

# Biennial Monitoring Evaluation Report for the Uinta National Forest



**For More Information Contact:**

Paul Cowley  
857 West South Jordan Parkway  
South Jordan, UT 84095-8594  
801-999-2177  
paul.cowley@usda.gov

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NOTE: On June 11, 2020, Monitoring Question #5 Fuels Reduction and Monitoring Question #6 Fire Management sections on Pages 11 and 12 were edited to fix inaccuracies in the acreage data, data sources, and duplicate paragraph and minor typographic errors.

# About our Plan Monitoring Program

## Purpose

The purpose of the biennial monitoring evaluation report is to help the responsible official determine whether a change is needed in forest plan direction, such as plan components or other plan content that guide management of resources in the plan area. The biennial monitoring evaluation report represents one part of the Forest Service's overall monitoring program for this national forest unit. The biennial monitoring evaluation report is not a decision document—it evaluates monitoring questions and indicators presented in the Plan Monitoring Program chapter of the forest plan, in relation to management actions carried out in the plan area.

Our monitoring plan covers these eight topics required under FSH 1909.12, in addition to social, economic and cultural sustainability. You'll find each of these topics addressed in this report, with a cross-reference to the Uinta NF Monitoring Questions provided on page 7.

1. The status of select watershed conditions.
2. The status of select ecological conditions including key characteristics of terrestrial and aquatic ecosystems.
3. The status of focal species to assess the ecological conditions required under § 219.9.
4. The status of a select set of the ecological conditions required under § 219.9 to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern.
5. The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.
6. Measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area.
7. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.
8. The effects of each management system to determine that they do not substantially and permanently impair the productivity of the land (16 U.S.C. 1604(g)(3)(C)). (36 CFR 219.12(a))

## How Our Plan Monitoring Program Works

Monitoring and evaluation requirements have been established through the National Forest Management Act (NFMA) at 36 CFR 219. Additional direction is provided by the Forest Service in Chapter 30 – Monitoring – of the Land Management Handbook (FSH 1909.12). The Uinta National Forest monitoring program was updated on November 20, 2015 for consistency with the 2012 planning regulations [36 CFR 219.12 (c)(1)]. The Uinta National Forest Plan was administratively changed to include the updated monitoring program (Chapter 6: Monitoring and Evaluation Plan). For a copy of the current monitoring program go to <https://www.fs.usda.gov/detailfull/uwcnf/landmanagement/planning/?cid=stelprdb5076960&width=full>. Monitoring questions and indicators were selected to inform the management of resources on the plan area and not every plan component was determined necessary to track [36 CFR 219.12(a)(2)].

The monitoring evaluation implementation guide (monitoring guide) is part of the overall plan monitoring program and provides more specific direction for implementing the more strategic plan monitoring program and details monitoring methods, protocols, and roles and responsibilities. The Monitoring Guide is not part of the plan decision and is subject to change as new science and methods emerge. The Uinta-Wasatch-Cache National Forest monitoring guide is available upon request. Please contact Paul Cowley at the address on Page 2. Providing timely, accurate monitoring information to the responsible official and the public is a key requirement of the plan monitoring program. This biennial monitoring evaluation report is the vehicle for disseminating this information.

## Monitoring Objectives

The objectives of our plan monitoring plan include:

- Assess the current condition and trend of selected forest resources.
- Document implementation of the Plan monitoring Program
- Evaluate relevant assumptions, changed conditions, management effectiveness, and progress towards achieving the selected desired conditions, objectives, and goals described in the Forest Plan.
- Assess the status of previous recommended options for change based on previous monitoring & evaluation reports.
- Document scheduled monitoring actions that have not been completed and the reasons and rationale why.
- Present any new information not outlined in the current plan monitoring program that is relevant to the evaluation of the selected monitoring questions.
- Present recommended change opportunities to the responsible official.

## Monitoring Results Summary

Monitoring from 2018-2019 identified no issues with the Uinta NF Forest plan.

Tables 1 and 2 below summarize current adaptation recommendations for line officer consideration. Table 1 shows that three amendments are needed to manage activities on the Uinta NF. Table 2 shows that all of the monitoring questions and monitoring items do not need changes.

**Table 1. Quantitative summary of adaptive management recommendations for all monitoring questions addressed in this report (3 total)**

Recommendation	Yes, need for change	Unsure	No
Results inconsistent with Forest Plan direction	0	0	16
Change to Forest Plan warranted	0	0	16
Change to management activities warranted	0	0	16
Change to Plan monitoring program warranted	0	0	16
Focused assessment needed	0	0	16



**Table 2. Summary of findings for each plan monitoring item (questions and indicators).**

<b>Monitoring Item</b>	<b>Last Year Updated</b>	<b>Consistency with Plan Intent<sup>1</sup></b> <i>Do results demonstrate intended progress of the plan components associated with this monitoring item?</i>	<b>Recommendation<sup>2</sup></b> <i>Based on the evaluation of monitoring results, may changes be warranted?</i>	<b>Type of Change(s) under consideration<sup>2</sup></b> <i>Where may the change be needed?</i>
All Monitoring Items				
Monitoring Question #4, Are vegetation conditions stable or moving toward desired future conditions?	2017	B-Uncertain	B-Uncertain	More time needed to understand effect of wooly adelgid
Monitoring Question #8 Are Forest management activities and natural events affecting the ecological conditions indicated by the status of Focal species?	2017	B-Uncertain	B-Uncertain	Because of population variability, additional surveys are needed at sites with low populations of cutthroat trout before drawing conclusions as to the cause
Monitoring Question #11 Are Forest management activities and natural events affecting the ecological conditions of terrestrial and aquatic ecosystems?, Indicator #2 – Riparian ecosystem conditions	2017	B-Uncertain	B-Uncertain	Revisit flood-scoured stream channels in Nebo Creek, Bennie Creek, Summit Creek, and Peteetneet Creek drainages in 5 to 10 years to validate expected recovery of stream side vegetation to provide shade and stability
Monitoring Question #11 Are Forest management activities and natural events affecting the ecological conditions of terrestrial and aquatic ecosystems?, Indicator #3 – Forested terrestrial	2017	B-Uncertain	B-Uncertain	May need management action of replanting 144 acres of the Little Dip Salvage Timber sale in the Provo River drainage and 39 acres in the Black Hawk Campground if natural regeneration is insufficient

ecosystem conditions				
Monitoring Question #11 Are Forest management activities and natural events affecting the ecological conditions of terrestrial and aquatic ecosystems?, Indicator #3 – Forested terrestrial ecosystem conditions	2017	B-Uncertain	B-Uncertain	<i>Monitoring to determine if stream side vegetation will recover in about 5 to 10 years to provide shade and stability on scoured stream channels in Nebo Creek, Bennie Creek, Summit Creek, and Peteetneet Creek drainages.</i>
Monitoring Question #12 Are Forest management activities and natural events affecting watershed conditions? Indicator #2 Air Quality - Trends of lichen biomonitoring sites.	2017	A – Uncertain	A - Uncertain	The lichen monitoring interval is 10 years. Next lichen station monitoring expected to be 2021
All Other Monitoring Questions and Indicators	2017	Yes	None	N/A

<sup>1</sup>Plan intent:

(A) Uncertain – Interval of data collection beyond this reporting cycle (indicate date of next time this monitoring item will be evaluated);

(B) Uncertain – More time/data are needed to understand status or progress of the Plan Component(s);

<sup>2</sup>Refer to pages below for more details regarding any specific recommendations for change.

