

# **Uinta National Forest**

State of the Forest Report  
For  
Fiscal Year 2004

September 2005

## **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 (Chapter 6 in the Forest Plan) and summarizes the monitoring that was conducted in Fiscal Year 2004 (10/1/2003 – 9/30/2004). 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> <p>a. Goshawk territory activity (annually survey at least one third of known territories and post the results; evaluate trends/results every five years).</p> <p>b. Habitat conditions (every 5 years).</p>	<p><b>Description:</b> In addition to being classified as a Management Indicator Species, the northern goshawk is also classified as sensitive by the Intermountain Region of the Forest Service. This species is widely distributed throughout North America and Eurasia. In Utah, goshawks are widely distributed throughout the mountainous areas. Goshawks are typically permanent residents or short-distance migrants. 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, and 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.</p> <p>Goshawk populations on the Uinta National Forest are most likely to be potentially impacted by timber, fire, and vegetation management. The Forest monitors goshawk territory occupancy as an index of goshawk population trend. Percent territory occupancy is assumed to be positively correlated with goshawk population abundance. Each year at least one third of known goshawk territories are monitored, and surveys are conducted in project areas to try to find previously unknown territories.</p> <p>The Forest has information on goshawk territory occupancy dating back to the early 1980s. In 2001, 46% of the goshawk territories monitored were occupied. In 2002, 64% of the territories monitored were occupied.</p> <p><b>2003:</b> a. Five of 14 (36%) goshawk territories monitored were occupied.</p> <p>b. Habitat conditions will be evaluated and reported at the prescribed 5-year interval (2008).</p> <p><b>2004:</b> a. Six of 15 (40%) goshawk territories monitored were occupied. These monitoring data provide no evidence that goshawk population trend has been declining on the Uinta National Forest in recent years.</p>

Indicator	Monitoring
<p><b>American beaver:</b>                      Number of active beaver dams (at least 20% of sample streams/ watersheds measured and reported annually; evaluate population trends/results every five years).</p>	<p>b. Habitat conditions will be evaluated and reported at the prescribed 5-year interval (2008).</p> <p><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 in drainages that are not too steep and have permanent stream flow and sufficient woody food resources. On the Uinta National Forest, primary woody food resources are willow, aspen, and in lower-elevation riparian forests, cottonwood and alder. 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>Livestock grazing, fire, water uses, and vegetation management are the management activities on the Forest most likely to impact beaver. Livestock grazing impacts levels of herbaceous vegetation, willow, and aspen, all of which are important food resources for beaver. Water use projects can result in inadequate stream flows to support beavers and their habitat. Many ecologists believe that fire suppression efforts have reduced the occurrence of wildfire during the past century and this is resulting in loss of aspen forest due to conifer encroachment in many areas of the Intermountain West. Loss of aspen forest negatively affects beaver because aspen is such an important source of food and construction material for beavers. Prescribed burning and mechanical treatments designed to reduce conifer encroachment and increase areas of young aspen will improve beaver habitat.</p> <p>The beaver is useful as an indicator species because it is a riparian obligate species and forest management activities and/or uses can 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>Several areas and drainages have been surveyed in the past for beaver presence and/or population trends. Population trend of beavers in the upper Strawberry River watershed was assessed by counting beaver dams and colonies on aerial photos dating back to 1938.</p>

Indicator	Monitoring																								
	<p data-bbox="585 269 1871 331" style="text-align: center;"><b>Numbers of Beaver Dams and Colonies Counted on Aerial Photos in Upper Strawberry River Watershed</b></p> <table border="1" data-bbox="617 367 1791 646"> <thead> <tr> <th data-bbox="617 367 1005 404">Year of Aerial Photos</th> <th data-bbox="1012 367 1400 404">Beaver Colonies</th> <th data-bbox="1407 367 1791 404">Beaver Dams</th> </tr> </thead> <tbody> <tr> <td data-bbox="617 409 1005 436">1938</td> <td data-bbox="1012 409 1400 436">3</td> <td data-bbox="1407 409 1791 436">15</td> </tr> <tr> <td data-bbox="617 441 1005 469">1956</td> <td data-bbox="1012 441 1400 469">66</td> <td data-bbox="1407 441 1791 469">335</td> </tr> <tr> <td data-bbox="617 474 1005 501">1964</td> <td data-bbox="1012 474 1400 501">68</td> <td data-bbox="1407 474 1791 501">329</td> </tr> <tr> <td data-bbox="617 506 1005 534">1971</td> <td data-bbox="1012 506 1400 534">72</td> <td data-bbox="1407 506 1791 534">362</td> </tr> <tr> <td data-bbox="617 539 1005 566">1984</td> <td data-bbox="1012 539 1400 566">90</td> <td data-bbox="1407 539 1791 566">545</td> </tr> <tr> <td data-bbox="617 571 1005 599">1987</td> <td data-bbox="1012 571 1400 599">77</td> <td data-bbox="1407 571 1791 599">333</td> </tr> <tr> <td data-bbox="617 604 1005 631">1998</td> <td data-bbox="1012 604 1400 631">66</td> <td data-bbox="1407 604 1791 631">259</td> </tr> </tbody> </table> <p data-bbox="533 683 1881 878"><b>2003:</b> The Forest Plan states that a Forest-wide monitoring protocol for monitoring beavers will be developed (p.6-6). A new protocol for monitoring beaver population trend was drafted and tested on the Nebo Unit. Fourteen sections within the Nebo Unit were randomly selected to be surveyed in October 2003. Six of these sections were considered to be too steep to include suitable beaver habitat and were not ground surveyed. Of the 8 sections ground surveyed, 1 active beaver colony was found in each of 2 sections.</p> <p data-bbox="533 919 1902 1081">In addition; 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 on the portions of the 10 streams surveyed.</p> <p data-bbox="533 1122 1881 1317"><b>2004:</b> A total of 44 sections were surveyed across the Uinta National Forest (44 square miles or 28,160 acres). Eight of 44 (18%) sections contained at least 1 active beaver colony. The density of active colonies was 0.48 colonies/mile<sup>2</sup> (a total of 21 active colonies/44 sections). Densities of beaver colonies reported in the literature vary greatly, ranging from 0 colonies/mile<sup>2</sup> to 11.9 colonies/mile<sup>2</sup>. Many old, abandoned beaver colonies were found, especially in areas where aspen had declined due to conifer encroachment, and in areas with either no or only small willow communities.</p>	Year of Aerial Photos	Beaver Colonies	Beaver Dams	1938	3	15	1956	66	335	1964	68	329	1971	72	362	1984	90	545	1987	77	333	1998	66	259
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Indicator	Monitoring
<p><b>American three-toed woodpecker:</b></p> <ul style="list-style-type: none"> <li>a. Index of population abundance (Breeding Bird Surveys will be conducted and results reported annually).</li> <li>b. Habitat conditions (every 5 years).</li> </ul>	<p><b>Description:</b> In addition to being classified as a Management Indicator Species on the Uinta National Forest, the American 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. This species is widely distributed throughout boreal and subalpine forests of North America. It occurs 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 dead portions of live trees. Most of their diet consists of wood-boring beetles and caterpillars that attack conifers. Densities of three-toed woodpeckers can increase substantially in response to spruce beetle (<i>Dendroctonus rufipennis</i>) outbreaks.</p> <p>Timber management and fire are the activities on the Uinta National Forest most likely to affect three-toed woodpecker populations. The three-toed woodpecker is closely associated with old forest structural characteristics in spruce/fir forests, the forest type in which much of the timber harvesting on the Uinta National Forest 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 areas have been surveyed to determine three-toed woodpecker populations and densities in the survey areas. In addition, annual surveys have been conducted on three Breeding Bird Survey (BBS) routes located on the Uinta National Forest (one since 1980, one since 1992, and one since 1996). Data from these surveys is summarized in the following table:</p>

Indicator	Monitoring													
	<b>Three-toed Woodpeckers Detected on Breeding Bird Surveys on the Uinta NF, 1992-2004</b>													
	<sup>1/</sup> BBS Route	Number of Birds Detected												
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Soapstone	0	NS	NS	NS	2	0	NS	0	0	1	2	0	1
	Heber Mtn	NS	NS	NS	NS	0	1	1	0	0	0	0	0	1
	Sheep Creek	0	0	0	0	0	0	0	0	0	0	0	0	0
	NS: Indicates the route was not surveyed that year.													
	<sup>1/</sup> This is the official data off the BBS website. <sup>2/</sup> The 2003 State of the Forest Report had 2 detections listed for 2003 on the Soapstone route but 0 detections are listed here. This is because the route was surveyed on three dates and 2 woodpeckers were detected on the third day. However, the official BBS website only reports the first survey's data and no three-toeds were detected on the first survey													
	Although this woodpecker species is widely distributed, it occurs at relatively low densities in most areas. Population trend analysis for three-toed woodpeckers was conducted using data published on the Breeding Bird Survey website ( <a href="http://www.mbr-pwrc.usgs.gov/bbs/trend/tf04.html">http://www.mbr-pwrc.usgs.gov/bbs/trend/tf04.html</a> ). Trend analysis was conducted at the spatial scale of the western BBS region because of the low densities of woodpeckers on the three BBS routes on the Uinta National Forest. During the past 20 years (1984 to 2004), the population trend estimate was 10.22, which was a non-significant (P = 0.18) increase in population trend.													
	<b>2003:</b> a. The three BBS routes were surveyed (see above). In addition to the annual BBS surveys, the Forest Plan states that an additional Forest-wide monitoring protocol will be developed. In 2003, a more intensive three-toed woodpecker monitoring protocol was drafted and tested. A random sample of survey stations located across the Uinta National Forest was generated. The monitoring protocol is based on conducting broadcast surveys (playing a recording of three-toed woodpecker calls and drumming) at each survey station and determining the percentage of total survey stations at which three-toed woodpeckers respond. Eleven stations were surveyed. Eight three-toed woodpeckers were recorded at one station, and													

Indicator	Monitoring
	<p>none were encountered at the other 10 survey stations.</p> <p>b. Habitat conditions will be evaluated and reported at the prescribed 5-year interval (2008).</p> <p><b>2004:</b> a. As described previously, the three BBS routes were surveyed. In addition, surveys were conducted in accordance with the additional Forest-wide protocol that was drafted in 2003. Three-toed woodpeckers were detected at 14 of 43 (33%) survey stations across the Uinta National Forest. In addition, three-toed woodpeckers were detected at an additional 17 sites on the Forest during project surveys or incidental observations. Each detection represented a confirmed sighting of at least one three-toed woodpecker (1 to 4 three-toed woodpeckers were observed at each site). Three-toed woodpeckers were detected in spruce/fir, Douglas-fir, and lodgepole pine forest types, and were commonly detected in areas with spruce beetle activity.</p> <p>b. Habitat conditions will be evaluated and reported at the prescribed 5-year interval (2008).</p>
<p><b>Colorado River cutthroat trout:</b></p> <p>a. Population estimates (at least 33% of sample streams surveyed, and results reported annually; population trends will be evaluated and reported every 5 years).</p> <p>b. Habitat conditions (every 5 years).</p>	<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.</p> <p><b>2003:</b></p> <p>a. Eight streams, equating to 53% of the populations on the Forest, were surveyed for Colorado River cutthroat trout.</p>



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	<p><b>2003 Colorado River Cutthroat Trout Survey Results</b></p> <table border="1" data-bbox="535 334 1850 649"> <thead> <tr> <th data-bbox="535 334 940 371">Stream</th> <th data-bbox="940 334 1394 371">2003 CRCT fish/m*</th> <th data-bbox="1394 334 1850 371">2003 CRCT K-factor**</th> </tr> </thead> <tbody> <tr> <td data-bbox="535 371 940 409">Right Fork White River</td> <td data-bbox="940 371 1394 409">No estimate</td> <td data-bbox="1394 371 1850 409">1.01</td> </tr> <tr> <td data-bbox="535 409 940 446">Left Fork White River</td> <td data-bbox="940 409 1394 446">Channel dry in sample reach</td> <td data-bbox="1394 409 1850 446">Channel dry in sample reach</td> </tr> <tr> <td data-bbox="535 446 940 483">Middle Fork White River</td> <td data-bbox="940 446 1394 483">Channel dry in sample reach</td> <td data-bbox="1394 446 1850 483">Channel dry in sample reach</td> </tr> <tr> <td data-bbox="535 483 940 521">West Fork Duchesne #1</td> <td data-bbox="940 483 1394 521">0.21</td> <td data-bbox="1394 483 1850 521">0.97</td> </tr> <tr> <td data-bbox="535 521 940 558">West Fork Duchesne #2</td> <td data-bbox="940 521 1394 558">0.23</td> <td data-bbox="1394 521 1850 558">0.91</td> </tr> <tr> <td data-bbox="535 558 940 596">Little West Fork Duchesne</td> <td data-bbox="940 558 1394 596">0.66</td> <td data-bbox="1394 558 1850 596">1.08</td> </tr> <tr> <td data-bbox="535 596 940 633">Vat Creek</td> <td data-bbox="940 596 1394 633">0.21</td> <td data-bbox="1394 596 1850 633">0.99</td> </tr> <tr> <td data-bbox="535 633 940 670">Low Pass Creek</td> <td data-bbox="940 633 1394 670">Channel dry in sample reach</td> <td data-bbox="1394 633 1850 670">Channel dry in sample reach</td> </tr> </tbody> </table> <p data-bbox="579 686 894 716">* fish/m = fish per meter</p> <p data-bbox="579 719 1890 784">** 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 data-bbox="535 820 1869 885">Data indicates that there may be a slight upward trend in condition of cutthroat trout, but that population abundance appears static.</p> <p data-bbox="535 920 1707 950">b. Survey data will be summarized and habitat conditions evaluated and reported in 2008.</p> <p data-bbox="535 985 611 1015"><b>2004:</b></p> <p data-bbox="535 1018 1923 1115">a. The Forest Plan states that a Forest-wide monitoring protocol will be developed. In FY2004, a draft cutthroat trout monitoring protocol was developed. Sixteen streams, equating to 94% of the populations on the Forest, were surveyed for Colorado River cutthroat trout.</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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<p><b>Bonneville cutthroat trout:</b></p> <p>a. Population estimates (at least 33% of sample streams)</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>																																																					

