486 945">1,415</td> <td data-bbox="1486 901 1623 945">49,176</td> <td data-bbox="1623 901 1772 945">31,256</td> </tr> <tr> <td data-bbox="730 945 905 987">Actual</td> <td data-bbox="905 945 1041 987">19,624</td> <td data-bbox="1041 945 1178 987">29,118</td> <td data-bbox="1052 945 1188 987">29,181</td> <td data-bbox="1188 945 1486 987">1,415</td> <td data-bbox="1486 945 1623 987">48,805</td> <td data-bbox="1623 945 1772 987">30,533</td> </tr> </tbody> </table>	Type	Heber		Spanish Fork		Total		Cattle	Sheep	Cattle	Sheep	Cattle	Sheep	Permitted	--	--	--	--	62,286	124,386	Authorized	19,995	29,841	29,181	1,415	49,176	31,256	Actual	19,624	29,118	29,181	1,415	48,805	30,533
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<p>Acres leased for oil and gas exploration (annually).</p>	<p><b>2003:</b> One lease for 911.30 acres was issued in FY 2003.</p>																																		
<p>Number of recreation Special Use permits (annually).</p>	<p><b>2003:</b> 226 permits</p>																																		
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12. Are we providing a diversity of **recreational opportunities** while protecting natural resources? Are conflicts between user groups minimal?

**DFC:** Summer use dispersed recreation management plans are developed. Developed recreation sites are managed to meaningful measures standards. Recreation special uses have site plans and are managed to standard. Travel management plans have been completed, and motorized trails have been built or reconstructed to meet trail standards. The portions of the Bonneville Shoreline Trail that are on the Forest have been completed. Off-highway vehicle (OHV) and all-terrain vehicle (ATV) use is limited to existing roads and trails, reducing indiscriminate use that causes resource damage in critical watersheds and habitats.

Indicator	Monitoring
Acreage with approved Travel Management Plan (every 5 years).	<b>2003:</b> The Forest Plan was implemented in July 2003. During the remaining months of FY 2003 no travel management plans were developed. It is anticipated that during FY 2004, travel management planning will be initiated for the Vernon Unit.
Miles of non-motorized trail (annually).	<b>2003:</b> 339
Miles of motorized trail and road opportunities (annually).	<b>2003:</b> 325
Miles of trails groomed for winter use (annually).	<b>2003:</b> 154
Trailheads maintained for winter use (annually).	<b>2003:</b> 14 trailheads are maintained for winter use. Three are specifically designated for cross-country skiing.
Campground capacity (annually).	<b>2003:</b> 12,581,000 PAOTS; 31,551 sites.
Developed recreation sites meeting accessibility (ADA) standards (every 5 years).	The Americans with Disabilities Act (ADA) requires that after January 1992, design and construction of facilities or part of a facility constructed by, on behalf of, or for the use of a public entity, shall be designed and constructed in such manner that the facility or part of the facility is readily accessible to and usable by individuals with disabilities. Also after January 1992, each facility or part of a facility altered by, on behalf of, or for the use of a public entity in a manner that affects or could affect the usability of the facility or part of the facility shall, to the maximum extent feasible, be altered in such manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities. Design, construction, or alteration of facilities will be in conformance with the Uniform Federal Accessibility Standards (UFAS) (Appendix A to 41 CFR Part 101-19.6).