## Past Monitoring Recommendation and Status Summary

The March 2018 monitoring and evaluation report had no recommendations for changes to the forest plan, management activities for implementing the forest plan, or the monitoring program or to conduct an assessment to determine if there exists a preliminary need to change the plan.

## Other Considerations for Adaptive Management

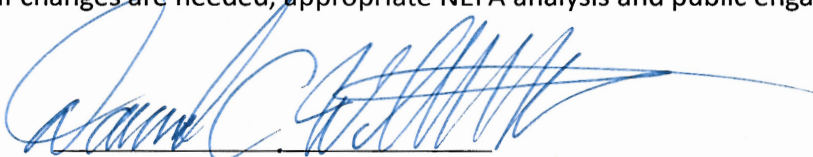
Although not related to the monitoring program, two issues have arisen indicating a potential need to change the forest plan. The first is the need to add management direction for many acquired land parcels and for National Forest Service lands that were inaccurately delineated during the 2003 UNF revision. The second is the need to allow vegetation/fuels treatments in undeveloped areas (Management Prescription 2.6) such as in pinion/juniper areas of the Forest.

## Forest Supervisor's Certification

This report documents the results of monitoring activities that occurred through Fiscal Year 2019 on the Uinta National Forest. Monitoring on some topics is long-term and evaluation of those data will occur later in time.

I have considered the monitoring and evaluation results presented in this report. Based on the monitoring, I find no need to change the 2003 Land Management Plan, as amended, at this time and, therefore, consider it sufficient to continue to guide land and resource management of the Uinta National Forest for the near future. I also find no need to change the plan monitoring program or to conduct an assessment to determine if there exists a preliminary need to change the plan.

I will examine the recommended change to management activities and the two potential needs to change the plan in response to non-monitoring related issues through further discussion with resource specialists. If changes are needed, appropriate NEPA analysis and public engagement will occur.



DAVID C. WHITTEKIEND

Uinta-Wasatch-Cache National Forest Supervisor

Date: March 16, 2020



### **Cross-Walk between Monitoring Required by the Planning Rule and Uinta NF Monitoring Questions**

This section of the report presents a cross-walk between the eight requirements which are noted at 36 CFR 219.12(a)(5) and the Uinta NF monitoring questions

**Monitoring Question #1, Education-Information: Are we delivering key education/ enforcement messages to Forest employees and users?** Addresses Requirement v. The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.

**Monitoring Question #2, What is visitor satisfaction on Forest Service lands?** Addresses Requirement v. The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.

**Monitoring Question #3, Is adequate access to and across the Forest being provided?** Addresses Requirement v. The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives and Requirement vii. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.

**Monitoring Question #4, Are vegetation conditions stable or moving toward desired future conditions?** Addresses Requirement vi. Measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area.

**Monitoring Question #5, Fuels Reduction: Are fuels reduction projects protecting property, human health and safety, and reducing the potential for unwanted fire effects (in the Wildland Urban Interface (WUI) and non-WUI)?** Addresses Requirement vii. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.

**Monitoring Question #6, Fire Management: Are natural ignitions being managed to accomplish resource management objectives?** Addresses Requirement vii. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.

**Monitoring Question #7, Rangeland Management: What is the extent of the change of ecological conditions due to invasive species? Do rangeland plant communities have desired species composition and is ground cover adequate?** Addresses Requirement i. The status of select watershed conditions.

**Monitoring Question #8, Are Forest management activities and natural events affecting the ecological conditions indicated by the status of Focal species?** Addresses Requirement iii. The status of focal species to assess the ecological conditions required under § 219.9.

**Monitoring Question #9, Is there a change in species distribution across the Forest?** Addresses Requirement vi. Measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area.

**Monitoring Question #10, Are Forest management activities and/or natural events affecting ecological conditions that contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of concern?** Addresses Requirement iv. The status of a select set of the ecological conditions required under § 219.9 to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern.

**Monitoring Question #11, Are Forest management activities and natural events affecting the ecological conditions of terrestrial and aquatic ecosystems?** Addresses Requirement ii. The status of select ecological conditions including key characteristics of terrestrial and aquatic ecosystems.

**Monitoring Question #12, Are Forest management activities and natural events affecting watershed conditions?** Addresses Requirement i. The status of select watershed conditions.

**Monitoring Question #13, NFMA compliance: Are we complying with appropriate NFMA requirements?** Addresses Requirement vii. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities and Requirement viii. The effects of each management system to determine that they do not substantially and permanently impair the productivity of the land (16 U.S.C. 1604(g)(3)(C)).

**Monitoring Question #14, Are timber management activities impairing soil productivity of the land?**

Addresses Requirement viii. The effects of each management system to determine that they do not substantially and permanently impair the productivity of the land (16 U.S.C. 1604(g)(3)(C)).

**Monitoring Question #15, Are goods and services being provided in accordance with Forest Plan goals and objectives?** Addresses Requirement vii. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.