Indicator	Monitoring									
<p>surveyed, and results reported annually; population trends will be evaluated and reported every 5 years).</p> <p>b. Habitat conditions (every 5 years).</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></p> <p>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="535 769 1801 907"> <thead> <tr> <th data-bbox="535 769 989 837">Stream Sampled</th> <th data-bbox="995 769 1394 837">2003 BCT Populations (fish/m*)</th> <th data-bbox="1400 769 1801 837">2003 Fish Condition Index (K-factor**)</th> </tr> </thead> <tbody> <tr> <td data-bbox="535 842 989 873">North Fork American Fork River</td> <td data-bbox="995 842 1394 873">0.37</td> <td data-bbox="1400 842 1801 873">0.98</td> </tr> <tr> <td data-bbox="535 878 989 907">Holman Creek</td> <td data-bbox="995 878 1394 907">0.19</td> <td data-bbox="1400 878 1801 907">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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Stream Sampled	2003 CT Populations (fish/m*)	2003 Fish Condition Index (K-factor**)											
Willow Creek	0.52	0.97											
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Indicator	Monitoring		
<b>2004 Bonneville Cutthroat Trout Survey Results</b>			
	<b>Stream Sampled</b>	<b>2004 BCT Populations (fish/m*)</b>	<b>2004 Fish Condition Index (K-factor**)</b>
	North Fork American Fork River	0.35	1.01
	South Fork American Fork River	BCT not observed	BCT not observed
	Mainstem American Fork River	BCT not observed	BCT not observed
	Fifth Water	0.07	1.10
	Chase Creek	0.04	1.20
	Shingle Mill	BCT not observed	BCT not observed
	Sixth Water	0.06	1.19
	Halls Fork	0.01	0.96
	Cottonwood Creek	0.17	1.02
	Upper Diamond Fork	0.01	1.08
	Lower Diamond Fork	BCT not observed	BCT not observed
	Tie Fork	BCT not observed	BCT not observed
	Nebo Creek	0.01	1.10
	Holman Creek	0.19	1.00
	Little Diamond Creek	0.32	1.10
	Wanrhodes	Channel dry in sample reach	Channel dry in sample reach
	Provo Deer Creek	BCT not observed	BCT not observed
	Right Fork Hobble Creek	BCT not observed	BCT not observed
	Left Fork Hobble Creek	BCT not observed	BCT not observed
	Wardsworth Creek	0.08	1.11
	Peteetneet Creek	0.69	1.08
	Wimmer Ranch Creek	0.46	1.14
<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 four Strawberry Reservoir tributaries. This species is not native in the Strawberry River drainage.</p>			

Indicator	Monitoring																	
	<p><b>2004 Bear Lake Cutthroat Trout Survey Results</b></p> <table border="1" data-bbox="537 334 1801 542"> <thead> <tr> <th data-bbox="537 334 989 402">Stream Sampled</th> <th data-bbox="997 334 1394 402">2004 CT Populations (fish/m*)</th> <th data-bbox="1402 334 1801 402">2004 Fish Condition Index (K-factor**)</th> </tr> </thead> <tbody> <tr> <td data-bbox="537 409 989 440">Willow Creek</td> <td data-bbox="997 409 1394 440">0.51</td> <td data-bbox="1402 409 1801 440">1.10</td> </tr> <tr> <td data-bbox="537 446 989 477">Upper Strawberry River #1</td> <td data-bbox="997 446 1394 477">0.83</td> <td data-bbox="1402 446 1801 477">0.95</td> </tr> <tr> <td data-bbox="537 483 989 514">Upper Strawberry River #2</td> <td data-bbox="997 483 1394 514">0.37</td> <td data-bbox="1402 483 1801 514">0.95</td> </tr> <tr> <td data-bbox="537 521 989 552">Bryant's Fork</td> <td data-bbox="997 521 1394 552">0.97</td> <td data-bbox="1402 521 1801 552">No Data</td> </tr> </tbody> </table> <p data-bbox="583 581 894 612">* fish/m = fish per meter</p> <p data-bbox="583 615 1890 678">** 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 data-bbox="537 716 1921 779">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 data-bbox="537 816 1709 847">b. Survey data will be summarized and habitat conditions evaluated and reported in 2008.</p>			Stream Sampled	2004 CT Populations (fish/m*)	2004 Fish Condition Index (K-factor**)	Willow Creek	0.51	1.10	Upper Strawberry River #1	0.83	0.95	Upper Strawberry River #2	0.37	0.95	Bryant's Fork	0.97	No Data
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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, Hobbie Creek, White River, and Diamond Fork), and on the Nebo Unit along Salt Creek.</p> <p>Bald eagle populations across North America continue to increase from the lows in 1970s that resulted from the 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 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> <p><b>2004:</b> Two standardized mid-winter surveys were conducted off-Forest by the UDWR. Fifty-three (53) eagles were counted on a survey route that starts in north of the Forest in Vernon, and goes toward Rush Valley and Ophir Canyon. A second survey starts near Fountain Green (southeast of the Nebo Unit), travels around Moroni, Freedom and Wales, and heads down through the Sanpete Valley. Eighty-</p>

Indicator	Monitoring
	<p>six (86) eagles were counted on this route. While neither of these routes are located on the Forest, the habitat covered in the surveys are similar to what is found on the Forest. Bald eagle roost mapping surveys, which occurs primarily off-Forest, were not conducted by the Division of Wildlife Resources in 2004.</p> <p>Bald eagles were also observed in the Diamond Fork area on four different days by students visiting the Diamond Fork Youth Forest. These sightings occurred between October and January, and involved at least 5 birds.</p>
<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 Endangered Species Act in 2000. Information on the status of Canada lynx on the Uinta National Forest was summarized as part of the viability assessment completed during revision of the Uinta National Forest’s Forest Plan. There are no known breeding populations of lynx in Utah, although historically the species regularly occurred throughout the Uinta Mountains. Two Lynx Analysis Units (LAUs) have been designated on the Uinta National Forest. They are located on the northern part of the Heber Ranger District in the Upper Provo River and West Fork Duchesne River drainages. Hair-snare surveys were conducted for lynx as part of the National Lynx Survey during 1999, 2000, and 2001 within these two LAUs, but no lynx was detected. Lynx inhabit high-elevation conifer forests in the Rocky Mountain region and feed on snowshoe hares, red squirrels, other small mammals, and forest grouse. Lynx typically den under logs, stumps, rocks, or thick patches of live vegetation.</p> <p><b>2003:</b> No observations were documented.</p> <p><b>2004:</b> Two different lynx were detected on the Uinta National Forest. Both were animals that had been translocated to Colorado and had collars. A male lynx passed through the Strawberry Valley area in July 2004. A female lynx was located at several locations on the Forest during fall 2004. Both lynx kept moving, did not stay in one area for more than a week, and eventually moved off the Forest.</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</p>



Indicator	Monitoring
	<p>surveys have also been conducted as part of several project-specific analyses, but no plants were found as a result. 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 and students buried pots containing soil and seeds from an existing clay phacelia colony in three potential habitat areas on the Forest in 1996 and 1997, using soil from both private and NFS habitat. They found that the two soil sources did not differently affect seed germination. These pot sites were surveyed in 2002, but no clay phacelia plants were found.</p> <p><b>2003:</b> The 1996 experimental planting sites were surveyed, but no clay phacelia plants were found.</p> <p><b>2004:</b> A Decision Notice signed by the acting Forest Supervisor on September 23, 2004 documented approval of an interagency project to introduce clay phacelia on up to thirteen sites of apparently suitable habitat on the Uinta N. F over a period of several years. The first seedlings may be planted on one or more sites in late fall of 2006. Plant surveys for projects on the Uinta N. F. have not found clay phacelias to date. No projects were proposed or surveyed within likely clay phacelia habitat in 2004.</p>
<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>; ULT) 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, a high priority for conservation and protection.</p>

Indicator	Monitoring
	<p><b>2003:</b> In 2001 twenty (20) bee boxes were placed within existing ULT habitat to see if they would increase pollinator habitat. They were checked in 2002 to see if they were used by pollinators, and no use was found. Dr. Vincent Tepedino told us we had placed them in sites too wet to appeal to bees. In 2003 the beehives were repositioned in adjacent upland areas per Dr. Tepedino’s recommendation, and 20 bundles of elderberry twigs were added nearby, to see if Ute ladies’-tresses pollinating bees would use them for nesting. The boxes and twig bundles were scheduled to be inspected again in 2005. The one project related survey conducted was in the Diamond Fork Campground, to make sure a trail to be constructed avoided known colonies and visible plants.</p> <p><b>2004:</b> There were no project-related surveys for ULT conducted in 2004.</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 thought to be due to extended drought conditions that have lowered the water table.</p> <p><b>2004:</b> The trend for fewer observed Ute ladies’-tresses plants continued, as shown in the following table. This is likely due to a combination of the continued drought, and first implementation of lowered summer water tables following completion of the Diamond Fork water pipeline and restoration of a more natural summer flow in the creek.</p>

Indicator	Monitoring																																						
	<p><b>CUWCD Ute Ladies'-tresses Survey Results</b></p> <table border="1" data-bbox="896 334 1608 786"> <thead> <tr> <th data-bbox="896 334 1136 402">Year</th> <th data-bbox="1136 334 1371 402">Number of Plants</th> <th data-bbox="1371 334 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 727">2003</td> <td data-bbox="1136 695 1371 727">1,040</td> <td data-bbox="1371 695 1608 727">77</td> </tr> <tr> <td data-bbox="896 727 1136 760">2004</td> <td data-bbox="1136 727 1371 760">697</td> <td data-bbox="1371 727 1608 760">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	2004	697	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
<p>Mitigation measures including pre-disturbance surveys applied/not applied (every 5 years).</p>	<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. Overall, 790 acres were surveyed for cultural resources, and 63 new sites documented. Fifty of these were abandoned mines on the Vernon unit that were documented as part of a mine safety closure project. 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 were reviewed 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> <p><b>2004:</b> All ground disturbing projects in 2004 were surveyed for cultural resource (heritage) sites, and the potential effects of the projects to the sites were evaluated. The potential effect of routine maintenance activities on historic guard stations was also evaluated. Only one project had the potential to adversely affect a National Register eligible site; it is discussed below. Overall, 2,042 acres were surveyed for cultural resources, and 26 new sites documented. Only seven of these sites were documented in the course of evaluating the potential effects of Forest projects on sites. The majority of the sites (19) were documented by <i>Passport in Time</i> Program volunteers assisting the Forest Heritage Program in fulfilling its obligation to document, evaluate, and protect National Register eligible heritage resources.</p>

Indicator	Monitoring
	<p>Restoration of Reservoir No. 1 adversely affected the historic integrity of the reservoir itself, which is part of the historically significant Daniel’s Irrigation Company Canal System. Adverse effects to the reservoir are being resolved through a 1995 Programmatic Agreement between the Central Utah Project Completion Act Program, the Central Utah Water Conservancy District, the Uinta National Forest, and the Utah State Historic Preservation Office. This adverse effect was recognized during the NEPA process and mitigation implemented in the final project design. Mitigation measures include interpretive signs describing the history of the system. No sites of any kind were found in either the Three Forks Culvert Parking Lot or the Springville Crossing Enclosure project areas, where post-implementation monitoring was also conducted.</p>
<p>Unapproved impacts to sites (every 5 years).</p>	<p><b>2003:</b> None; see discussion above.  <b>2004:</b> None; see discussion above.</p>