Indicator	Monitoring																																				
	<p data-bbox="573 233 1835 334">Subject to the provisions of ADA, no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity.</p> <p data-bbox="573 370 1919 534"><b>2003:</b> Replacement and construction of facilities has been conducted with the intent to provide for accessibility. The following table summarizes the Uinta National Forest’s status as of 2003 relative to efforts to provide accessible recreation sites. This data is not currently complete in the INFRA database as accessibility is a new INFRA field and will be populated as the Forest works towards the completion of the next five years of inventory and condition surveys.</p> <p data-bbox="751 570 1751 602" style="text-align: center;"><b>Accessible Developed Recreation Facilities on the Uinta National Forest</b></p> <table border="1" data-bbox="808 634 1696 1182"> <thead> <tr> <th data-bbox="814 639 1186 711">Developed Recreation Types</th> <th data-bbox="1186 639 1438 711">Number of Sites</th> <th data-bbox="1438 639 1690 711">Number Accessible</th> </tr> </thead> <tbody> <tr> <td data-bbox="814 711 1186 751">Family campgrounds</td> <td data-bbox="1186 711 1438 751">27</td> <td data-bbox="1438 711 1690 751">7</td> </tr> <tr> <td data-bbox="814 751 1186 792">Family picnic areas</td> <td data-bbox="1186 751 1438 792">8</td> <td data-bbox="1438 751 1690 792">1</td> </tr> <tr> <td data-bbox="814 792 1186 833">Group campgrounds</td> <td data-bbox="1186 792 1438 833">4</td> <td data-bbox="1438 792 1690 833">0</td> </tr> <tr> <td data-bbox="814 833 1186 873">Group picnic grounds</td> <td data-bbox="1186 833 1438 873">3</td> <td data-bbox="1438 833 1690 873">0</td> </tr> <tr> <td data-bbox="814 873 1186 914">Trailheads</td> <td data-bbox="1186 873 1438 914">26</td> <td data-bbox="1438 873 1690 914">3</td> </tr> <tr> <td data-bbox="814 914 1186 954">Visitor/interpretive sites</td> <td data-bbox="1186 914 1438 954">10</td> <td data-bbox="1438 914 1690 954">4</td> </tr> <tr> <td data-bbox="814 954 1186 995">Fishing access</td> <td data-bbox="1186 954 1438 995">14</td> <td data-bbox="1438 954 1690 995">2</td> </tr> <tr> <td data-bbox="814 995 1186 1036">Boating access</td> <td data-bbox="1186 995 1438 1036">5</td> <td data-bbox="1438 995 1690 1036">0</td> </tr> <tr> <td data-bbox="814 1036 1186 1076">Nordic ski areas</td> <td data-bbox="1186 1036 1438 1076">2</td> <td data-bbox="1438 1036 1690 1076">0</td> </tr> <tr> <td data-bbox="814 1076 1186 1117">Snow parks</td> <td data-bbox="1186 1076 1438 1117">6</td> <td data-bbox="1438 1076 1690 1117">2</td> </tr> <tr> <td data-bbox="814 1117 1186 1177">Observation points</td> <td data-bbox="1186 1117 1438 1177">7</td> <td data-bbox="1438 1117 1690 1177">6</td> </tr> </tbody> </table> <p data-bbox="573 1214 1913 1351">Over the last five years, the Forest has replaced 57 of the 214 toilets on inventory with accessible units. Two of the family campgrounds have also been rebuilt to make them accessible facilities. Accessible facilities are in other sites that have not been reported because access to the facilities is not completed or does not currently meet standards.</p>	Developed Recreation Types	Number of Sites	Number Accessible	Family campgrounds	27	7	Family picnic areas	8	1	Group campgrounds	4	0	Group picnic grounds	3	0	Trailheads	26	3	Visitor/interpretive sites	10	4	Fishing access	14	2	Boating access	5	0	Nordic ski areas	2	0	Snow parks	6	2	Observation points	7	6
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Indicator	Monitoring
Day-use developed site capacity (annually).	<p><b>2003:</b> 17,405 PAOTS.</p>
Scenery Management Objectives compliance (every 5 years).	<p><b>2003:</b> The Forest Plan states that resource uses or activities should meet the assigned objectives for scenery management, and that in the short-term there may be activities that produce impacts not meeting planned scenery objectives, yet facilitate a higher level of scenic quality in the long-term.</p> <p>The Silver Meadows Fence involved construction of a fence to protect a rare plant species. The project area is adjacent to a road, and has an assigned visual quality objective of maximum modification. A buck and pole fence was used as it requires minimal ground disturbance and uses native materials that borrow aesthetically from the surrounding environment. The project complies with Forest Plan direction, which defines maximum modification as:</p> <p style="padding-left: 40px;">Management activities of vegetative and landform alterations may dominate the characteristic landscape; however, when viewed as background, the visual characteristics must be those of natural occurrences within the surrounding area or character type. When viewed as foreground or middleground, they may not appear to completely borrow from naturally established form, line, color, or texture. Alterations may be out of scale or contain detail that is incongruent with natural occurrences as seen in foreground or middleground (2003 Forest Plan, Glossary-34).</p> <p>Most range projects on the Forest have limited obvious impacts on visual quality. However, structural range improvements can create more noticeable visual impacts. In FY 2003, the Strawberry River Fence was approved and constructed. This fence is located near a road, and is in an area with an assigned visual quality objective of partial retention. A buck and pole fence was used as it requires minimal ground disturbance and uses native materials that borrow aesthetically from the surrounding environment. The project complies with Forest Plan direction, which defines partial retention as:</p> <p style="padding-left: 40px;">Management activities remain visually subordinate to the characteristic landscape. Management activities should repeat form, line, color, or texture common to the characteristic landscape; however, structures can introduce form, line, color, or texture that are found infrequently or not at all in the characteristic landscape. Reduction in form, line, color, and texture to meet Partial Retention should be accomplished as soon after project completion as possible or, at a minimum, within the first year after project completion (2003 Forest Plan, Glossary-33).</p>