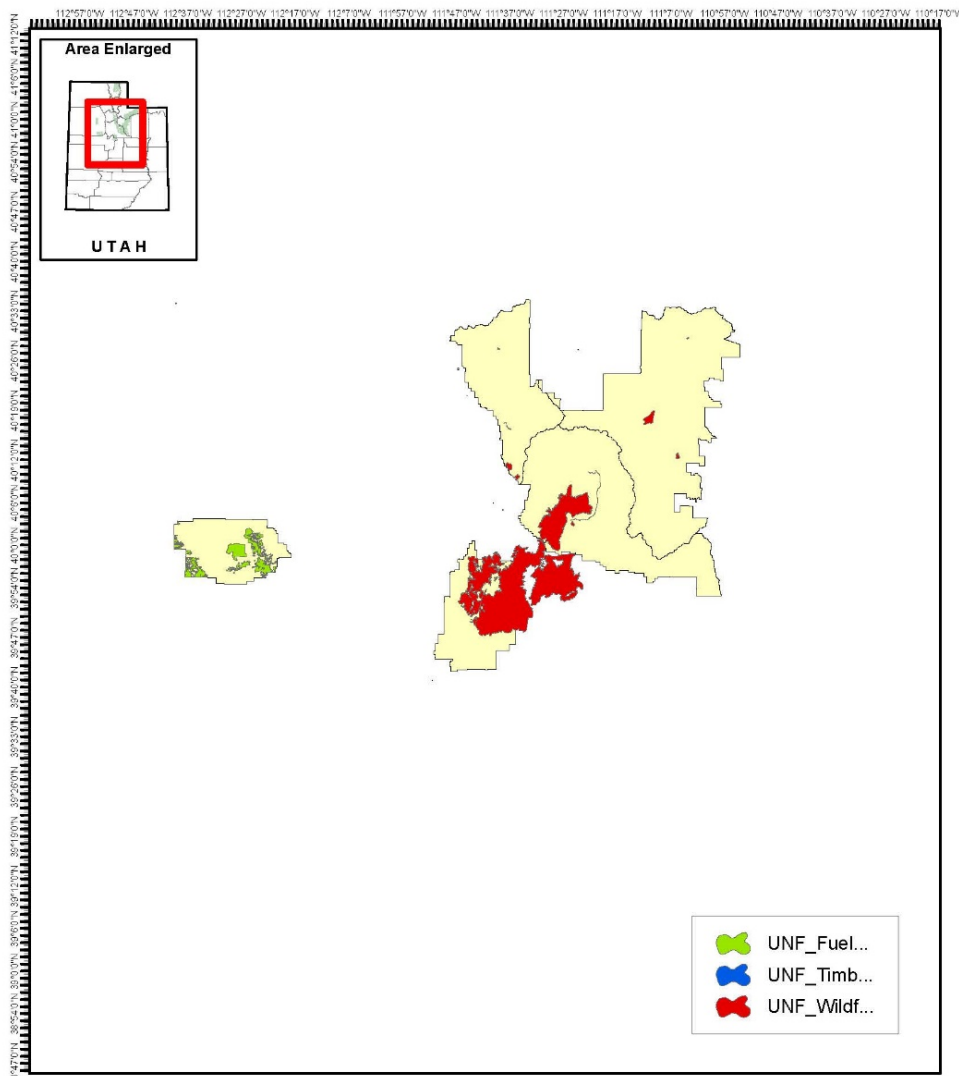
**Monitoring Question #16, National Historic Preservation Act as amended: Are cultural resources being protected as the Forest Plan is implemented and are mitigation measures sufficient prevent damage to cultural resources from project activities? Are *Historic Properties* receiving adverse effects from project implementation, vandalism, looting, and/or neglect?** Addresses Requirement vii. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.

## **SUMMARY OF CHANGES TO THE FOREST PLAN SINCE THE 2018 REPORT**

In 2018, one Forest Plan amendment was completed in response to issues of obsolete standards, guidelines, and definitions in the UNF plan for Canada Lynx (Scoping, analysis, and decision information can be found at <https://www.fs.usda.gov/project/?project=56203>).

### **Summary of Vegetative Changes in 2018-2019**

The figure below is a broad view of areas on the Uinta National Forest (UNF) that have had timber harvest, fuels treatments, and wildfire. Commercial timber harvest occurred on 513 acres. In 2018 to 2019, the main ecological change that has occurred is from vegetation changes resulting from the 120,500 acre Pole Creek/Bald Mountain wildfire and from 17,430 acres of fuels treatments mainly in Vernon area. Based on Burned Area Emergency Response analysis for the Pole Creek/Bald Mountain wildfire, 1,790 acres of 2,120 total acres across the UNF resulted in high soil burn severity mainly in conifer vegetation that is expected to be a relatively permanent change in vegetation from conifer to grass/shrub for many decades before conifer seedlings naturally begin to get established. Wildfires across the UNF resulted in 372 acres of pinyon-juniper and mountain mahogany in high burn severity and 17,430 acres of fuels treatments mainly in Vernon area is expected to revert back to pinion-juniper in about 30 years if left to natural recovery. The remaining areas that wildfires burned across the UNF is expected to recover to the previous vegetative types within five years.



## Uinta National Forest Treatment Areas and Wildfire Areas

US DEPARTMENT OF AGRICULTURE  
 UTAH WASATCH CACHE NF  
 Data Source: USFS Corporate GIS database  
 The Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. They may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created, may yield inaccurate or misleading results.

Fiscal Years 2018-2019  
 Map Created 2/19/2020

0 20 40 Miles



### INFORMATION ON MONITORING QUESTIONS AND INDICATORS

**Monitoring Question #1 Education-Information:** Are we delivering key education/ enforcement messages to Forest employees and users? (Key Focus Areas are: OHV use, recreation user ethics, fire's role/hazardous fuels, noxious weeds, watershed health).

**Finding:** No changes are needed. Although no data was reported from the ranger districts, the Uinta NF delivers key education/enforcement messages to the Forest employees at employee orientation meetings and through contacts with Forest users.

**Indicator #1 - Number of key messages.**

**Data source:** Uinta-Wasatch-Cache NF Public Affairs Officer; forms completed by teachers at the Diamond Fork Youth Forest; responses of users of the Uinta NF to questions asked by Forest Service field personnel

regarding whether users know the key messages that are on kiosks, and on Forest Service website and social media.

**Monitoring result:** No data reported for delivering key education / enforcement messages. .

## **Monitoring Question #2 What is visitor satisfaction on Forest Service lands?**

**Finding:** No changes are needed.

### **Indicator #1 - Level of visitor satisfaction.**

**Data source:** No National Visitor Use Monitoring (NVUM) Surveys were conducted in 2018 or 2019. However, in 2017 information on level of visitor satisfaction was collected using the NVUM protocol but the assessment report was not available for the 2016-2017 Uinta NF Forest Plan monitoring report. Information from the 2017 NVUM survey is used in this report along with information from the 2012 NVUM survey and both of these surveys were completed for the Uinta-Wasatch-Cache National Forest unit and the information is not separated between the Uinta NF and Wasatch-Cache NF.

**Monitoring result:** A summary of public satisfaction using a composite rating in 2012 and 2017 is shown in the table below. The 2012 report states that overall satisfaction results show that about 80% of people visiting indicated they were very satisfied with their overall recreation experience. Another 15% were somewhat satisfied. The results for the composite satisfaction indices were also very good. Satisfaction ratings for perception of safety were at least 90% for all types of sites. Satisfaction ratings for access items were above 85% for all types of sites. The 2017 NVUM report states that overall satisfaction results are quite good. About 84% of people visiting indicated they were very satisfied with their overall recreation experience. Another 13% were somewhat satisfied. The results for the composite indices were mixed. Satisfaction ratings for perception of safety were at least 70% for all types of sites. Ratings for the access composite was over 89% across all types of sites, but ratings for services in both dispersed settings was under 70%.