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).	<p><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.</p> <p><b>2004:</b> All term grazing permits and Grazing agreements on the Forest include the Forest Plan utilization standards. The permits and agreements 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 eleven allotments on the Spanish Fork Ranger District (52 % of the district allotments) and nine allotments on the Heber Ranger District (20 % of active allotments on the district). All were found to be within compliance.</p>
Allotments administered to standard (annually).	<p><b>2003:</b> Three allotments on the Spanish Fork Ranger District and eight allotments on the Heber Ranger District were administered to standard (a total of about 128,900 acres).</p> <p><b>2004:</b> Four allotments on the Spanish Fork Ranger District and five allotments on the Heber Ranger District were administered to standard (a total of about 91,000 acres).</p>
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>

Indicator	Monitoring
	<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 sage or sage/grass 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 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><b>2004:</b> Nine studies were read on the Heber Ranger District. The trend of 33.3% of the studies was stable, and of 66.7% of the studies was up. Three studies had no trend because they were either moved or were new installations with no comparison data. The ecological status of 11.1% was early seral, of 77.8% was mid-seral, and 11.1% was late seral.</p> <p>Five studies were read on the Spanish Fork Ranger District. The trend of 0% of the studies was down, 20% was stable and 40 % was up. No trend is available on 40% because they were newly installed and it 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 0% was early seral, 40% was mid-seral/fair, 60% was late seral/good.</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 the study on that creek was not included in the analysis. On the other five studies, 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>

Indicator	Monitoring
	<p><b>2004:</b> Three riparian studies were read on the Heber Ranger District. The greenline status was mid-seral on 33.3%, late seral on 33.3%, and PNC on 33.3% of the studies. Greenline stability was moderate on 33.3%, good on 33.3%, and excellent on 33.3% of the studies. The trend was down on 33.3%, stable on 33.3%, and up for 33.3% of the studies.</p> <p>Six riparian studies were read on the Spanish Fork Ranger District. The greenline status was very early seral on 16%, early seral on 34%, mid-seral on 0%, late seral on 16 %, and PNC on 34%. Greenline stability was poor on 16%, moderate on 34%, good on 34%, and excellent on 16%. The trend was down on 0%, stable on 66%, and up on 34%.</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><b>2004:</b> The equipment cleaning at the American Fork Mine Reclamation project apparently worked. Informal checks of the project area showed no new weed populations.</p> <p>Three Forks Culvert Parking Lot – This project was located in a part of Diamond Fork Canyon that had for many years received heavy unmitigated recreational use with personal vehicles, which have potential for weed seed transportation. The site had a pre-existing seed bank of weeds such as cheatgrass, Canada thistle and likely other species. Construction of this project was done with heavy equipment</p>

Indicator	Monitoring
	<p>that had been washed prior to NFS land entry, to minimize weed introduction. This action was in the contract provisions (Clause 3(d)). Use of silt fences for erosion control rather than organic mulches or barriers also had the effect of minimizing a potential source of weed seeds. There was no weed treatment prior to start of the construction project. Revegetation was done using seed of native species. Utah State prohibits sale of seed into Utah containing noxious weed seeds. Monitoring on the Three Forks Culvert Parking Lot found that vegetation on that site is mostly grasses with a mixture of weeds.</p> <p>Reservoir No. 1 Restoration – This was part of a larger set of actions authorized under an interagency Record of Decision signed in 2001. The actions altering the area of the reservoir took place in 2002. According to Jim Percy of Heber R. D., weed control activities were to be the responsibility of the Water District. The Water District did weed control work in the year of construction, but not afterwards. An arrangement was developed about 2003, whereby the Water District supplied Heber R. D. with a lump sum of money to do weed control and some other work for five years. Now Heber is doing weed monitoring and control work at this site on a yearly basis. Monitoring during the field trip identified that there is some cheatgrass, some thick patches of Canada thistle, black medic, and Virginia Creeper. Heber R. D. believes the cheatgrass may have been introduced during the project, but the Canada thistle and perhaps the other species pre-dated the project.</p> <p>The Springville Crossing Exclosure – This exclosure fence was built to keep sheep from the riparian area. Fence construction is an activity with a low potential for weed seed introduction. Soil disturbance from holes dug can bring up buried dormant weed seeds. Virtually all riparian zones on this Forest have long-established populations of Canada thistle, which has wind-borne seeds.</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><b>2004:</b> 1,086 acres of noxious weeds and 1,493 acres of other invasive plants were treated (see the table in the “Estimated acres infested” row below). In addition, the Uinta N. F. cooperated in treating 45 acres of adjacent private land, to prevent spread of noxious weeds onto the Forest.</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																																																																																			
	<p align="center"><b>Estimated Acres Infested and FY 2003 Treatments of Noxious Weeds and Other Undesirable Species</b></p> <table border="1" data-bbox="724 370 1780 1354"> <thead> <tr> <th data-bbox="724 370 1125 435">Species</th> <th data-bbox="1131 370 1453 435">Estimated Acres Infested</th> <th data-bbox="1459 370 1780 435">Acres Treated in FY 2003</th> </tr> </thead> <tbody> <tr> <td colspan="3" data-bbox="724 440 1780 472"><b>Utah Listed Noxious Weed Species</b></td> </tr> <tr> <td data-bbox="724 477 1125 509">Canada thistle</td> <td align="right" data-bbox="1131 477 1453 509">5,300</td> <td align="right" data-bbox="1459 477 1780 509">156</td> </tr> <tr> <td data-bbox="724 514 1125 547">Diffuse knapweed</td> <td align="right" data-bbox="1131 514 1453 547">10</td> <td align="right" data-bbox="1459 514 1780 547">0</td> </tr> <tr> <td data-bbox="724 552 1125 584">Dyer's woad</td> <td align="right" data-bbox="1131 552 1453 584">30</td> <td align="right" data-bbox="1459 552 1780 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1406"><b>1,315</b></td> </tr> </tbody> </table> <p data-bbox="569 1390 1877 1422"><b>2004:</b> It is estimated that 39,767 acres are infested with noxious weeds and about 45,575 acres are</p>			Species	Estimated Acres Infested	Acres Treated in FY 2003	<b>Utah Listed Noxious Weed Species</b>			Canada thistle	5,300	156	Diffuse knapweed	10	0	Dyer's woad	30	2	Hoary cress (white top)	1,000	146	Leafy spurge	10	2	Medusahead	5	0	Musk thistle	18,000	834	Perennial pepperweed	6	6	Russian knapweed	5	0	Scotch thistle	30	14	Spotted knapweed	12	12	Squarrose knapweed	48	1	Yellow starthistle	50	50	<b>TOTAL NOXIOUS</b>	<b>24,506</b>	<b>1,222</b>	<b>Other Undesirable Species</b>			Blue spurge	5	5	Common burdock	60	60	Dalmatian toadflax	1,500	15	Hounds tongue	2,000	13	Jointed goatgrass	25	0	Russian olive	5	0	Tamarisk (salt cedar)	15	0	Yellow sweetclover	150	0	<b>TOTAL OTHER</b>	<b>3,760</b>	<b>93</b>	<b>COMBINED TOTAL</b>	<b>28,266</b>	<b>1,315</b>
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	<p data-bbox="575 240 1885 370">infested with other undesirable plants (see the following table, shown in two parts). This is a large increase in the acreage estimate, particularly for the undesirable invasive category. It is based on the personal observations of District personnel. Over the next few years, acreage documented with GPS data from employees and volunteers will replace the estimates.</p> <p data-bbox="615 407 1885 467" style="text-align: center;"><b>Estimated Acres Infested and FY 2004 Treatments of Noxious Weeds and Other Undesirable Species</b></p> <table border="1" data-bbox="724 505 1780 1170"> <thead> <tr> <th data-bbox="724 505 1125 574">Species</th> <th data-bbox="1125 505 1453 574">Estimated Acres Infested</th> <th data-bbox="1453 505 1780 574">Acres Treated in FY 2004</th> </tr> </thead> <tbody> <tr> <td colspan="3" data-bbox="724 574 1780 607"><b>Utah Listed Noxious Weed Species</b></td> </tr> <tr> <td data-bbox="724 607 1125 639">Canada thistle</td> <td data-bbox="1125 607 1453 639">6,650</td> <td data-bbox="1453 607 1780 639">173</td> </tr> <tr> <td data-bbox="724 639 1125 672">Diffuse knapweed</td> <td data-bbox="1125 639 1453 672">15</td> <td data-bbox="1453 639 1780 672">3</td> </tr> <tr> <td data-bbox="724 672 1125 704">Dyer's woad</td> <td data-bbox="1125 672 1453 704">30</td> <td data-bbox="1453 672 1780 704">2</td> </tr> <tr> <td data-bbox="724 704 1125 737">Hoary cress (white top)</td> <td data-bbox="1125 704 1453 737">19,500</td> <td data-bbox="1453 704 1780 737">161</td> </tr> <tr> <td data-bbox="724 737 1125 769">Leafy spurge</td> <td data-bbox="1125 737 1453 769">10</td> <td data-bbox="1453 737 1780 769">1</td> </tr> <tr> <td data-bbox="724 769 1125 802">Medusahead</td> <td data-bbox="1125 769 1453 802">5</td> <td data-bbox="1453 769 1780 802">0</td> </tr> <tr> <td data-bbox="724 802 1125 834">Musk thistle</td> <td data-bbox="1125 802 1453 834">23,000</td> <td data-bbox="1453 802 1780 834">693</td> </tr> <tr> <td data-bbox="724 834 1125 867">Perennial pepperweed</td> <td data-bbox="1125 834 1453 867">11</td> <td data-bbox="1453 834 1780 867">6</td> </tr> <tr> <td data-bbox="724 867 1125 899">Poison hemlock</td> <td data-bbox="1125 867 1453 899">30</td> <td data-bbox="1453 867 1780 899">13</td> </tr> <tr> <td data-bbox="724 899 1125 932">Quackgrass</td> <td data-bbox="1125 899 1453 932">1</td> <td data-bbox="1453 899 1780 932">0</td> </tr> <tr> <td data-bbox="724 932 1125 964">Russian knapweed</td> <td data-bbox="1125 932 1453 964">5</td> <td data-bbox="1453 932 1780 964">0</td> </tr> <tr> <td data-bbox="724 964 1125 997">Scotch thistle</td> <td data-bbox="1125 964 1453 997">80</td> <td data-bbox="1453 964 1780 997">17</td> </tr> <tr> <td data-bbox="724 997 1125 1029">Spotted knapweed</td> <td data-bbox="1125 997 1453 1029">30</td> <td data-bbox="1453 997 1780 1029">9</td> </tr> <tr> <td data-bbox="724 1029 1125 1062">Squarrose knapweed</td> <td data-bbox="1125 1029 1453 1062">80</td> <td data-bbox="1453 1029 1780 1062">6</td> </tr> <tr> <td data-bbox="724 1062 1125 1094">Yellow starthistle</td> <td data-bbox="1125 1062 1453 1094">50</td> <td data-bbox="1453 1062 1780 1094">2*</td> </tr> <tr> <td data-bbox="724 1094 1125 1127"><b>TOTAL NOXIOUS</b></td> <td data-bbox="1125 1094 1453 1127"><b>39,767</b></td> <td data-bbox="1453 1094 1780 1127"><b>1,086</b></td> </tr> </tbody> </table>	Species	Estimated Acres Infested	Acres Treated in FY 2004	<b>Utah Listed Noxious Weed Species</b>			Canada thistle	6,650	173	Diffuse knapweed	15	3	Dyer's woad	30	2	Hoary cress (white top)	19,500	161	Leafy spurge	10	1	Medusahead	5	0	Musk thistle	23,000	693	Perennial pepperweed	11	6	Poison hemlock	30	13	Quackgrass	1	0	Russian knapweed	5	0	Scotch thistle	80	17	Spotted knapweed	30	9	Squarrose knapweed	80	6	Yellow starthistle	50	2*	<b>TOTAL NOXIOUS</b>	<b>39,767</b>	<b>1,086</b>
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	<table border="1"> <thead> <tr> <th colspan="3" data-bbox="722 272 1780 305">Other Undesirable Species</th> </tr> </thead> <tbody> <tr> <td data-bbox="722 305 1125 342">Blue spurge</td> <td data-bbox="1125 305 1451 342">5</td> <td data-bbox="1451 305 1780 342">1</td> </tr> <tr> <td data-bbox="722 342 1125 380">Common burdock</td> <td data-bbox="1125 342 1451 380">25</td> <td data-bbox="1451 342 1780 380">10</td> </tr> <tr> <td data-bbox="722 380 1125 417">Dalmatian toadflax</td> <td data-bbox="1125 380 1451 417">1,500</td> <td data-bbox="1451 380 1780 417">121</td> </tr> <tr> <td data-bbox="722 417 1125 454">Hounds tongue</td> <td data-bbox="1125 417 1451 454">5,000</td> <td data-bbox="1451 417 1780 454">202</td> </tr> <tr> <td data-bbox="722 454 1125 492">Jointed goatgrass</td> <td data-bbox="1125 454 1451 492">79</td> <td data-bbox="1451 454 1780 492">0</td> </tr> <tr> <td data-bbox="722 492 1125 529">Russian olive</td> <td data-bbox="1125 492 1451 529">19</td> <td data-bbox="1451 492 1780 529">16</td> </tr> <tr> <td data-bbox="722 529 1125 566">Tamarisk (salt cedar)</td> <td data-bbox="1125 529 1451 566">30</td> <td data-bbox="1451 529 1780 566">1</td> </tr> <tr> <td data-bbox="722 566 1125 604">Yellow sweetclover</td> <td data-bbox="1125 566 1451 604">150</td> <td data-bbox="1451 566 1780 604">0</td> </tr> <tr> <td data-bbox="722 604 1125 641">Woolly mullein</td> <td data-bbox="1125 604 1451 641">3000</td> <td data-bbox="1451 604 1780 641">56</td> </tr> <tr> <td data-bbox="722 641 1125 678">TOTAL OTHER</td> <td data-bbox="1125 641 1451 678">7,808</td> <td data-bbox="1451 641 1780 678">407</td> </tr> <tr> <td data-bbox="722 678 1125 699">COMBINED TOTAL</td> <td data-bbox="1125 678 1451 699">47,575</td> <td data-bbox="1451 678 1780 699">1,493</td> </tr> </tbody> </table>		Other Undesirable Species			Blue spurge	5	1	Common burdock	25	10	Dalmatian toadflax	1,500	121	Hounds tongue	5,000	202	Jointed goatgrass	79	0	Russian olive	19	16	Tamarisk (salt cedar)	30	1	Yellow sweetclover	150	0	Woolly mullein	3000	56	TOTAL OTHER	7,808	407	COMBINED TOTAL	47,575	1,493
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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>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><b>2003:</b> 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</p>

