United States
Department of
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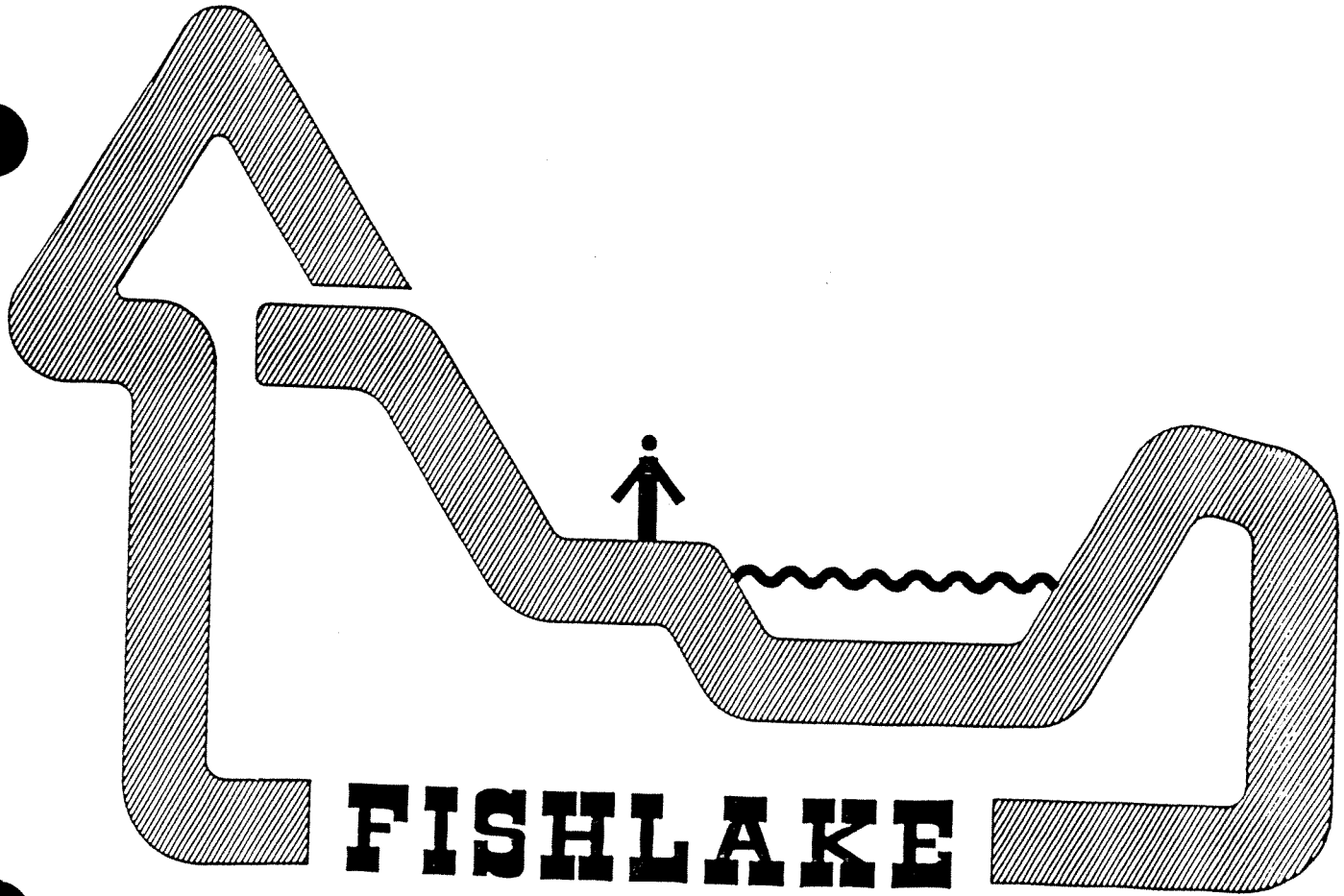
Forest
Service

Intermountain
Region

**Fishlake National
Forest**

RECORD OF DECISION

Deep Creek and Snow Bench Timber Sales



FISHLAKE NATIONAL FOREST

RECORD OF DECISION

FINAL ENVIRONMENTAL IMPACT STATEMENT

DEEP CREEK AND SNOW BENCH TIMBER SALES

FISHLAKE NATIONAL FOREST
LOA RANGER DISTRICT
WAYNE COUNTY, UTAH

Responsible Agency	USDA Forest Service
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ABSTRACT

The Forest Service is proposing to harvest timber and construct roads in the Deep Creek and Snow Bench analysis areas. An amendment to the Fishlake National Forest Plan is also proposed. With this action and subsequent regeneration and timber stand improvement practices, the Forest Service will continue to provide a sustained yield of wood products, and contribute to the Allowable Sale Quantity as directed in the Land and Resource Management Plan for the Fishlake National Forest.