<b>Satisfaction Element</b>	<b>Satisfied Survey Respondents (%)</b>					
	<b>Developed Sites</b>		<b>Undeveloped Areas</b>		<b>Designated Wilderness</b>	
	<b>2012</b>	<b>2017</b>	<b>2012</b>	<b>2017</b>	<b>2012</b>	<b>2017</b>
<i>Developed Facilities</i>	87.3	89.5	83.7	74.3	70.7	52.0
<i>Access</i>	94.3	86.0	90.6	84.4	89.2	83.4
<i>Services</i>	85.2	81.9	71.9	61.4	85.7	67.2
<i>Feeling of Safety</i>	98.6	95.8	93.6	97.0	99.6	97.2

## **Monitoring Question #3 Is adequate access to and across the Forest being provided?**

**Finding:** No changes are needed. Access is adequate.

**Indicator #1 - Miles of classified road open for public use, miles of motorized trail, miles of non-motorized trail.**

**Data source:** Uinta-Wasatch-Cache NF Motor Vehicle Use Map.

**Monitoring result:** At the end of FY 2019, the miles of classified roads open for public use were 886 miles

*which is considerably less than what was reported in the 2016-2017 monitoring report. This is because the 2016-2017 data included roads under other jurisdictions such as the county. The roads data in 2018-2019 is for only Forest Service owned and managed roads that are open to the public. The only road closure on the Uinta NF was part of a project to reroute an existing road out of a riparian area along Squaw Creek and Indian Creek west of Strawberry Reservoir on the Heber RD. The road was decommissioned and a new road constructed to provide access to the same area as the decommissioned road but in upland area of the watershed. Data for the miles of motorized trails and non-motorized trails is not available for 2018 and 2019 because of data review and re-digitizing in GIS.*

#### **Monitoring Question #4 Are vegetation conditions stable or moving toward desired future conditions?**

**Finding:** *No changes are needed.*

##### **Indicator #1 Forested Vegetation –Extent of insect/disease infestations.**

**Data source:** *Forest Health Protection Annual Aerial Detection Survey 2018. No data is available for 2019. FACTS Database, treatment accomplishments recorded for FY 2019.*

**Monitoring result:** *In 2019 on the Uinta NF, several vegetation treatment activities have been accomplished. These treatments are primarily the result of management actions taken to move toward desired future conditions. These activities include 239 acres of thinning for hazardous fuels reduction, 513 acres of commercial timber sales, 91 acres of planting trees, and 1,701 acres of pile burning. This accounts for a total 2,544 acres that were treated on the Uinta or roughly 0.3% of the 884,726 acres encompassed by the forest boundary.*

*As shown in the following table, acres of the forest experiencing some level of mortality due to various pathogens have remained relatively constant with one exception. While the data shows that the largest amount of area that has been impacted is by the spruce beetle, the rates of mortality in these areas has remained very low to low with less than 3-10% of trees per acre experiencing mortality from this insect. This is not the case with the balsam wooly adelgid. The balsam wooly adelgid is an invasive insect that has moved into the Uinta from Idaho and it was first discovered on the forest in 2017. Where this insect is found, the mortality rates in these areas is categorized as mostly moderate to severe. This categorization shows that 11% to 50% of the trees on these acres are experiencing mortality from this insect.*

Damage Agent	Affected Species	Estimated Acres <sup>(a)(b)</sup> within Insect mortality by Year <sup>1/</sup>								
		2011	2012	2013	2014	2015	2016	2017	2018	2019
Spruce Beetle	Spruce	9,555	6,785	10,137	3,231	212	479	607	3685	Data Not Available
Fir Engraver Beetle	Subalpine and White Fir	32	61	81	2,675	391	318	2907	6820	Data Not Available
Subalpine Fir Mortality Complex	Subalpine and White Fir	151	283	909	5,832	5383	2986	6760	10968	Data Not Available
Mountain Pine Beetle	Lodgepole, Limber and Ponderosa Pine	374	54	165	110	97	42	34	2	Data Not Available
Douglas-fir Beetle	Douglas-fir	374	173	491	1,095	680	344	435	2224	Data Not Available
Ips Beetle	Pinyon Pine	0	0	0	0	10	10	68	1	Data Not Available
Balsam Woolly Adelgid	Subalpine and White Fir	NA	NA	NA	NA	NA	NA	NA	739	Data Not Available

*Acres were estimated through GIS analysis for land ownership, mid-scale vegetation, and insect damage type.*

**Monitoring Question #5 Fuels Reduction: Are fuels reduction projects protecting property, human health and safety, and reducing the potential for unwanted fire effects (in the Wildland Urban Interface (WUI) and non-WUI)?**

**Finding:** *No changes are needed. There are several examples of fuels treatments that contributed to the control and/or management of fire on the Uinta NF.*

**Indicator #1 Acres of hazardous fuels reduction in WUI and non-WUI.**

**Data source:** *Forest Service Activity Tracking System database.*

**Monitoring result:** *From 2018-2019, the Uinta NF implemented 18,459 acres of fuels reduction treatments which is about 2.5 times the area of fuels treated in 2016-2017. 3,921 of those acres were treated in WUI and 14,538 acres were treated in non-WUI.*

**Indicator #2 Fire behavior and opportunities for suppression.**

**Data source:** *Fuel Treatment Effectiveness Monitoring database.*

**Monitoring result:** *From 2018-2019, tenfires started or burned into the 16 fuel treatment areas. The fires are Alaska, Bald Mountain, Bear Canyon, Coal Pit Road, Coyote Springs, Pole Creek, Riverside, Scout, Sheep Rock, and Pole Canyon. Fire behavior changed in all of the fuels treatment areas and 11 of the 16 treatments contributed to the control and/or management of fire. These treatments, combined with past fire scars, have been successful at altering fire behavior in a way that reduced unwanted fire effects, increased firefighter safety, and allowed for more fire management options (which makes it easier to protect property and life).*

**Monitoring Question #6 Fire Management: Are natural ignitions being managed to accomplish resource management objectives?**



**Finding:** *No changes are needed. Conditions must be favorable in order to manage fires for resource objectives, many of which are outside of our control (such as weather, available resources, and fire location). Therefore the percentage of natural ignitions that can be managed for resource objectives may vary significantly from year to year and it is too early to establish a long-term trend. However the goal is to see a long-term trend of increasing the percentage of fires with resource objectives.*

*In the last two years, 3% of natural ignitions were managed to accomplish resource management objectives on the Uinta NF.*

*We hope to see a trend of increasing percentages of acres with resource benefits from natural ignitions by managing more fires for resource objectives and implementing vegetation projects to reduce unwanted fire effects. Over the last two years, about 30% of the acres that burned from natural ignitions were beneficial on the Uinta NF. Typically, non-beneficial acres are from fires burning at low elevations in the wildland urban interface where there are extensive weed populations such as along the Wasatch Front. The percentage on the Uinta NF was unusually low due to the 2018 Bald Mountain and Pole Creek fires. Large areas of these fires were identified as not having a resource benefit due to extensive weed populations, damage to infrastructure, and significant acreages of high severity fire in important watersheds.*

**Indicator #1 Percent of natural ignitions with identified resource management objective.**

**Data source:** *Wildland Fire Decision Support System database.*

**Monitoring results:** *In 2018-2019, 3% of natural ignitions were managed to accomplish resource management objectives on the Uinta NF.*

**The percentage of natural ignitions on the Uinta from 2018 to 2019 that were managed in order to accomplish resource objectives.**

Year	# Natural Ignitions	# Fires with Resource Objectives	% Fires with Resource Objectives
2018	24	1*	4%
2019	5	0	0%
Total	29	1	3%

\*Includes the Willow Creek fire (1,311ac).