Indicator	Monitoring
	<p>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% 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><b>2004:</b> The Three Forks Culvert parking lot project was designed to mitigate and rehabilitate the flood plain areas adjacent to Diamond Fork from dispersed use by the public for parking on the stream terraces and from crossing the stream. The stream terraces were denuded, soils compacted, and the stream banks were eroding causing stream sedimentation. Soil surfaces on the flood plains were roughened to alleviate compaction and to limit runoff, thus effectively reducing stream sedimentation. Soils consist mainly of coble, gravels, and sandy loams. Large woody debris was left on the surface to add organic matter and to aid in long-term soil productivity. Vegetation establishment consists mainly of grasses with a mixture of weeds. In a few cases some woody species were observed including a few forbs. Vegetation cover is less than 80%.</p> <p>The Springville Crossing Exclosure area was established to stop cattle access to the riparian corridor. Vegetation cover was greater within the exclosure, especially on the stream banks, thus helping stabilize the banks against further trampling and erosion. Soils within the exclosure and adjacent areas are variable and have a high percentage of coarse fragments. Subsoils are highly calcareous, and are a loam or silt loam.</p> <p>The Reservoir No.1 Restoration was part of the Daniels Rehabilitation project, in which the reservoir was rehabilitated. Because this was previously a reservoir site, soils are devoid of topsoil. Soils consist mainly of cobbles, gravels and sandy loam. Although the site has been seeded and some vegetation and associated ground cover is being established, rills are present on north and south slopes in exposed areas. Bare ground averages 60 percent with a few large areas ranging from 25 percent. Because the reservoir site is just being vegetated, there is very little litter ground cover. Some cheatgrass and thick patches of Canada thistle were observed.</p>
<p>Down woody debris (every 5 years).</p>	<p>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>

Indicator	Monitoring
	<p><b>2003:</b> 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><b>2004:</b> Reservoir No.1 site is a converted lake area, reclaimed to a wetland with surrounding upland conditions. Therefore, the down woody debris guideline does not apply to this project.</p> <p>The Springville Crossing Enclosure is a range site, and therefore the down woody debris guideline is not applicable.</p> <p>The Three Forks Culvert project is a reclaimed parking area with access to the Three Forks trailhead. Improvements included an arch culvert crossing with expansion, leveling and graveling the parking lot with installation of a single-vault toilet and information board. The existing parking lot, vehicle ford and damaged stream banks were rehabilitated. Large cottonwood trees are present, but the restoration and culvert installation with parking improvements did not affect these standing trees. Large woody debris was left on the surface to add organic matter and to aid in long-term soil productivity.</p> <p>Monitoring was conducted on the Bjorkman Headcut Restoration project that was implemented in July 2003. Large aspen felled during implementation were spread across the final prepared surface and meet the 30 tons/acre for large woody debris per 10 treated acres. The aspen logs are beginning to settle into the soil surface with root masses still retaining some of the original soil still packed around the roots. Logs are still sound with very little decomposition or bark sloughing off the surface.</p>
Ground cover (every 5 years).	<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</p>



Indicator	Monitoring
	<p>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> <p><b>2004:</b> Changes in ground cover associated with grazing are monitored through the range condition and trend study sites across the Forest. Nine range study sites were monitored on the Heber Ranger District. The bare ground on the sites ranged from 3.0% to 27.5%, with an average of 17.9%. Five range trend studies were monitored on the Spanish Fork Ranger District. Bare ground on these sites ranged from 3% to 47%, with an average of 25%.</p> <p>Project specific monitoring was also done at three locations. See the discussion of this monitoring under the “Detrimental Soil Disturbance” monitoring indicator above.</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. 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 EPA’s STORET 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><b>2004:</b> The Reservoir No.1 Restoration was part of the Daniels Rehabilitation project and included rehabilitation of the reservoir as wetland mitigation. Sediment sources from parking lot and partially vegetated adjacent uplands are affecting water quality in the wetland. However, the wetland is functioning, as designed, to filter and capture sediment.</p> <p>The Springville Crossing Livestock Enclosure area was established to exclude cattle from the riparian corridor. The enclosure is effective in keeping livestock out of the stream reach and associated riparian zone. Stabilizing riparian vegetation is being re-established, and aiding in restoring floodplain and stream function. As vegetation is re-established, the stream’s ability to filter and capture sediment or other pollutants will increase.</p> <p>The Three Forks Parking Area is a heavily visited trailhead. Users were causing resource damage to floodplain and water resources by direct stream crossing and parking in the floodplain and other stream terraces. Installation of the culvert crossing alleviated direct impact to water quality and streambanks resulting from repeated vehicle crossing. The established parking area concentrated use within the gravel surfaced area, reducing soil compaction, stream bank, and floodplain alteration. The channel and adjacent floodplain were restored to natural conditions. BMPs recommended in the environmental document and in the Stream Alteration Permit successfully mitigated sedimentation to the stream during and following construction. However, groundcover was marginally adequate on the reconstructed floodplain.</p> <p>The American Fork Canyon Abandoned Mine Reclamation project was monitored to ensure that Best Management Practices implemented during the project are functioning as designed. During the 2004 spring season, snow melt runoff formed small rills on the face of the Dutchman Flat Repository, mainly on the far eastern faces that have slopes steeper than 3:1. In addition, vegetation establishment from the October 2003 hydroseeding resulted with only 10-15 percent cover. Follow up actions were performed on July 29, 2004 by seeding the bare eroding areas on the repository face and on top of the repository. The seeded areas were mulched using certified weed free straw. Straw wattles were installed on the top lip of the repository to prevent runoff from the top edge of the repository. The</p>

Indicator	Monitoring
	<p>Sultana Smelter reclaimed area was also reseeded and mulched.</p> <p>Sampling data summary for samples in 2000, Fall 2003, and 2004 are listed below.</p> <p><u>Lower Bog Mine area:</u></p> <p><u>Adit</u>                      Water quality parameters to date yield relatively constant values for dissolved metals: Cadmium ~ 0.01 mg/L, Iron ~ 7.1 mg/L, Lead ~ 0.004 mg/L, Zinc ~0.55 mg/L. PH values measured fluctuate between 4.0 – 4.5</p> <p><u>North Fork American River Below Lower Bog Mine area</u>                      Drops in all dissolved metals, including Zinc, were noted. Levels of pH recorded ranged from 7.9 to 8.1.</p> <p>Extending the runoff channel from the adit to the North Fork American River initially allowed much of the iron to drop out before reaching the North Fork American River. Spring 2004 iron levels of 7.2 mg/L at the adit were reduced to 0.069 mg/L before joining the North Fork American River. However, during the fall 2004 sampling, the pH drops from 5.5 at the adit to 4.5 just above the confluence with the North Fork of American Fork River. Thus, the earlier increases of pH and iron values are no longer evident, and the mine drainage is again compromised. To buffer the pH, the Forest is designing and intends to install an anoxic limestone diversion well treatment system for adding alkalinity to the contaminated mine drainage in place of the runoff channel.</p> <p><u>Pacific Mine Area:</u></p> <p><u>Adit</u>                      Water quality parameters to date yield relatively constant values for dissolved metals: Cadmium ~0.01 – 0.02 mg/L, Iron ~ 0.07 – 0.10 mg/L, Lead ~ 0.005 mg/L. Zinc values recorded at the adit have continued to rise since 2000. Spring 2004 sampling of the site measured a Zinc value of 2.5 mg/L. PH is remaining relatively stable at 7.0 – 7.5.</p> <p><u>North Fork American River Below Pacific Mine</u>                      Cadmium values have remained constant at this site throughout the samplings. Iron, lead, and zinc values are lowering. PH levels are fluctuating between 8.0 – 8.3.</p> <p>The mine drainage wetland filtration system appears to be working as designed. Most notably, the</p>

Indicator	Monitoring
	<p>wetland system is dramatically dropping out the high concentration of zinc. Sampling this spring yielded 2.5 mg/L at the adit, 0.410 mg/L at the outlet of the first pond, and 0.23 mg/L at the outlet of the fourth pond. Current zinc levels contributed to the North Fork American Fork River are similar to levels above the mine facility, with only a small increase (0.01 mg/L).</p>
<p>Compliance with water quality standards (every 5 years).</p>	<p>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.</p> <p><b>2003:</b> 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 increasing at Willow Creek, and it meets all other State water quality standards. 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>Water flowing from the Lower Bog Mine did not meet state standards for pH. 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> <p><b>2004:</b> Seven baseline sites were sampled from January 2004 through June 2004. Sampling of eight baseline sites was completed from July 2004 through October 2004.</p>

Indicator	Monitoring
	<p>Wide Hollow Creek above the confluence with Strawberry River and Daniels Creek at the First Diversion met all water quality standards. Streeper Creek above Indian Creek road had one exceedence of dissolved oxygen. Strawberry River below the confluence with Willow Creek had an exceedence of dissolved oxygen and also had one exceedence of phosphorus. Indian Creek above the mouth of Streeper Creek has one exceedence in temperature. Strawberry River above the Daniels Diversion exceeded phosphorous levels for all four samplings as well as one exceedence of dissolved oxygen. Willow Creek above the confluence with Strawberry River had one exceedences of dissolved oxygen and one of phosphorus. West for Duchesne River above Vat Creek diversion dam had elevated phosphorus in one sampling.</p>
<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> <p><b>2004:</b> In previous 303(d) lists, the State of Utah had identified only those waters needing TMDLs and has removed Assessment Units that had approved TMDLs from the list. For the 2004 305(b) report and the 303(d) list, the State has adopted the five-part integrated list for reporting the status of the State's water.</p> <p><u>Streams</u>                      The North Fork of the American Fork River and tributaries above Tibble Fork Reservoir were removed from the 2004 303(d) List of Waters due to recent assessment that water quality standards are being met. The fish consumption health advisory for this river segment was lifted and development of TMDL is not needed. The American Fork River and Tributaries from diversion at mouth of Canyon to Tibble Fork Reservoir is now included on the list as a Category 5A and requires development of a TMDL for pH exceedances and for partially supporting beneficial uses.</p> <p><u>Lakes</u>                      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/pH, and dissolved oxygen, respectively. A TMDL (Total Maximum Daily Limit) Study for Strawberry Reservoir is scheduled for completion in 2005.</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
<p>Forest Service management activities do/don't result in exceedances from established NAAQs standards (every 5 years).</p>	<p><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 National Ambient Air Quality Standards (NAAQS) experienced by the Uinta National Forest as a result of a management action.</p> <p><b>2004:</b> No prescribed burns were implemented on the Uinta National Forest during Fiscal Year 2004. The Halls Fork Prescribed Burn was conducted in October of 2004 (FY 2005), and results of smoke monitoring conducted for this project will be described in the State of the Forest Report for Fiscal Year 2005.</p>
<p>Degradation of lichen biomonitors sites (every 5 years).</p>	<p><b>2003-2004:</b> Lichen biomonitors samples were collected in 2003. This involved sampling at 11 previously established sites located along the Wasatch Front, and establishment and collection of baseline data on an additional 12 sites. The 2003 Forest Plan indicates there were 13 additional sites; however, only 12 additional sites were identified and established. The samples were analyzed in 2004; however, a report describing the results was not completed until February of 2005 (FY 2005). The results of this report will be described in the State of the Forest Report for Fiscal Year 2005.</p>
<p>Exceedances from NAAQs standards (every 5 years).</p>	<p>NAAQS for the 7 criteria air pollutants (lead, ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, particulate matter &lt; 10 microns [PM<sub>10</sub>], and particulate matter &lt; 2.5 microns [PM<sub>2.5</sub>]) are monitored at several sites by the Utah Division of Air Quality. Several sites are located in counties that contain the Uinta National Forest. These include several sites in Utah County, one site in Tooele County, and several sites in nearby Salt Lake County.</p> <ul style="list-style-type: none"> <li>◆ Lead is monitored at 2 Salt Lake County, and no Utah and Tooele County sites.</li> <li>◆ Ozone is monitored at 3 Utah County sites, 6 Salt Lake County sites, no Tooele County sites.</li> <li>◆ Sulfur dioxide is monitored at 3 Salt Lake County sites, and no Tooele or Utah County sites.</li> <li>◆ Nitrogen dioxide is at 1 Utah County site, 2 Salt Lake County sites, and no Tooele County sites.</li> </ul>