Indicator	Monitoring
Compliance with travel management direction (every 5 years).	<b>2003:</b> 55 incident reports, 157 violation notices, 137 written warnings. This is a static trend from past years. Additionally, the Uinta National Forest has cooperative agreements with Juab, Utah, and Wasatch Counties for enforcement on National Forest System lands.
Compliance with wilderness direction (every 5 years).	<b>2003:</b> No violation notices were issued. Generally there are 10-15 issued per year. This suggests a downward trend for FY 2003.
Non-Forest Service participant assistance in compliance, education, and enforcement (every 5 years).	<p><b>2003:</b> The Bureau of Land Management (BLM), Utah State Parks, Utah Division of Wildlife Resources, Wasatch County, Utah County, and Juab County assisted the Forest in two OHV patrols on National Forest System lands. Two volunteers on the Pleasant Grove Ranger District contact other Forest users while working on mountain bike trails to encourage them to follow Forest Service rules.</p> <p>The Timpanogos Emergency Response Team (TERT) on Mount Timpanogos makes approximately 55-110 contacts each weekend about staying safe and following Forest Service rules.</p> <p>Timpanogos Cave National Monument and the Uinta National Forest are partners in a Recreation Fee Demonstration (Fee Demo) Project in American Fork Canyon. The Park Service provides four seasonal employees for a total of about 4,156 hours each year. These employees provide maps, safety information, wildlife information, and answers to the public's questions. Additionally, the National Park Service provides a supervisor who spends approximately 40% of her time working directly with the fee booths. The Timpanogos Cave Visitor's Center also provides educational information to people using National Forest System lands. In 2003 National Park Service personnel conducted 45 summer campfire programs at which people camping on National Forest System lands were welcome. Park Service personnel participate in campfire patrols in the canyon and in educating cub scouts and the public about the Leave No Trace program, fire restrictions, and fire safety. The Park Service Junior Ranger program is used to educate children.</p> <p>On the Spanish Fork Ranger District, many partners team up with the Uinta National Forest to provide public education. These include the National Wild Turkey Federation, Sportsmen for Fish and Wildlife, Hawkwatch International, Boy Scouts of America, Tread Lightly Inc., Utah Society of Environmental Education, Brigham Young University, Nebo School District, Norfolk Homeowner's Association, Environmental Protection Agency, U.S. Fish and Wildlife Service, Bureau of Land Management, State Lands, Fish and Forestry, Alcoa, Neways, and Utah Division of Wildlife Resources. These partners provide individuals who educate the public at events including Jake's Day, Women in the Outdoors, National Public Lands Day, and Fishing Derby Day. Representatives from these groups help to provide information to students in the Diamond Fork Youth Forest and teach private landowners adjacent to the</p>

Indicator	Monitoring
	<p>Forest how to reduce fuels and decrease the risk of wildfire.</p> <p>The Forest has cooperative agreements with Juab, Tooele, Utah, and Wasatch Counties for law enforcement. These agreements provide funds to these counties for their assistance in patrolling National Forest System lands. As part of this agreement Wasatch County law enforcement officers spent about 935 hours patrolling National Forest System lands. Patrol hour data for the other counties is not available.</p>

13. Is adequate **access** to and across the Forest being provided?

**DFC:** Miles of classified roads remain relatively unchanged. The Forest is well accessible with many roads in place and functioning for many years. Roads (particularly arterial and collector roads) are maintained and constructed to a standard that is providing a safe economical facility. Local roads provide access to and through the area. Ecosystem integrity, public safety, and available funding are in balance with access needs and desires to maintain a minimum road system. When possible, roads or portions of roads that have negatively affected watershed and aquatic conditions are relocated or hardened.

Indicator	Monitoring
Miles of classified road (annually).	<b>2003:</b> 1,217
Miles of classified road open for public use (every 5 years).	<b>2003:</b> 1,121
Miles of new road construction (annually).	<b>2003:</b> 0
Miles of classified roads reconstructed or relocated (annually).	<b>2003:</b> 9.1 miles were reconstructed or relocated. Additional work accomplished - 8 miles of road were identified under deferred maintenance for access improvement.
Miles of classified road maintained (annually).	<b>2003:</b> 480.79
Miles of unclassified road decommissioned (annually).	<b>2003:</b> 4
Miles of unclassified road (every 10 years).	<b>2003:</b> Inventory is incomplete. Currently estimated to be about 155 miles.