**Indicator #2 Percent of natural ignition acres with resource benefit.**

**Data source:** Forest Service Activity Tracking System database, UWC fire perimeter GIS data.

**Monitoring results:** *In 2018-2019, 30% of natural ignitions were beneficial for natural resources on the Uinta NF.*

**The percentage of acres that resulted in resource benefit from natural ignitions on the Uinta from 2018 to 2019.**

Year	# Natural Ignitions Acres	# Acres with Resource Benefit	% Acres with Resource Benefit
2018	122,124	36,926	30%
2019	365	0	0%
Total	122,489	36,926	30%

**Monitoring Question #7 Rangeland Management: What is the extent of the change of ecological conditions due to invasive species? Do rangeland plant communities have desired species composition and is ground cover adequate?**

**Finding:** *No changes are needed. Although some weed infestations are increasing on the Uinta NF, the Forest has been making efforts to control weeds on the planning area. Riparian areas and upland conditions of range allotments are stable to improving, However, long-term monitoring studies indicative vegetative and ground cover conditions are in overall satisfactory condition and noxious weed infestations account for approximately 5% of the district. Satisfactory condition is defined as meeting desired conditions or trending towards desired condition. Desired condition is defined as the 2003 Forest Plan Standards and Guidelines and having the desired plant communities.*

**Indicator #1 Estimated acres infested with noxious weeds.**

**Data source:** *Visual observations and/or treatment reports from seasonal noxious weed USFS crews.*

**Monitoring results:** *The table below presents the acres of noxious weed inventory by Utah State University (USU) and acres of noxious weed treatment in years 2016 through 2019.*

<b>Acres of Noxious Weed Inventory and Treatments</b>						
<b>Ranger District</b>	<b>USU Inventories</b>		<b>Weed Treatment Acres</b>			
	<b>Inventoried Acres</b>	<b>Weed Infested Acres</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Pleasant Grove</b>	7,114	618	2,094	1,360	950	91
<b>Heber</b>	13,658	586	896	1,454	669	1,118
<b>Spanish Fork</b>	5,174 <sup>1</sup>	19 <sup>1</sup>	1,296	534	0	521
<b>Totals</b>	25,946	1,223	4,286	3,348	1,619	1,730

<sup>1</sup> Inventory on Vernon Unit only.

*In 2018-2019 on the Heber Kamas RD, on the Wolf Creek and Strawberry Valley corridor of the Uinta NF, current noxious weeds infestations are being controlled and new noxious weed infestations are found almost on an annual basis. Strawberry corridor is a high use recreation area and noxious weeds are increasing in the area. These new noxious weed infestations are aggressively treated to keep infestations controlled and small. Weeds are treated using herbicide, mechanical treatments, and bio-control agents. Musk Thistle, Canadian Thistle, and Whitetop are the three top invasive weeds found on the Uinta NF.*

**Indicator #2 Riparian and upland condition and trend.**

**Data source:** *Information for riparian and upland condition and trend is based on monitoring studies that were established or re-read on the cattle and sheep allotments between 2018 and 2019. In 2018-2019 on the Heber Kamas RD, Wolf Creek and Strawberry Valley corridor of the Uinta NF approximately 233 long-term monitoring studies were established or re-read on the cattle and sheep allotments between 2018 and 2019. Some of the allotments on the Heber-Kamas District located on the Uinta NF which include Currant Creek, East Daniels, Mud Creek, North Streeper, Soapstone, Neeley Basin, Wolf Creek and others.*

**Monitoring results:** *The vegetative communities associated with the allotments are overall in satisfactory condition. Satisfactory condition is defined as meeting desired conditions or trending towards desired condition. Desired condition is defined as the 2003 Forest Plan Standards and Guidelines and having the*

desired plant communities.

**Monitoring Question #8 Are Forest management activities and natural events affecting the ecological conditions indicated by the status of Focal species?**

**Findings:** *No changes are needed. For conditions indicated by goshawk, the overall trend appears to be increasing with variability from one year to the next. For conditions indicated by cutthroat trout, in some areas more information is needed because of the variability in the population survey results within the same drainage. Survey results do not indicate a need to change the Forest Plan because most stream segments surveyed in 2019 were in excellent condition with upward population trends, low fine sediment loads and exceptional bank stability and at sites with low populations additional surveys are needed to draw conclusions as to the cause.*

**Indicator #1 Active Goshawk territories.**

**Data source:** *Comparison to current inventory of territories based on Survey protocols for the UWC NF that have been adapted from the Northern Goshawk Inventory and Monitoring Technical Guide (Woodbridge & Hargis, Northern goshawk inventory and monitoring technical guide, 2006).*

**Monitoring results:** *Since 2015, the number of known territories has fluctuated between 12-13 territories. Five of these territories are selected as the focal territories (approximately 1/3<sup>rd</sup> per the Forest Plan). However, the five territories have not been monitored consistently during the past five years. There were 13 known territories in 2019. Nine of these territories were monitored. Only 2 were occupied, for a 22% occupancy rate, which is very close to the 25% rate for the focal territories.*

<b>Territory #</b>	<b>Territory Name</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
R04F19D53T06	Mill Hollow	yes	----	no	yes	no
R04F19D53T11	Telephone Hollow	----	yes	yes	yes	no
R04F19D02T07	Granite Flat/Silver Lake	----	----	yes	yes	no
R04F19D02T08	Rock Canyon	yes	yes	yes	no	yes
R04F19D08T05	White River	yes	yes	yes	yes	----
	Total known focal territories	5	5	5	5	5
	Territories monitored for occupancy	3	3	5	5	4
	Percent territories monitored	60%	60%	100%	100%	80%
	Total occupied territories	3	3	4	4	1
	Percent monitored territories that are occupied	100%	100%	80%	80%	25%

*Goshawks on the Uinta planning area use lodgepole pine and aspen equally for their nest locations. Three of the territories have standing nests in both tree species. Lodgepole pine can be either alive or dead, but all of*

*the aspen are alive. It is unlikely that the decline in the occupancy rate is attributed to the beetle epidemic that killed large blocks of lodgepole pine in the mid-2000s because there is no indication that goshawk prefer dead lodgepole pine over live.*