The Final Environmental Impact Statement describes seven alternatives for managing the 230 acre analysis areas. The analysis areas are located on the east side of Thousand Lake Mountain in Wayne County, Utah, T27S, R4E, sections 26, 27, 34, and 35. The Deep Creek Timber Sale is on the western edge of the Lookout Peak Roadless Area and the Snow Bench Timber Sale is on the eastern edge of the Thousand Lake Roadless Area.

Alternatives included various methods of silvicultural treatment and no action. These alternatives were analyzed by issues that were identified during

the public involvement process. Alternatives considered were; no harvest, patch clearcuts, patch clearcuts with sanitation, shelterwood, patch clearcuts and shelterwood, group selection, and individual tree selection. Issues which were identified and used to evaluate the alternatives were: wildlife and old growth, recreation and visuals, proximity to Capitol Reef National Park, watershed and soils, economics, roadless character, and timber management. Patch clearcuts and shelterwood is the preferred alternative for the Deep Creek Timber Sale and group selection is the preferred alternative for the Snow Bench Timber Sale.

RECORD OF DECISION

INTRODUCTION

This Record of Decision documents my decision and rationale for implementation of the Deep Creek and Snow Bench Timber Sales. The specific decisions I will make include the following:

1. Should the Fishlake National Forest Land and Resource Management Plan be amended to provide for methods other than clearcutting in the spruce-fir type?

2. Should timber management activities, along with required road construction, take place in the Deep Creek and Snow Bench Analysis Areas?

3. If they do take place, to what intensity should they be implemented and by what silvicultural method?

4. What mitigation measures, if any, should occur as a part of the project?

THE DECISION

I have decided to amend the Fishlake National Forest Land and Resource Management Plan to allow silvicultural methods other than clearcutting in the spruce-fir type, such as individual and group selection which apply unevenaged management or a shelterwood system.

I have decided to harvest timber in the Deep Creek and Snow Bench analysis areas. I have selected the Patch Clearcuts and Shelterwood alternative for the Deep Creek Timber Sale and the Group Selection alternative for the Snow Bench Timber Sale. I feel that they best meet the goals and objectives set forth for the area by the Forest Plan. The interdisciplinary team has adequately analyzed the environmental consequences of harvesting timber in the area and I concur that these are the proper silvicultural methods for implementation at these sites.

The selection of the Patch clearcuts and Shelterwood alternative for the Deep Creek Timber Sale will implement the following activities.

1. Harvest 1,200 MBF of sawtimber from 150 acres. Harvesting will occur in the Lookout Peak Roadless Area.

2. Two to five acre Patch Clearcuts will be applied to harvest timber in the south and northeast portions of the Deep Creek analysis area and Shelterwood will be used in the northwest portion.

3. Approximately one mile of new road will be constructed to harvest the timber. This road construction will occur in the Lookout Peak Roadless Area. Two miles of road reconstruction will be completed on existing access roads to the area.

4. The cultural treatments including planting, thinning, and slash cleanup, described on pages II-2 and II-3 of the Final Environmental Impact Statement will be implemented.

Selection of the Group Selection alternative for the Snow Bench Timber Sale will implement the following activities.

1. Harvest 1,200 MBF of sawtimber from 80 acres. Harvesting will occur in the Thousand Lake Roadless Area.

2. Group selection will be applied to harvest timber in the Snow Bench analysis area.

3. Approximately one mile of new road will be constructed within the area. This road construction will occur in the Thousand Lake Roadless Area. Two additional miles of road reconstruction will be completed on existing access roads to the area. There will be a total of four miles reconstructed on the two sales.

4. The cultural treatments including planting, thinning, and slash cleanup, described on pages II-2 and II-3 of the Final Environmental Impact Statement will be implemented.

The following mitigation measures will be required.

1. Adhere to all standards and guidelines as described in the Forest Plan.

2. Implement proposed Forest Plan amendment which would change the preferred method of harvesting in the spruce-fir type from clearcutting, thereby allowing the use of other management systems.

3. Implementation will require the use of a standard Timber Sale Contract which would be applied to all timber harvest activities, road construction, and reconstruction. The contract contains provisions whereby the contractor must perform to a standard designed to mitigate impacts on the sale area.

4. There were no cultural resources identified in the area. If some are discovered during implementation of the project, they will be protected.

5. Soil erosion as a result of road construction, road reconstruction, and harvest activities will be minimized. Erosion control structures will be installed on all roads and skid trails to standards required by the timber

sale contract and as described in the Final EIS. Constructed roads will be revegetated according to these same standards and descriptions.

6. Slash created through harvest activities will be treated, as described in the Final EIS, to reduce the risk of wildfire and bark beetle buildup.

7. Smoke dispersal measures, as described in the Final EIS, will be applied to reduce impacts to the Class I airshed to the east during burning of logging slash. A slash burning prescription will be prepared which will be designed to disperse the smoke and reduce particulates. A clearing index of 500+ will be required to aid in smoke dispersal. Some smoke may enter the Class I airshed, but only for a short time.