Indicator	Monitoring
	<ul style="list-style-type: none"> <li>◆ Carbon monoxide is monitored at 2 Utah County, 4 Salt Lake County and no Tooele County sites.</li> <li>◆ PM<sub>10</sub> is monitored at 2 Utah County, 4 Salt Lake County, and no Tooele County sites.</li> <li>◆ PM<sub>2.5</sub> is monitored at 4 Utah County, 1 Tooele County, and 6 Salt Lake County sites</li> </ul> <p><b>2003:</b> In 2003, 8 exceedances from NAAQS for PM<sub>10</sub> were recorded at air quality monitoring sites in Salt Lake County. This included 2 exceedances at the Hawthorne monitoring site in Salt Lake County. (see discussion above for the indicator <i>“Forest Service management activities do/don’t result in exceedances from established NAAQs standards”</i>). No other exceedances for PM<sub>10</sub>, or the other criteria pollutants were recorded at the air quality monitoring sites in Utah County, Tooele or Salt Lake Counties in 2003.</p> <p><b>2004:</b> In the winter of 2004, one exceedance from NAAQS for PM<sub>2.5</sub> and one for PM<sub>10</sub> were recorded at one Salt Lake County site. Neither of these exceedances were caused by, or coincided with Forest management actions that might have contributed to the elevated levels of particulates.</p>



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).	<p><b>2003:</b> Seventy-nine acres were clearcut in aspen on the Forest.</p> <p><b>2004:</b> Two cutting units totaling 39 acres were clearcut. Both cutting units were aspen regeneration harvests on the Dry Hollow Timber Sale. One cutting unit was 26 acres, and the other 13 acres in size.</p>
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>No wildland fire use fires occurred in FY 2003.</p> <p><b>2004:</b> No prescribed burns or wildland fire use fires were conducted on the Uinta in FY2004.</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 reported as “acres of hazardous fuels treated.”</p> <p><b>2004:</b> The only fuels-funded project completed in FY04 was the Bryant’s Fork Summer Home Fuelbreak, for 50 acres. In addition, several non-fuels-funded projects were completed that reduced fuels and/or potentially changed fire regime condition class on a localized scale. These included Bryant’s For Spruce Trap Tree Treatment (178 acres), Dry Hollow Thinning (20 acres), Heber Aspen Beaver Treatment #1 (38), Murdock Timber Sale (42 acres), Silver Meadows Timber Sale (184 acres), Squaw Peak Road (20 acres), and Strawberry Sage Grouse Lek Treatment (4 acres), as reported in the National Fire Plan Operations Reporting System (NFPORS) database, for a total of 578 acres treated.</p>
<p>Acres 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><b>2004:</b> A Forest-wide wildland fire use plan was developed as part of the 2003 Uinta and Wasatch-Cache National Forests’ Fire Management Plan. This wildland fire use plan allowed consideration of wildland fire use on 286,432 acres in several blocks across the forest. These blocks included wilderness and non-wilderness Forest lands.</p>
<p>Aspen, spruce/fir, Douglas-fir                      a. Extent of conversion (acres) to younger age classes (every 5 years).                      b. Extent and distribution of old and mature (every 5 years).</p>	<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</p>

Indicator	Monitoring																					
<p>c. Extent of insect/disease infestations (every 5 years).</p>	<p>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> <ul style="list-style-type: none"> <li>a. Seventy-nine acres of aspen were regenerated by clearcutting, and about 349 acres of spruce-fir were selection cut (SOURCE: 2003 Annual Reforestation and Timber Stand Improvement Needs Report). The selection cuts are designed to maintain/create multi-species stands containing multiple age classes, including new regeneration. In addition, about 261 acres of aspen (&lt; 1% of this type) and 12 acres of conifer (&lt; 0.1% of the conifer) were burned (moderate to high intensities) 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> </ul> <p style="text-align: center;"><b>2003 Insect and Disease Survey Results</b></p> <table border="1" data-bbox="766 1008 1738 1287"> <thead> <tr> <th>Species</th> <th>Damage Agent</th> <th>Acres</th> </tr> </thead> <tbody> <tr> <td>Fir</td> <td>Fir engraver beetle – mortality</td> <td>4,226</td> </tr> <tr> <td>Subalpine fir</td> <td>Western spruce budworm – defoliation</td> <td>200</td> </tr> <tr> <td>Spruce</td> <td>Spruce beetle – mortality</td> <td>179</td> </tr> <tr> <td>Spruce-fir</td> <td>Spruce beetle/fir engraver beetle – mortality</td> <td>4,694</td> </tr> <tr> <td>Lodgepole pine</td> <td>Mountain pine beetle – mortality</td> <td>20</td> </tr> <tr> <td>Douglas-fir</td> <td>Douglas-fir beetle mortality</td> <td>1,488</td> </tr> </tbody> </table>	Species	Damage Agent	Acres	Fir	Fir engraver beetle – mortality	4,226	Subalpine fir	Western spruce budworm – defoliation	200	Spruce	Spruce beetle – mortality	179	Spruce-fir	Spruce beetle/fir engraver beetle – mortality	4,694	Lodgepole pine	Mountain pine beetle – mortality	20	Douglas-fir	Douglas-fir beetle mortality	1,488
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	<p><b>2004:</b></p> <ul style="list-style-type: none"> <li>a. Thirty-nine acres of aspen were regenerated by clearcutting, and about 169 acres of spruce-fir were selection cut (SOURCE: 2004 Annual Reforestation and Timber Stand Improvement Needs Report, as corrected). The selection cuts are designed to maintain/create multi-species stands containing multiple age classes, including new regeneration. In addition, about 55 acres of aspen (&lt; 1% of this type) were burned on the Forest in 2004.</li> <li>b. Extent and distribution of old and mature will be evaluated within the 5-year reporting period.</li> <li>c. Insect activity increased substantially since 2003:</li> </ul> <p style="text-align: center;"><b>2004 Insect and Disease Survey Results</b></p> <table border="1" data-bbox="766 618 1738 898"> <thead> <tr> <th>Species</th> <th>Damage Agent</th> <th>Acres</th> </tr> </thead> <tbody> <tr> <td>Fir</td> <td>Fir engraver – mortality</td> <td>17,486</td> </tr> <tr> <td>Subalpine fir</td> <td>Western spruce budworm – defoliation</td> <td>248</td> </tr> <tr> <td>Spruce</td> <td>Spruce beetle – mortality</td> <td>303</td> </tr> <tr> <td>Spruce-fir</td> <td>Spruce beetle/fir engraver beetle – mortality</td> <td>9,852</td> </tr> <tr> <td>Lodgepole pine</td> <td>Mountain pine beetle – mortality</td> <td>862</td> </tr> <tr> <td>Douglas-fir</td> <td>Douglas-fir beetle mortality</td> <td>3,536</td> </tr> </tbody> </table> <p>A summary of forest disturbance agents detected in the 2004 aerial detection survey follows.</p> <p style="text-align: center;"><b><u>Heber Ranger District</u></b></p> <p><b><u>Bark Beetles</u></b></p> <ul style="list-style-type: none"> <li>• <b>Douglas-fir</b> – Mortality of Douglas-fir attributed to DFB increased. Tree kill estimates increased ten-fold from approximately 350 trees to over 3,600. The increases occurred in Willow Creek, the West Fork of the Duchesne River, Soapstone Creek, Currant Creek Reservoir, and Center Canyon.</li> <li>• <b>Engelmann spruce</b> – Mortality due to Englemann spruce beetle increased from the 2003 survey. Large groups were mapped in Bryant’s Fork, Mud Creek, Clyde Creek, Jones Hollow, and Willow Creek.</li> <li>• <b>Subalpine fir</b> – Mortality due to western balsam bark beetle increased to over 49,000 trees. Large groups were mapped throughout the host type District-wide.</li> </ul>	Species	Damage Agent	Acres	Fir	Fir engraver – mortality	17,486	Subalpine fir	Western spruce budworm – defoliation	248	Spruce	Spruce beetle – mortality	303	Spruce-fir	Spruce beetle/fir engraver beetle – mortality	9,852	Lodgepole pine	Mountain pine beetle – mortality	862	Douglas-fir	Douglas-fir beetle mortality	3,536
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	<ul style="list-style-type: none"> <li>• <b>Lodgepole pine</b> – Mortality resulting from mountain pine beetle increased significantly. Outbreak-sized groups were mapped on Iron Mine Mountain and Soapstone Mountain.</li> <li>• <b>White fir</b> – Mortality attributed to fir-engraver beetle increased significantly. Large outbreak-sized groups were mapped at Balsam Bench and Wheeler Fork.</li> </ul> <p><b><u>Defoliators</u></b></p> <ul style="list-style-type: none"> <li>• <b>Subalpine fir</b> – Defoliation from western spruce budworm was mapped on over 150 acres near Wheeler Fork and Willow Creek.</li> </ul> <p style="text-align: center;"><b><u>Pleasant Grove Ranger District</u></b></p> <p><b><u>Bark Beetles</u></b></p> <ul style="list-style-type: none"> <li>• <b>Douglas-fir</b> – Mortality of Douglas-fir attributed to Douglas-fir beetle increased. Large groups were mapped near Shaffer Fork of American Fork Canyon, North Fork Ridge, and Pine Hollow.</li> <li>• <b>White fir</b> – Mortality attributed to fir-engraver beetle increased by a factor of seven. Large groups were mapped near Mutual Dell, Aspen Grove, Sundance Resort, and Pole Hollow.</li> <li>• <b>Subalpine fir</b> – Mortality resulting from western balsam bark beetle increased. Large groups were mapped near Mutual Dell, Aspen Grove, and Upper American Fork.</li> </ul> <p style="text-align: center;"><b><u>Spanish Fork Ranger District</u></b></p> <p><b><u>Bark Beetles</u></b></p> <ul style="list-style-type: none"> <li>• <b>Douglas-fir</b> – Mortality of Douglas-fir attributed to Douglas-fir beetle increased. Approximately 8,900 trees were killed. Large groups were mapped near Reservation Ridge, White River, Tie Fork, Right Fork Hobble Creek, and Fifth Water Creek.</li> <li>• <b>Engelmann spruce</b> – Mortality of Engelmann spruce attributed to Engelmann spruce beetle decreased. Large groups were mapped near Bald Mountain.</li> <li>• <b>Subalpine fir</b> – Mortality of subalpine fir attributed to western balsam bark beetle and other agents increased slightly. Large groups were recorded near Santaquin Canyon and Twin Peaks.</li> <li>• <b>White fir</b> – Mortality attributed to fir-engraver beetle increased from 5,000 to over 86,000 trees killed on the District. Large groups were mapped near Pole Canyon, Bear Canyon, Maple Lake, Beaver Dam Creek, and Pumphouse Hill.</li> </ul>