*Mill Hollow is adjacent to a timber sale that is in its third year of harvest. Telephone Hollow is located in a past timber sale that ended in approximately 2012. Granite Flat/Silver Lake and the Rock Canyon territories are just outside of campgrounds. The Granite Flat campground is used all summer, while Rock Canyon is a group site that is normally locked unless there is reservation. It seems that the three territories that are subject to more disturbance fluctuate more than the remaining two, which get little human disturbance.*

#### **Indicator #2 Cutthroat Trout population estimates.**

**Data source:** *In 2018, eight FS sites on the Uinta portion of the Uinta-Wasatch-Cache National Forest were surveyed. In 2019, eight sites were sampled for FS trends. Four sites were sampled for Colorado River Cutthroat Trout (CRCT) in the Duchesne River drainage. The other four sites are on the Upper Provo River and within Bonneville Cutthroat Trout (BCT) drainages. No additional streams were sampled in 2018-2019.*

**Monitoring results:** *Sites were sampled in the Deer Creek Drainage, North Fork American Fork River, Hobble Creek (Hobble Creek and Wardsworth Creek), Payson Canyon (Peteetneet Creek, Wimmer Ranch) and Nebo Creek (Nebo Creek, Holman Creek). All sampling sites are within the BCT range. Field observation suggests that low water from drought conditions in six of the last seven years has either lowered population numbers (for all species) or forced fish into higher elevations to seek habitat and thermal refugia, though sample site elevation did not correlate with population trend or number.*

*The winter of 2018-2019 was a drastic change from most prior winters (since 2012) with well above average snowfall. Habitat conditions and fish populations responded and were very good and in most streams the population was up. Most stream segments surveyed in 2019 were in excellent condition with upward population trends, low fine sediment loads and exceptional bank stability. The one bit of concern was an absence of spawning gravels. High flows from snow melt likely mobilized them and fishes may have to travel some distance to spawn, but high flows, seen throughout the year, and good stream connectivity should make this an easy task. The exceptions are discussed below.*

*On Soapstone Creek, further study of this site is needed to explain a near absence of any fish. The stream has good habitat and adequate flow, non-natives are not present, temperatures are cool, yet the stream is lightly inhabited and even sculpin are absent. Deeper study will be undertaken in 2020 as this could be a future foothold for BCT within the Upper Provo drainage and a jump-off point for re-patriotization in this large watershed.*

*On the upper South Fork Provo River, this site is relatively confined by Highway 35 and a narrow canyon, has good habitat condition, but lack of room to meander has resulted in a high gradient, which during flows experienced in 2019 may have flushed fish to lower reaches. Populations of BCT and brook trout were both still very good, but length frequency distributions were skewed with fewer than expected fish under 150mm. Purely from the numbers, this stream's trend is down, but it shows stability despite native/non-native competition. On Bench Creek, population trend on this stream has been steadily declining since 2011. From 2011 to 2014 population decline was 35%, while from 2014 to 2019 reduction was 41%. Habitat is exceptional; with stable banks, low fines and increasing riparian vegetation and beaver activity. The upper watershed has no roads and no overgrazing was observed. Some of the current reduction could be a result of willow overhanging the stream banks thereby reducing the fishability of 20% of the segment and a battery failure at station 60 on the second pass. Future study efforts need to increase on this stream.*

**Monitoring Question #9 Is there a change in species distribution across the Forest?**

**Finding:** *No changes are needed.*

**Indicator #1** Change from cold water to warm water species, change in terrestrial vegetation and species distribution.

**Data source:** *Field observations of aquatic habitat and fish population surveys*

**Monitoring results:** *There is no indication of a change from cold to warm water species. There have been increases in riparian terrestrial vegetation due to willow growth in many areas and increased beaver activity. There is no indication of a change in terrestrial species distribution.*

**Monitoring Question #10 Are Forest management activities and/or natural events affecting ecological conditions that contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of concern?**

**Finding:** *No changes are needed. For conditions indicated by goshawk and for other federally listed threatened and endangered species, conserve proposed and candidate species, the ecological and population trends appears to be stable or increasing. For fisheries, weather has caused changes in spring runoff that has resulted in changes both up and down in streams that were surveyed and forest management activities does not appear to have been a factor in the changes.*

**Indicator #1** Mature forest conditions and population estimates (e.g, Northern goshawk). *See Monitoring Question # 8, Indicator #1.*

**Indicator #2** Aquatic and riparian condition: In-stream channel conditions and population estimates (e.g, Bonneville cutthroat trout and Colorado River cutthroat trout). *For fish abundance and condition surveys see Monitoring Question # 8, Indicator #2.*

**Indicator #3** Habitat that contains other federally listed threatened and endangered species, conserve proposed and candidate species – Documentation of alterations in habitat due to management actions and natural events.

**Data source:** *Forest Service information in FACTS database on fuels treatments.*

**Monitoring results:** *In 2018 and 2019, 17,430 acres of fuels treatments mainly in Vernon area have helped to prevent adverse effects to sage grouse habitat from wildfire. The 2018 monitoring results also provided additional information to the decision maker and reviewing officer for the Greater Sage-Grouse Amendment, currently under objection resolution.*

**Monitoring Question #11 Are Forest management activities and natural events affecting the ecological conditions of terrestrial and aquatic ecosystems?**

**Finding:** *No changes are needed. In 2018 and 2019, natural events and forest management activities changed ecosystem conditions mainly in the short-term on 120,500 acre Pole Creek/Bald Mountain wildfire, on several thousand acres of trees having insect and disease, and from 17,430 acres of fuels treatments mainly in Vernon area. Timber lands are fully stocked or will regenerate naturally, and wildfire has resulted in 2,120 total acres across the UNF resulted in high soil burn severity mainly in conifer vegetation of the Pole Creek/Bald Mountain wildfire. Most of these activities affected the terrestrial ecosystem by setting the seral stage of the vegetation*

303(d) listed water bodies from Utah Division of Water Quality 2016 303(d) list.			
<i>Ranger District</i>	<i>Analysis Unit ID</i>	<i>Analysis Unit Description</i>	<i>Parameter</i>
<b>Pleasant Grove RD</b>	UT16020201-015_00	Dry Creek-Alpine	pH
	UT16020203-013_00	Provo Deer Creek	OE Bioassessment <sup>1</sup>
<b>Heber RD</b>	UT14060003-019_00	North Fork Duchesne	Aluminum, Dissolved
	UT14060004-013_00	Strawberry-4	Dissolved Oxygen; pH
	UT14060004-015_00	Currant Creek Upper	Dissolved Oxygen
	UT16020203-009_00	Main Creek-1	OE Bioassessment; E. coli
	UT16020203-010_00	Main Creek-2	E. coli <sup>1</sup>
	UT16020203-026_00	Heber Valley	Temperature
<b>Spanish Fork RD</b>	UT16020201-005_00	Salt Creek-2	pH
	UT16020201-014_00	Currant Creek-Juab Valley	Temperature
	UT16020202-003_00	Hobble Creek-1	pH
	UT16020202-012_00	Soldier Creek-1	Temperature
	UT16020202-027_00	Beer Creek	OE Bioassessment; Total Ammonia

<sup>1</sup> OE means Observed versus Expected and E. coli. is a bacteria indicator species.

to an earlier stage, improving watershed conditions by increasing ground cover, and improving sage grouse habitat.

**Data source for all indicators:** See Monitoring Question # 4, Indicator #1, Monitoring Question #5, Indicators #2, Monitoring Question # 6, Indicators #1 and #2, Monitoring Question # 7, Indicators #1and #2, Monitoring Question # 8, Indicators #1 and #2 and the Utah 2016 Integrated Report (303(d) and 305(b) reports).

#### **Indicator #1 Aquatic habitat conditions.**

**Monitoring results:** For fish abundance and condition surveys see Monitoring Question # 8, Indicator #2. Water quality may indicate natural and/ or man-caused conditions that affect aquatic habitat. The current water quality assessment for streams by the Utah Division of Water Quality is the same as that which was reported in the 2016-2017 Forest Plan monitoring report. As previously reported, the Utah 2016 Integrated Report (303(d) and 305(b) reports) lists several streams on the Uinta NF that are classified as not supporting its beneficial use, as shown in the table above. Those streams are rated as low priority for TMDL assessment by Utah division of Water Quality. The Utah Division of Water Quality will be assessing data and completing the biennial 2018/2020 Integrated Report (303(d) and 305(b) reports within next two years.

#### **Indicator #2 Riparian ecosystem conditions.**

**Monitoring results:** Changes to riparian ecosystems have occurred after the 2018 Pole Creek/Bald Mountain fire that burned riparian areas in Diamond Fork, Nebo Creek, Bennie Creek, Summit Creek, and Peteetneet Creek drainages. Fires burned willows and cottonwoods along the streams of Diamond Fork, Nebo Creek and Bennie Creek. Floods scoured stream channels in Nebo Creek, Bennie Creek, Summit Creek, and Peteetneet Creek drainages. It is expected that stream side vegetation will recover in about 5 to 10 years to provide shade and stability to these drainages.

#### **Indicator #3 Forested Terrestrial ecosystem conditions.**

**Monitoring results:** In 2018 and 2019, natural events and forest management activities changed ecosystem conditions mainly in the short-term on 120,500 acre Pole Creek/Bald Mountain wildfire, on several thousand



acres of trees having insect and disease, and from 17,430 acres of fuels treatments mainly in Vernon area. Timber lands are fully stocked or will regenerate naturally, and wildfire has resulted in 2,120 total acres across the UNF resulted in high soil burn severity mainly in conifer vegetation of the Pole Creek/Bald Mountain wildfire. Most of these activities affected the terrestrial ecosystem by setting the seral stage of the vegetation to an earlier stage, improving watershed conditions by increasing ground cover, and improving sage grouse habitat. In fiscal year 2019, the forest planted trees on 91 acres in Clyde Creek. The Uinta National Forest has a need of replanting 183 acres of land. About 144 of these acres are the result of the Little Dip Salvage Timber sale in the Provo River drainage. There is a need to plant tree seedlings in the Black Hawk Campground although much of the burned area is expected to have natural regeneration of aspen and oak stands.

**Indicator #4 Non-forested terrestrial ecosystem conditions.** See Monitoring Question #7, Indicator #2. The table above shows that about 1,041 acres of non-forested area had high burn severity and that these areas of soils have had severe impacts from wildfire.

**Monitoring Question #12 Are Forest management activities and natural events affecting watershed conditions?**

**Finding:** No changes are needed. Regarding water quality, the UWCNF works cooperatively to collect water samples and to provide information to the Utah Division of Water Quality on possible causes of water quality impairment. No lichen monitoring has occurred in 2018-2019. The next evaluation is scheduled in 2026 when another round of lichen monitoring should be complete. Past lichen monitoring indicates no change is needed. Based on projects monitored in 2018-2019, monitoring indicates that no permanent or substantial impairment of soil properties have occurred from project activities and there has been no loss of soil productivity.

**Indicator #1 Aquatic Habitat conditions.**

**Data source:** See Monitoring Question #8, Indicator #2 and Monitoring Question #11, Indicator #1.

**Monitoring results:** See Monitoring Question #8, Indicator #2 and Monitoring Question #11, Indicator #1.

**Indicator #2 Air Quality - Trends of lichen biomonitoring sites.**

**Data source:** The Uinta National Forest has 23 lichen monitoring sites that were evaluated in 2011. The results of the evaluation were presented in the 2016-2017 Forest Plan Monitoring Evaluation report. The monitoring interval for lichen monitoring is 10 years and no new data has been collected for 2018-2019 Forest Plan Monitoring Evaluation report.

**Monitoring results:** Next evaluation will be after next monitoring, 2021.

**Indicator #3 Changes in soil properties (physical, chemical, and biological) that result in the loss of the inherent ecological capacity or hydrologic function of the soil resource.**

**Data source:** Soil resource condition surveys

**Monitoring results:** Three projects were reviewed on the Heber RD and include thinning timber and ground-based skidding along wildfire line perimeter along Bjorkman Creek, ruts formed by off-road vehicles at Soapstone Pass, and dispersed camping for large group gathering along Soapstone Creek. Monitoring indicates that very little permanent or substantial impairment of soil resources have occurred and that design features of the wildfire perimeter and the large group gathering substantially reduced impacts to soil resources. Ruts formed by off-road vehicle use occurs occasionally in small areas of the Forest and are the Forest Plan allows for the rehabilitation of these areas.

In 2018 and 2019, six activities were monitored and documented in the National Best Management Practices database and included implementation and effectiveness for the projects listed below.

- Completed construction and re-routing of motorized trail on Tibble Fork Reservoir for fishing access, Pleasant Grove RD (2018).
- Motorized trail operation on Sawmill Nebo Creek, Spanish Fork RD (2018).
- Wildfire management on Bald Mountain/Pole Creek Fire, Spanish Fork RD (2019).
- Dispersed recreation site management at Halls Fork, Spanish Fork RD (2019).
- Road decommissioning on Indian Springs Road and Squaw Creek Road, Heber RD (2019).