Indicator	Monitoring
	<p><b><u>Defoliators</u></b></p> <ul style="list-style-type: none"> <li>• <b>Subalpine fir</b> – 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 117 acres of riparian vegetation (&lt; 1% of this type) on the Forest were burned and regenerated in FY 2003.</p> <p><b>2004:</b> Extent and distribution of old and mature will be evaluated within the 10-year reporting period. About 2 acres of riparian forest types were burned and regenerated in the Cherry Creek II Fire. No riparian forest types were burned in the Red Bull Fire.</p>
<p>Other forest types a. Extent and distribution of old and mature (every 10 years). 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>pinon/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 pinon/juniper.</p> <p><b>2003:</b></p> <ul style="list-style-type: none"> <li>a. Extent and distribution of old and mature will be evaluated within the 5-year reporting period. Approximately 1,366 acres of old and/or oak/oak-maple/mountain brush burned at high to moderate intensities (i.e., sufficient to regenerate these types) on the Forest in FY 2003.</li> <li>b. About 1,654 acres of pinon ips beetle related mortality was reported in FY 2003.</li> </ul> <p><b>2004:</b></p> <ul style="list-style-type: none"> <li>a. Extent and distribution of old and mature will be evaluated within the 5-year reporting period. Approximately 4 acres of mountain brush (&lt; 1% of this type), 2,497 acres of oak/oak-maple/oak-juniper burned in FY 2004. In addition, about 105 acres of pinon/juniper on the Forest (&lt; 1% of this type) burned at high to moderate intensity in FY 2004. Most species in the mountain brush and oak types sprout following fire. Moderate to high intensity fires typically kill most of the pinon and</li> </ul>

Indicator	Monitoring
	<p>juniper trees, except where they occupy areas of sparse fuels.</p> <p>b. No pinyon ips beetle related mortality was reported in FY 2004. (SOURCE: Region 4 Forest Pest Management Aerial Detection Survey Results, Uinta National Forest, 2004)</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>Extent and distribution of sagebrush with greater than 15% canopy cover will be evaluated within the 5-year reporting period.</p> <p><b>2003:</b> 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 353 acres of sagebrush/grass burned in FY 2003.</p> <p><b>2004:</b> Range condition and trend data was collected at 2 sagebrush study sites on the Heber District. One study showed a stable trend and was considered to be in mid-seral ecological condition. The other study was not given a trend rating because it was moved from an inaccessible hillside to a more representative site in the same vegetation type. The ecological condition of this site was determined to be late seral. On the Spanish Fork District, range condition and trend data was collected on one sagebrush study site. The site is in mid-seral/fair condition with a stable trend. Fair and good are terms used on sites that were seeded in the past with non-native species.</p> <p>Approximately 377 acres of sagebrush/grass burned at moderate to high intensities in FY 2004. In addition, about 67 acres burned at low intensities. In the Mountain sagebrush types burned by these fires, moderate to high intensity fires remove or substantially reduce sagebrush densities in the areas burned. Low intensity fires usually thin, but do not eradicate sagebrush from the burned stands.</p>
<p>Other rangeland types – Extent, distribution, and</p>	<p>Extent, distribution, and trend will be evaluated within the 10-year reporting period.</p>

Indicator	Monitoring																																																																																				
trend (every 10 years).	<p><b>2003:</b> Approximately 15 acres of grass burned on the Forest in FY 2003. Also see the discussion of range condition/trend presented previously in this document.</p> <p><b>2004:</b> Approximately 274 acres of grass burned at low to moderate intensities in two large wildfires. Also see the discussion of range condition/trend presented previously in this document.</p> <p><b>2003 - 2004:</b> Grasshoppers and Mormon crickets are two major insect pests affecting Uinta National Forest rangelands. USDA-APHIS is the federal agency responsible for monitoring and treating insect pests on federal lands, including those managed by the Uinta National Forest. Acreages of heavy insect infestations in the five counties containing the Uinta National Forest are shown below. Grasshopper populations for the five-county area containing the Uinta NF peaked in 2001, and have declined since. Mormon cricket populations in the five-county area increased significantly through 2001, and remained at epidemic levels during 2003 and 2004.</p> <table border="1" data-bbox="575 703 1646 948"> <thead> <tr> <th colspan="6">Acreages of Heavy Grasshopper Infestations (&gt; 8 insects/yd<sup>2</sup>)</th> </tr> <tr> <th>Area\Year</th> <th>2000</th> <th>2001</th> <th>2002</th> <th>2003</th> <th>2004</th> </tr> </thead> <tbody> <tr> <td>Juab Co.</td> <td>33,000</td> <td>174,000</td> <td>NR<sup>1</sup></td> <td>21,030</td> <td>8,060</td> </tr> <tr> <td>Sanpete Co.</td> <td>157,000</td> <td>183,500</td> <td>268,400</td> <td>142,680</td> <td>118,920</td> </tr> <tr> <td>Tooele Co.</td> <td>5,700</td> <td>74,600</td> <td>161,800</td> <td>39,000</td> <td>2,550</td> </tr> <tr> <td>Utah Co.</td> <td>29,000</td> <td>56,400</td> <td>8,500</td> <td>15,150</td> <td>16,440</td> </tr> <tr> <td>Wasatch Co.</td> <td>3,000</td> <td>65,600</td> <td>7,000</td> <td>17,540</td> <td>25,250</td> </tr> </tbody> </table> <table border="1" data-bbox="575 982 1646 1227"> <thead> <tr> <th colspan="6">Acreages of Heavy Mormon Cricket Infestations</th> </tr> <tr> <th>Area\Year</th> <th>2000</th> <th>2001</th> <th>2002</th> <th>2003</th> <th>2004</th> </tr> </thead> <tbody> <tr> <td>Juab Co.</td> <td>116,000</td> <td>502,500</td> <td>618,900</td> <td>651,500</td> <td>680,550</td> </tr> <tr> <td>Sanpete Co.</td> <td>NR<sup>1</sup></td> <td>NR<sup>1</sup></td> <td>NR<sup>1</sup></td> <td>31,760</td> <td>310</td> </tr> <tr> <td>Tooele Co.</td> <td>346,000</td> <td>622,000</td> <td>749,700</td> <td>793,500</td> <td>691,050</td> </tr> <tr> <td>Utah Co.</td> <td>500</td> <td>5,650</td> <td>74,600</td> <td>116,200</td> <td>123,800</td> </tr> <tr> <td>Wasatch Co.</td> <td>NR<sup>1</sup></td> <td>NR<sup>1</sup></td> <td>NR<sup>1</sup></td> <td>NR<sup>1</sup></td> <td>NR<sup>1</sup></td> </tr> </tbody> </table> <p><sup>1</sup>NR = None Reported</p>	Acreages of Heavy Grasshopper Infestations (> 8 insects/yd <sup>2</sup> )						Area\Year	2000	2001	2002	2003	2004	Juab Co.	33,000	174,000	NR <sup>1</sup>	21,030	8,060	Sanpete Co.	157,000	183,500	268,400	142,680	118,920	Tooele Co.	5,700	74,600	161,800	39,000	2,550	Utah Co.	29,000	56,400	8,500	15,150	16,440	Wasatch Co.	3,000	65,600	7,000	17,540	25,250	Acreages of Heavy Mormon Cricket Infestations						Area\Year	2000	2001	2002	2003	2004	Juab Co.	116,000	502,500	618,900	651,500	680,550	Sanpete Co.	NR <sup>1</sup>	NR <sup>1</sup>	NR <sup>1</sup>	31,760	310	Tooele Co.	346,000	622,000	749,700	793,500	691,050	Utah Co.	500	5,650	74,600	116,200	123,800	Wasatch Co.	NR <sup>1</sup>	NR <sup>1</sup>	NR <sup>1</sup>	NR <sup>1</sup>	NR <sup>1</sup>
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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).	<p><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. There were no wildland fire use fires.</p> <p><b>2004:</b> A total of 34 wildfires burned on the Uinta in FY 2004; 26 of these fires were caused by lightning. A total of about 1,863 acres were burned. There were no wildland fire use fires in FY04.</p>
Fire condition classes (every 5 years).	<p><b>2003:</b> Fire regime condition class (FRCC) 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>

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	<p><b>Fire Condition Classes on the Uinta National Forest</b></p> <table border="1" data-bbox="621 334 1881 963"> <thead> <tr> <th data-bbox="621 334 1377 402">Vegetation Type</th> <th data-bbox="1383 334 1545 402">Acres</th> <th data-bbox="1551 334 1713 402">% of Forest</th> <th data-bbox="1719 334 1881 402">Condition Class</th> </tr> </thead> <tbody> <tr> <td data-bbox="621 402 1377 435">Aspen, aspen/conifer, conifer/aspen, and aspen/forb</td> <td data-bbox="1383 402 1545 435">269,260</td> <td data-bbox="1551 402 1713 435">30</td> <td data-bbox="1719 402 1881 435">2, 3</td> </tr> <tr> <td data-bbox="621 435 1377 467">Sagebrush/grass</td> <td data-bbox="1383 435 1545 467">160,660</td> <td data-bbox="1551 435 1713 467">18</td> <td data-bbox="1719 435 1881 467">2, 3</td> </tr> <tr> <td data-bbox="621 467 1377 532">Englemann spruce, subalpine fir, lodgepole pine, and mixed conifer</td> <td data-bbox="1383 467 1545 532">78,690</td> <td data-bbox="1551 467 1713 532">9</td> <td data-bbox="1719 467 1881 532">2, 3</td> </tr> <tr> <td data-bbox="621 532 1377 565">Barren land</td> <td data-bbox="1383 532 1545 565">36,840</td> <td data-bbox="1551 532 1713 565">4</td> <td data-bbox="1719 532 1881 565">N/A</td> </tr> <tr> <td data-bbox="621 565 1377 597">Oak brush-maple and mountain brush</td> <td data-bbox="1383 565 1545 597">226,540</td> <td data-bbox="1551 565 1713 597">25</td> <td data-bbox="1719 565 1881 597">2, 3</td> </tr> <tr> <td data-bbox="621 597 1377 630">Douglas-fir</td> <td data-bbox="1383 597 1545 630">13,750</td> <td data-bbox="1551 597 1713 630">2</td> <td data-bbox="1719 597 1881 630">2, 3</td> </tr> <tr> <td data-bbox="621 630 1377 662">Pinyon and juniper</td> <td data-bbox="1383 630 1545 662">43,370</td> <td data-bbox="1551 630 1713 662">5</td> <td data-bbox="1719 630 1881 662">2, 3</td> </tr> <tr> <td data-bbox="621 662 1377 695">Riparian</td> <td data-bbox="1383 662 1545 695">17,560</td> <td data-bbox="1551 662 1713 695">2</td> <td data-bbox="1719 662 1881 695">2, 3</td> </tr> <tr> <td data-bbox="621 695 1377 727">Sagebrush/grass</td> <td data-bbox="1383 695 1545 727">25,380</td> <td data-bbox="1551 695 1713 727">3</td> <td data-bbox="1719 695 1881 727">1</td> </tr> <tr> <td data-bbox="621 727 1377 760">Oak/mountain brush</td> <td data-bbox="1383 727 1545 760">16,690</td> <td data-bbox="1551 727 1713 760">2</td> <td data-bbox="1719 727 1881 760">1</td> </tr> <tr> <td data-bbox="621 760 1377 792">Other conifer</td> <td data-bbox="1383 760 1545 792">4,130</td> <td data-bbox="1551 760 1713 792">&lt;0.5</td> <td data-bbox="1719 760 1881 792">1</td> </tr> <tr> <td data-bbox="621 792 1377 824">Aspen/forbs</td> <td data-bbox="1383 792 1545 824">2,200</td> <td data-bbox="1551 792 1713 824">&lt;0.5</td> <td data-bbox="1719 792 1881 824">1</td> </tr> <tr> <td data-bbox="621 824 1377 857">Douglas-fir</td> <td data-bbox="1383 824 1545 857">1,500</td> <td data-bbox="1551 824 1713 857">&lt;0.5</td> <td data-bbox="1719 824 1881 857">1</td> </tr> <tr> <td data-bbox="621 857 1377 889">Unknown vegetation (not mapped)</td> <td data-bbox="1383 857 1545 889">815</td> <td data-bbox="1551 857 1713 889">N/A</td> <td data-bbox="1719 857 1881 889">N/A</td> </tr> <tr> <td data-bbox="621 889 1377 922">Total vegetation</td> <td data-bbox="1383 889 1545 922">897,385</td> <td data-bbox="1551 889 1713 922">100</td> <td data-bbox="1719 889 1881 922">N/A</td> </tr> </tbody> </table> <p data-bbox="575 997 1703 1029">Condition classes will be reevaluated every 5 years in accordance with the Forest Plan.</p> <p data-bbox="575 1062 1881 1127"><b>2004:</b> No FRCC assessments were completed on the Uinta National Forest in Fiscal Year 2004, but several were scheduled for FY 2005.</p> <p data-bbox="575 1159 1703 1192">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
<p>Allowable Timber Sale Quantity (annually), Total Timber Sale Program Quantity, and Other Forest products (Fuelwood and Christmas Trees Permits) (annually).</p>	<p><b>Goal:</b> Goals are listed in the following table. Fuelwood demand has dropped substantially, ranging between 649 and 1,615 hundred cubic feet (CCF) per year between 1982-2002. Average demand over the last 25 years was about 3,875 CCF. Supplies have come primarily by the Heber Ranger District. The fuelwood supply is limited by access, but is adequate to meet or exceed demand. Demand over the next few years is expected to stay about the same. The Forest Plan objective is 800-1,200 cords/year, which equates to 1,025-1,535 CCF/year. Personal use Christmas tree permits are issued on the Heber and Spanish Fork Ranger Districts. Commercial Christmas tree sales are not offered. Demand for permits remains extremely high on the Heber Ranger District and permits are sold out within a few hours of going on sale.</p> <p>The ASQ under the previous Forest Plan was 1.9 MMBF/Yr. (<math>\approx</math> 3,300 CCF/Yr). The ASQ and TSPQ were reduced in the 2003 Revised Forest Plan (see the following table). During the 1991-2002 period about 2,560 CCF of timber chargeable toward the ASQ was sold, and the TSPQ volume sold was about 5,460 CCF/Yr. (2001-2002 State of the Forest Report, pg. 39-40). All sales advertised during the 2003-2004 period were sold. Purchasers continue to be locally-owned, small, family-operated sawmills.</p> <p><b>2003-2004:</b> The Forest is meeting Forest Plan goals and objectives. See the table below.</p>