*Results of monitoring indicates that five of the six activities had BMPs mostly or fully implemented and that the BMPs were effective at reducing sediment movement. There was no permanent or substantial impairment of soil properties due to these project activities and no loss of soil productivity.*

**Monitoring Question #13 NFMA compliance: Are we complying with appropriate NFMA requirements?**

**Finding:** *No changes are needed.*

**Indicator #1 Stocking of lands.**

**Data source:** *Uinta-Wasatch-Cache NF Annual Reforestation and Timber Stand Improvement Needs Report*

**Monitoring results:** *The Uinta National Forest has a need of replanting 183 acres of land. 144 of these acres are the result of the Little Dip Salvage Timber sale. This closure of this timber sale was extended until 2020 and thus no reforestation efforts will be completed until after this time. The remainder of these acres still shows a need to be planted or certified as meeting stocking levels. In 2019, the forest planted 91 acres of trees in the Clyde Creek area. There will be a need for additional reforestation efforts resulting from the Bald Mountain and the Pole Creek fires which burned a cumulative total of 35,615 acres at the end of 2018. Sewing orders for tree seedlings have been placed for planting trees in the Black Hawk Campground but much of the burned area is expected to have natural regeneration of aspen and oak stands. Regeneration levels will be evaluated in 2021 and additional sewing orders will be placed with the nursery at this time to fill in areas that don't have adequate natural regeneration.*

**Monitoring Question #14 Are timber management activities impairing soil productivity of the land?**

**Finding:** *No changes are needed.*

**Indicator #1 Changes in soil properties (physical, chemical, and/or biological) that result in the loss of the inherent ecological capacity or hydrologic function of the soil resource. Specific indicators are amount of soil disturbance, change inorganic matter, or change in Soil structure, soil temperature, A horizon depth.**

**Data source:** *Data consisted of observations along a transect using soil monitoring protocol USDA 2009. Forest Soil Disturbance Monitoring Protocol, Volume 1: Rapid Assessment, By Deborah S Page-Dumroese, Ann Abbott, and Thomas M. Rice. Gen. Tech. Report WO-82a, September 2009.*

**Monitoring results:** *In 2019, the Telephone Hollow timber harvest was monitored on the Uinta NF. The results indicate that very little permanent or substantial impairment of soil resources have occurred.*

**Monitoring Question #15 Are goods and services being provided in accordance with Forest Plan goals and objectives?**

**Finding:** *No changes are needed. The Uinta NF is providing a variety of goods and services according to the Forest Plan.*

**Indicator #1 Number of Lands Special Use Permits.**

**Data source:** Forest Service Special Uses Data System (SUDS) database.

**Monitoring results:** *The number of lands and recreation special use permits are presented by ranger district in the table below. Lands SUPs are uses such as dams, water transmission lines, geophysical exploration. Recreation SUPs are uses such as recreation residences, outfitter and guides, and recreation events.*

Number of Lands Special Use Permits.			
<i>Ranger District</i>	<i>Number of Lands SUP</i>	<i>Number of Recreation SUP</i>	<i>Total</i>
<i>Supervisor's Office<sup>1</sup></i>	49	12	61
<i>Pleasant Grove</i>	65	60	125
<i>Heber/Kamas<sup>1</sup></i>	55	95	150
<i>Spanish Fork</i>	69	26	95
<i>Total</i>	238	193	431

<sup>1</sup>Note that Supervisor's Office is for both the Uinta NF and the Wasatch-Cache NF because they are managed as a combined Forest unit. Kamas/Heber RDs data is the total for both ranger districts and is not broken out by separate districts.

**Indicator #2 Number of Recreation Special Use Permits.** *See indicator #1 and table above.*

**Indicator #3 Acres leased for oil and gas exploration and development.**

**Data source:** US Bureau of Land Management LR2000 database.

**Monitoring results:** *As of 12/05/19, there are 25 authorized oil and gas leases containing 52,588 acres within the Uinta NF plan area.*

**Indicator #4 Level of permitted livestock grazing.**

**Data source:** Range Allotment Annual Operating Plans

**Monitoring results:** *The level of permitted livestock grazing has not changed since 2015. The table below presents the permitted commercial livestock use levels. The term AUM means animal unit months.*

Level of permitted livestock grazing.							
<i>Ranger District</i>	<i>Number of permittees</i>	<i>Cattle Numbers</i>	<i>Cattle AUM</i>	<i>Sheep &amp; Goats Numbers</i>	<i>Sheep &amp; Goats AUM</i>	<i>Total number</i>	<i>Total AUM</i>
<i>Pleasant Grove</i>	0	0	0	0	0	0	0
<i>Heber</i>	23	4,003	20,488	41,640	39,587	45,643	60,075

<b>Spanish Fork</b>	24	7,375	42,051	2,000	3,445	9,375	45,496
<b>Total</b>	47	11,378	62,539	43,640	43,032	55,018	105,571

**Indicator #5 Other Forest Products (Fuelwood and Christmas Tree Permits).**

**Data source:** Forest Service PTSAR database.

**Monitoring results:** The table below presents other forest products produced from the Forest in 2018-19. The Uinta National Forest sold 1,055 special forest product permits to individuals in 2019. Among these permits were Christmas trees, firewood, and posts and poles. The table below presents forest products produced from the Forest in 2018-2019.

<b>Other Forest Products</b>		
<b>Ranger District</b>	<b>Product</b>	<b>Amount</b>
<b>Pleasant Grove</b>	Firewood	20 cords
<b>Kamas/Heber<sup>1</sup></b>	Firewood	3,697 cords
	Poles	70 pieces
	Christmas Trees	2,055 trees
<b>Spanish Fork</b>	Firewood	680 cords
	Christmas Trees	250 trees
<sup>1</sup> Note that Kamas/Heber RDs data is the total for both ranger districts and is not broken out by separate districts. <sup>2</sup> A cord is the amount of wood in a neat stack 4 feet wide by 4 feet high by 8 feet long (128 cubic feet).		

**Indicator #6 Total Timber Sale Program Quantity.**

**Data source:** Forest Service PTSAR database.

**Monitoring results:** The Uinta NF sold a total of 8,880 CCF (hundred cubic feet) of timber to commercial operators. Of this total, 8,417 was from the resale of a timber sale that not completed by a previous timber purchaser. This Uinta Forest plan identifies that the Forest should be offering 3,190 CCF of timber per year, of which 640 CCF is chargeable to the ASQ. Since the material that the forest is selling is salvage material resulting from beetle killed trees, we are exceeding our average annual sale of timber.

**Monitoring Question #16 National Historic Preservation Act as amended:** Are cultural resources being protected as the Forest Plan is implemented and are mitigation measures sufficient prevent damage to cultural resources from project activities? Are *Historic Properties* receiving adverse effects from project implementation, vandalism, looting, and/or neglect?

**Finding:** No changes are needed.

**Indicator #1 Number of *Historic Properties* that received new adverse effects from looting, vandalism, and/or neglect.**

**Data source:** *Heritage data module, hard copy reporting.*

**Monitoring results:** *On the Pleasant Grove RD, one archaeological site, a prehistoric rockshelter occupation was vandalized by spray paint.* There is no need to change management or change the Forest Plan because the Forest has the ability to take action to reduce these activities such as installing education signs and exclosures.