Indicator	Monitoring				
	<b>Timber Products Sold on Uinta National Forest</b>				
		<b>Allowable Sale Quantity (ASQ)</b>	<b>Total Timber Sale Program Quantity (TSPQ)<sup>2/</sup></b>	<b>Personal Use Fuelwood Permits</b>	<b>Christmas Tree Permits (also equals # of trees)</b>
		N/A	N/A	1,117.3 CCF	1,863 Permits
		640 CCF/Yr.	3,190 CCF/Yr.	1,025-1,535	N/A
		0 <sup>7/</sup>	4,528 CCF <sup>3/, 5/, 6/</sup>	1,080 CCF <sup>4/</sup>	1,989 Permits <sup>4/</sup>
		1,054 CCF	3,836 CCF <sup>3/, 6/</sup>	1,221 CCF <sup>4/</sup>	1,833 Permits <sup>4/</sup>
		<b>Average for planning period</b> 527 CCF/Yr. <sup>7/</sup>	4,182 CCF/Yr.	1,150 CCF/Yr.	1,911 Permits/Yr.
	<p><sup>1/</sup> The Forest Plan objectives are the average volume/year over the 10-year (2003-2012) planning. Objectives for timber (O-3-2 and O-3-3) are on pg. 2-17 of the 2003 Forest Plan.</p> <p><sup>2/</sup> Personal use firewood permits are not included in the TSPQ.</p> <p><sup>3/</sup> SOURCE: Periodic Timber Sale Accomplishment Report, Regional Sale Report.</p> <p><sup>4/</sup> SOURCE: FY Cut and Sold Report.</p> <p><sup>5/</sup> The FY2003 State of the Forest Report erroneously reported that 388 CCF of timber sales were sold in FY2003. The Rock Garden Timber Sale, which was advertised in FY02, but not awarded (i.e., “sold”) until November of 2002 (i.e., FY03) was inadvertently not included.</p> <p><sup>6/</sup> Includes sales offered the prior FY but not awarded (i.e. sold) till the current FY.</p> <p><sup>7/</sup> Does not include 3,552 CCF from the Rock Garden Sale that was advertised in FY02, awarded in FY03 (prior to 2003 Forest Plan approval). This was chargeable toward the ASQ under the 1984 Forest Plan, but is not on lands suited for timber production in the 2003 Forest Plan and not chargeable toward its ASQ.</p> <p>The 2003 Forest Plan objective (O-3-1) is <i>“Permit approximately 100,000 Animal Unit Months (AUMs) of forage per year for use by livestock.”</i> (LRMP, pg. 2-17) As can be seen below, the Forest has met, and slightly exceeded this objective. Authorized use may differ from permitted use, depending on range conditions, market and economic factors, other conditions.</p> <p><b>2003-2004:</b> As shown below, authorized use has been less than permitted use and the Forest Plan objective. No grazing was permitted on the Pleasant Grove Ranger District.</p>				
<p>Level of permitted livestock grazing (annually).`</p>					

Indicator	Monitoring																											
	<p style="text-align: center;"><b>Grazing Animal Unit Months (AUMs) on the Uinta National Forest</b></p> <table border="1" data-bbox="749 345 1726 501"> <thead> <tr> <th data-bbox="749 345 915 423" rowspan="2">Grazing Season<sup>2/</sup></th> <th colspan="3" data-bbox="915 345 1318 388">Permitted Use<sup>1/</sup></th> <th colspan="3" data-bbox="1318 345 1726 388">Authorized Use<sup>1/</sup></th> </tr> <tr> <th data-bbox="915 388 1052 423">Cattle</th> <th data-bbox="1052 388 1188 423">Sheep</th> <th data-bbox="1188 388 1318 423">Total</th> <th data-bbox="1318 388 1455 423">Cattle</th> <th data-bbox="1455 388 1591 423">Sheep</th> <th data-bbox="1591 388 1726 423">Total</th> </tr> </thead> <tbody> <tr> <td data-bbox="749 423 915 466">2003<sup>3/</sup></td> <td data-bbox="915 423 1052 466">61,945</td> <td data-bbox="1052 423 1188 466">45,276</td> <td data-bbox="1188 423 1318 466">107,221</td> <td data-bbox="1318 423 1455 466">46,341</td> <td data-bbox="1455 423 1591 466">17,719</td> <td data-bbox="1591 423 1726 466">64,230</td> </tr> <tr> <td data-bbox="749 466 915 501">2004</td> <td data-bbox="915 466 1052 501">61,945</td> <td data-bbox="1052 466 1188 501">45,276</td> <td data-bbox="1188 466 1318 501">107,221</td> <td data-bbox="1318 466 1455 501">54,210</td> <td data-bbox="1455 466 1591 501">37,473</td> <td data-bbox="1591 466 1726 501">92,074</td> </tr> </tbody> </table> <p data-bbox="562 532 1877 565"><sup>1/</sup> SOURCE: “Annual Grazing Statistical Forest/Grassland Detail at Forest Level Report”, from INFRA database.</p> <p data-bbox="562 565 1934 683"><sup>2/</sup> In prior <i>State of the Forest Reports</i>, fiscal year was used. The “Grazing Season” for most allotments on the Uinta National Forest runs from May or June into October, and thus may span part of 2 fiscal years. Thus, standardized reports cannot be used to monitor this item. Consequently, this monitoring item will be reported by grazing season rather than fiscal year.</p> <p data-bbox="562 683 1923 776"><sup>3/</sup> Numbers differ from those reported in <i>2003 State of Forest Report</i>. The 2003 Report contained an estimate for the fiscal year, whereas, the figures above are for the grazing season. Source and grazing seasons defined in <sup>1/</sup> and <sup>2/</sup> above.</p>	Grazing Season <sup>2/</sup>	Permitted Use <sup>1/</sup>			Authorized Use <sup>1/</sup>			Cattle	Sheep	Total	Cattle	Sheep	Total	2003 <sup>3/</sup>	61,945	45,276	107,221	46,341	17,719	64,230	2004	61,945	45,276	107,221	54,210	37,473	92,074
Grazing Season <sup>2/</sup>	Permitted Use <sup>1/</sup>			Authorized Use <sup>1/</sup>																								
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2004	61,945	45,276	107,221	54,210	37,473	92,074																						
Acres leased for oil and gas exploration (annually).	<p data-bbox="562 849 1205 881"><b>2003:</b> One lease for about 910 acres was issued.</p> <p data-bbox="562 917 1856 979"><b>2004:</b> Sixty six leases for about 139,590 acres were issued on the Heber and Spanish Fork Ranger Districts.</p>																											
Number of recreation Special Use permits (annually).	<p data-bbox="562 1018 806 1050"><b>2003:</b> 226 permits</p> <p data-bbox="562 1086 806 1118"><b>2004:</b> 161 permits</p>																											
Number of lands Special Use permits (annually).	<p data-bbox="562 1154 806 1187"><b>2003:</b> 175 permits</p> <p data-bbox="562 1222 806 1255"><b>2004:</b> 178 permits</p>																											

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).	<p><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.</p> <p><b>2004:</b> During FY 2004 no travel management plans were developed. Most of the effort in this area was to correct the Forest’s summer Travel Map in response to a Forest Plan appeal and litigation.</p>
Miles of non-motorized trail (annually).	<p>The Forest is undertaking a multi-year project to improve the accuracy of road and trail databases and associated GIS information and maps. Consequently, the numbers of miles of trails reported have been changing and are likely to continue to change until this effort is complete. Actual on the ground differences in the number of miles of trails will be noted.</p> <p><b>2003:</b> 285 (This data is based on the 2003 Uinta National Forest Travel Map. The number shown in last year’s State of the Forest Report [339] was in error. The Forest Plan [FEIS p. 3-538] reported 275 miles.)</p> <p><b>2004:</b> 248 (This data reflects the results of a Forest Plan appeal and litigation that converted about 31 miles of non-motorized trail back to motorized, as well as further GPS refinement of transportation data. The number of actual miles of trail on the ground did not change.)</p>
Miles of motorized trail and road opportunities (annually).	<p>The Forest is undertaking a multi-year project to improve the accuracy of road and trail databases and associated GIS information and maps. Consequently, the numbers of miles of trails and roads reported have been changing and are likely to continue to change until this effort is complete. Actual on the ground differences in the number of miles of trails and roads will be noted.</p> <p><b>2003:</b> 898 (This data is based on the 2003 Uinta National Forest Travel Map, and includes 266 miles of motorized trails and 632 miles of roads open to mixed use [including OHV’s]. The number shown in last</p>

Indicator	Monitoring
	<p>year's State of the Forest Report [325] was in error.)</p> <p><b>2004:</b> 945 (This data includes 316 miles of motorized trail and 629 miles of roads open to mixed use [including OHV's]. It reflects the results of a Forest Plan appeal and litigation that converted about 31 miles of non-motorized trail back to motorized, as well as further GPS refinement of transportation data. Other than the 31 miles, the number of actual miles of trails and roads on the ground did not change from 2003. The additional 7 miles of difference reflects corrections to mileages based on better GPS / GIS information.)</p>
<p>Miles of trails groomed for winter use (annually).</p>	<p><b>2003:</b> 154 (This figure did not include all miles groomed by other organizations and Utah State Parks and Recreation for both snowmobiles and Nordic skiers.)</p> <p><b>2004:</b> 248 (This figure includes miles groomed by the Forest Service and private organizations and Utah State Parks and Recreation for both snowmobiles [218 miles] and Nordic skiers [30 miles].)</p>
<p>Trailheads maintained for winter use (annually).</p>	<p><b>2003:</b> 14 trailheads are maintained for winter use. Three are specifically designated for cross-country skiing.</p> <p><b>2004:</b> No change from FY 2003 in trailheads maintained for winter use.</p>
<p>Campground capacity (annually).</p>	<p><b>2003:</b> 12,581 PAOTS (Persons At One Time); 29 campgrounds available for use.</p> <p><b>2004:</b> 12,281 PAOTS; 28 campgrounds available for use. This reflects temporary closure of Maple Lake Camping and Picnicing Area for reconstruction and temporary closure of Rock Canyon Campground because its water system does not meet State Water Quality Standards. It also includes closure of 6 sites to overnight camping at Little Mill Campground in order to reduce the potential threat of rolling rocks.</p>
<p>Developed recreation sites meeting accessibility (ADA) standards (every 5 years).</p>	<p>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).</p>

Indicator	Monitoring																																				
	<p data-bbox="575 235 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="575 370 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="808 634 1186 711">Developed Recreation Types</th> <th data-bbox="1186 634 1438 711">Number of Sites</th> <th data-bbox="1438 634 1696 711">Number Accessible</th> </tr> </thead> <tbody> <tr> <td data-bbox="808 711 1186 753">Family campgrounds</td> <td data-bbox="1186 711 1438 753">27</td> <td data-bbox="1438 711 1696 753">7</td> </tr> <tr> <td data-bbox="808 753 1186 795">Family picnic areas</td> <td data-bbox="1186 753 1438 795">8</td> <td data-bbox="1438 753 1696 795">1</td> </tr> <tr> <td data-bbox="808 795 1186 837">Group campgrounds</td> <td data-bbox="1186 795 1438 837">4</td> <td data-bbox="1438 795 1696 837">0</td> </tr> <tr> <td data-bbox="808 837 1186 880">Group picnic grounds</td> <td data-bbox="1186 837 1438 880">3</td> <td data-bbox="1438 837 1696 880">0</td> </tr> <tr> <td data-bbox="808 880 1186 922">Trailheads</td> <td data-bbox="1186 880 1438 922">26</td> <td data-bbox="1438 880 1696 922">3</td> </tr> <tr> <td data-bbox="808 922 1186 964">Visitor/interpretive sites</td> <td data-bbox="1186 922 1438 964">10</td> <td data-bbox="1438 922 1696 964">4</td> </tr> <tr> <td data-bbox="808 964 1186 1006">Fishing access</td> <td data-bbox="1186 964 1438 1006">14</td> <td data-bbox="1438 964 1696 1006">2</td> </tr> <tr> <td data-bbox="808 1006 1186 1049">Boating access</td> <td data-bbox="1186 1006 1438 1049">5</td> <td data-bbox="1438 1006 1696 1049">0</td> </tr> <tr> <td data-bbox="808 1049 1186 1091">Nordic ski areas</td> <td data-bbox="1186 1049 1438 1091">2</td> <td data-bbox="1438 1049 1696 1091">0</td> </tr> <tr> <td data-bbox="808 1091 1186 1133">Snow parks</td> <td data-bbox="1186 1091 1438 1133">6</td> <td data-bbox="1438 1091 1696 1133">2</td> </tr> <tr> <td data-bbox="808 1133 1186 1182">Observation points</td> <td data-bbox="1186 1133 1438 1182">7</td> <td data-bbox="1438 1133 1696 1182">6</td> </tr> </tbody> </table> <p data-bbox="575 1214 1913 1349">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> <p data-bbox="575 1382 1856 1414"><b>2004:</b> An inventory of accessible facilities has been completed and the numbers below have been</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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	<p>updated to reflect the results of that inventory.</p> <p style="text-align: center;"><b>Accessible Developed Recreation Facilities on the Uinta National Forest</b></p> <table border="1" data-bbox="808 365 1696 912"> <thead> <tr> <th data-bbox="808 365 1186 441">Developed Recreation Types</th> <th data-bbox="1186 365 1438 441">Number of Sites</th> <th data-bbox="1438 365 1696 441">Number Accessible</th> </tr> </thead> <tbody> <tr> <td data-bbox="808 441 1186 483">Family campgrounds</td> <td data-bbox="1186 441 1438 483">27</td> <td data-bbox="1438 441 1696 483">17</td> </tr> <tr> <td data-bbox="808 483 1186 526">Family picnic areas</td> <td data-bbox="1186 483 1438 526">8</td> <td data-bbox="1438 483 1696 526">6</td> </tr> <tr> <td data-bbox="808 526 1186 568">Group campgrounds</td> <td data-bbox="1186 526 1438 568">4</td> <td data-bbox="1438 526 1696 568">4</td> </tr> <tr> <td data-bbox="808 568 1186 610">Group picnic grounds</td> <td data-bbox="1186 568 1438 610">3</td> <td data-bbox="1438 568 1696 610">1</td> </tr> <tr> <td data-bbox="808 610 1186 652">Trailheads</td> <td data-bbox="1186 610 1438 652">26</td> <td data-bbox="1438 610 1696 652">11</td> </tr> <tr> <td data-bbox="808 652 1186 695">Visitor/interpretive sites</td> <td data-bbox="1186 652 1438 695">10</td> <td data-bbox="1438 652 1696 695">7</td> </tr> <tr> <td data-bbox="808 695 1186 737">Fishing access</td> <td data-bbox="1186 695 1438 737">14</td> <td data-bbox="1438 695 1696 737">7</td> </tr> <tr> <td data-bbox="808 737 1186 779">Boating access</td> <td data-bbox="1186 737 1438 779">5</td> <td data-bbox="1438 737 1696 779">3</td> </tr> <tr> <td data-bbox="808 779 1186 821">Nordic ski areas</td> <td data-bbox="1186 779 1438 821">2</td> <td data-bbox="1438 779 1696 821">2</td> </tr> <tr> <td data-bbox="808 821 1186 863">Snow parks</td> <td data-bbox="1186 821 1438 863">6</td> <td data-bbox="1438 821 1696 863">6</td> </tr> <tr> <td data-bbox="808 863 1186 912">Observation points</td> <td data-bbox="1186 863 1438 912">7</td> <td data-bbox="1438 863 1696 912">6</td> </tr> </tbody> </table>	Developed Recreation Types	Number of Sites	Number Accessible	Family campgrounds	27	17	Family picnic areas	8	6	Group campgrounds	4	4	Group picnic grounds	3	1	Trailheads	26	11	Visitor/interpretive sites	10	7	Fishing access	14	7	Boating access	5	3	Nordic ski areas	2	2	Snow parks	6	6	Observation points	7	6
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Day-use developed site capacity (annually).	<p><b>2003:</b> 17,405 PAOTS (Persons At One Time).</p> <p><b>2004:</b> 17,254 PAOTS. This is due to temporary closure of Maple Lakes Picnic Area and Campground for reconstruction.</p>																																				
Scenery Management Objectives compliance (every 5 years).	<p>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><b>2003:</b> 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>																																				

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	<p>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. 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> <p><b>2004:</b> The Springville Crossing Enclosure involved construction of a fence to protect a one-half mile of riparian habitat. 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 for maximum modification.</p> <p>A reclaimed area of Reservoir No. 1 was rehabilitated into a wetland mitigation/ wildlife pond. Landform shaping and revegetation exemplify an excellent job of blending with the natural landscape. The pond does repeat characteristics of natural water forms found in the western landscape. This restoration effort enhances the landscape attractiveness and facilitates a higher level of scenic quality in the long term. The project complies with Forest Plan direction, which defines modification as:</p> <p style="padding-left: 40px;">Management activities may visually dominate the original characteristic landscape. However, activities involving vegetative and landform alteration must borrow from naturally established form,</p>

Indicator	Monitoring
	<p>line, color, or texture so completely and at such a scale that its visual characteristics are those of natural occurrences within the surrounding area or character type. Additional parts of these activities such as structures and roads must remain visually subordinate to the proposed composition. <i>In summary, this broad objective allows for most forms of management activity including those such as structures which are more visually obtrusive, provided they are designed to fit the context of the natural surroundings at all viewing distances.</i> (2003 Forest Plan, Glossary-34).</p> <p>Development of the Three Forks parking lot included installation of a seventeen foot arch culvert in Diamond Fork Creek to create vehicular access for Trailhead parking. The size and color of the culvert is very apparent to the casual forest visitor, and does not blend in with the natural landscape characteristics that are common to the Diamond Fork Creek. The project does not comply with Forest Plan direction, which defines retention as:</p> <p style="padding-left: 40px;">Management activities may only repeat the form, line, color, and texture frequently found in the characteristic landscape. Changes should not be evident to the casual forest visitor, and all retention activities to restore the area to a naturally appearing condition should be accomplished either during the operation or immediately after. <i>In short, a visitor to the Forest should not notice the management activity.</i></p> <p>Logs were placed in the floodplain area, but no boulders and limited vegetation were found on the site. Landscaping with boulders, native trees, shrubs and seedlings that blend and mimic a natural stream setting would improve visual quality here. This will occur over time as vegetation re-establishes around the culvert.</p>
<p>Compliance with travel management direction (every 5 years).</p>	<p><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, Tooele, Utah, and Wasatch Counties for enforcement on National Forest System lands.</p> <p><b>2004:</b> 110 incident reports, 272 violation notices, and 129 written warnings. This is up from past years, and reflects an Agency-wide emphasis on OHV enforcement as part of the Forest Service Strategic Plan that address the Four Threats to keeping National Forests and Grasslands healthy. One of these threats is unmanaged recreation. The Uinta National Forest continues its cooperative agreements with Juab, Tooele, Utah, and Wasatch Counties for enforcement on National Forest System lands.</p>
<p>Compliance with wilderness</p>	<p><b>2003:</b> No violation notices were issued. Generally there are 10-15 issued per year. This suggests a</p>

Indicator	Monitoring
direction (every 5 years).	<p>downward trend for FY 2003.</p> <p><b>2004:</b> One incident report and 1 written warning were issued on the Pleasant Grove Ranger District.</p>
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 to protect wilderness values.</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 Forest how to reduce fuels and decrease the risk of wildfire.</p>

Indicator	Monitoring
	<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> <p>In addition, the Forest provided information at the Strawberry Visitor’s Center. It also participated in the Strawberry Wildlife Festival and Kokonee Days, similar to the events described for FY 2004, below.</p> <p><b>2004:</b> The Forest continued to participate in the partnerships and programs described above for FY 2003, and also participated in activities at Strawberry Reservoir.</p> <p>The Strawberry Visitor’s Center on the Heber District serves as a key point of contact for visitors, and hosted over 20,000 people in 2004. The Center also has a number of active partners who use it to disseminate educational and compliance information. For example, in January the Visitor’s Center partnered with Utah State Parks and Recreation, the Utah Snowmobile Association, Wasatch County Fire Department, Life Flight, and Wasatch County Search and Rescue to present the Multi-Agency Search and Rescue Day. The event teaches snowmobile, fire, and avalanche safety, and teaches winter recreation regulations. Visitor’s Center staff also teaches the correct use of O.H.V.s and snowmobiles during the winter months, including public land use laws and policies. In the early spring, the Visitor’s Center partners with the Division of Wildlife Resources for a six week event that focuses on the cutthroat trout spawning. About 6,000 people attend this event, and learn about Strawberry Reservoir area fish and their life cycles. It is also an opportunity to remind visitors about outdoor recreation ethics as they gear up for summer. In July, the Center emphasizes programs on illegal fireworks, lightning safety, and the beneficial role that fire plays in ecosystems. Partners include local firefighting organizations.</p> <p>The Strawberry Visitor’s Center partners again with the Division of Wildlife Resources for the annual Kokanee Salmon spawning season in September and October. In September 2004, 4,927 people entered the Visitor’s Center to learn about the salmon, and see the other interpretive exhibits, as well. The annual Strawberry Wildlife Festival is also held in September. The 2004 event included the Friends of Strawberry Valley, Division of Wildlife Resources, State Parks and Recreation, Wasatch County, Tracy Aviary, Daniels Summit Lodge, Strawberry Angler’s Association, Central Utah Water Conservancy District, Leave No Trace, Coast Guard Auxiliary, Utah Chapter of the Audubon Society, and Backcountry Horsemen. The event teaches about the ecology and long-term resource management of the area.</p>

Indicator	Monitoring
	<p>October brings an emphasis on legal and proper hunting techniques, particularly O.H.V. rules and regulations. The Visitor’s Center teaches how to identify which types of trees are legal to cut as Christmas trees. They also teach which areas are legal to cut in, and the clothing and equipment needed to safely cut trees in winter conditions.</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).	<p><b>2003:</b> 1,217</p> <p><b>2004:</b> 1,222 (During FY 2004, the forest reexamined our inventory of system roads and trails. Where we found discrepancies in uses between previous Forest Travel Maps, those roads and trails were researched to find the most recent, documented use and the inventory was updated. This has increased the accuracy of the miles of classified road figure.)</p>
Miles of classified road open for public use (every 5 years).	<p><b>2003:</b> 1,121</p> <p><b>2004:</b> 1,129 (During FY 2004, the forest reexamined our inventory of system roads and trails. Where we found discrepancies in uses between previous Forest Travel Maps, those roads and trails were researched to find the most recent, documented use and the inventory was updated. This has increased the accuracy of the miles of classified roads open for public use figure.)</p>
Miles of new road construction (annually).	<p><b>2003:</b> 0</p> <p><b>2004:</b> 0</p>
Miles of classified roads reconstructed or relocated (annually).	<p><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.</p> <p><b>2004:</b> Fifteen miles of classified roads were reconstructed or relocated. Five miles of road were reconstructed or relocated in the Red Creek Mountain area by the Uinta National Forest. In addition, the Central Utah Water Conservancy District reconstructed 0.3 miles of road at Springville Crossing and timber operators reconstructed 9.7 miles of road in the Soapstone area.</p> <p>18.3 miles of the Squaw Peak Road received heavy maintenance work.</p>

Indicator	Monitoring
Miles of classified road maintained (annually).	<p><b>2003:</b> 480.79</p> <p><b>2004:</b> 503</p>
Miles of unclassified road decommissioned (annually).	<p><b>2003:</b> 4</p> <p><b>2004:</b> 5</p>
Miles of unclassified road (every 10 years).	<p><b>2003:</b> Inventory is incomplete. Currently estimated to be about 155 miles.</p> <p><b>2004:</b> Inventory is incomplete. Estimates continue to be about 155 miles.</p>