8. Timber will not be harvested from sustained slopes in excess of forty percent.

9. Harvested areas will be regenerated to the proper levels within five years. Plantations will be monitored for five years to assure survival of the seedlings.

10. Timber stand improvement measures (thinning and damaged tree removal) will be completed to improve vigor and species composition of the area as described in the Final EIS.

11. Wind thrown trees will be monitored for and promptly salvaged or treated to prevent infestations of spruce bark beetle. Monitoring will be required for three years after harvest.

12. Informational signs will be placed in the area to explain timber management practices being used.

13. Vegetative diversity of the area will be maintained and improved according to the guidelines in the Forest Plan.

14. Visual quality objectives of modification and partial retention along major roads and trails will be met or exceeded. Logging slash will be piled and burned along roads, trails, and other visually evident areas.

15. The Fishlake National Forest Snag policy will be adhered to.

16. No harvesting activities will take place in the extreme western portion of the Snow Bench analysis area because wintering populations of blue grouse utilize it for feed and cover. That area would also be difficult to regenerate. The Utah Division of Wildlife resources supports this measure.

17. Timber will be salvaged on a ten acre area to the east of the riparian area in the Deep Creek analysis area and the timber type converted to aspen for improvement of wildlife habitat.

18. Roads constructed into each timber sale will be administratively closed to the public and a gate installed to prevent public use. Road closures are being implemented to mitigate impacts to wildlife, especially

deer and elk, as was recommended by the Utah Division of Wildlife Resources.

19. Heavy equipment will be prohibited within 100 feet of all riparian areas except at the one designated stream crossing in the Deep Creek area.

20. The riparian area just to the north of the Deep Creek analysis area will be treated to maintain the quality of the riparian characteristics. The invading conifers will be removed using chainsaws and hand labor. Heavy equipment would not be allowed on the riparian area.

21. A small pond in the Snow Bench area will be enhanced for wildlife habitat improvement. The pond will be cleaned out and enlarged to hold more water. It will then be fenced to keep cattle out.

22. Harvesting will not be allowed on the slope just to the west of Snow Lake due to visual and potential erosion considerations.

23. All trails through the harvest areas will be protected and logging slash adjacent to them piled.

24. An interpretive view area will be constructed on the Great Western Trail near the southwest corner of section 26.

25. A trailhead facility will be constructed near the road closure gate in the Snow Lake vicinity.

26. Threatened, endangered, and sensitive, (TES) plant and animal species found within the area will be monitored and protected. Forest Biologist will continue their inspections of the area. Timber marking crews will be trained to identify TES species. Protection guidelines will be implemented if TES species are located. The goshawk will be emphasized during monitoring.

RATIONALE FOR THE DECISION

I feel that the alternatives that I have selected will help achieve the goals, objectives, and the desired future condition identified in the Fishlake National Forest Land and Resource Management Plan. They meet the objectives of the purpose and need of the project as outlined on page I-6 of the Final EIS. The selected alternative is consistent with the Forest Plan.

Public participation occurred throughout the analysis and several important issues were identified. These issues were evaluated thoroughly and have helped me make my decision. The important issues follow.

1. Wildlife Management and Old Growth

Long term benefits will be derived from the selected alternatives by retaining or enhancing species and age class diversity. Forage production will be enhanced where the timber canopy is removed. Some hiding cover will be lost, but I, feel that with the type of cut I have chosen there will be adequate hiding cover in the area. There will be adequate old growth trees still in the

area after harvest to provide for species needing old growth. It has been displayed to me that the selected alternatives will have a general beneficial effect on the wildlife of the area and would have only a modest effect on the old growth trees in the area. There were no U. S. Forest Service, Region 4 defined old growth forests identified in the area.

2. Recreation and Visuals

Past timber harvest has improved access into the area. This has increased the roaded dispersed recreation use of the area. Continued harvest in the area will maintain the roads in good condition. Use of the area is expected to increase as the area becomes known. Use in the area has been changing from primitive to roaded. The visual quality objectives out lined in the Forest Plan for the area will be met for the selected alternatives.

3. Proximity to Capitol Reef National Park

The selected alternatives will have only minimal impacts to the resources of the Park; including visuals, hydrology, sedimentation, water quality, air quality, hiking, roadless characteristics and other recreation activities.

4. Watershed and Soils

There will be a small increase in water yields for the alternatives that I have selected. In the short-term, water quality will be reduced due to an increase in sediment. Most of the increase of sediment will be as a result from the new road construction. This will be a short-term increase and would be highest for about the first two years, returning to a constant erosion rate when mitigation measures are put into effect. Timber harvest activities are not expected to create large amounts of soil displacement as long as mitigation measures are in place.

5. Economics

The present net value for the selected alternative for the Deep Creek Timber Sale is $60,542.61, and the present net value for the selected alternative for the Snow Bench Timber Sale is $61,459.42. I feel that production of direct and indirect jobs, revenues to the counties, and incomes to residents of the area will occur as a result of the alternatives I have selected.

6. Protection of Roadless Character

I feel that the alternatives that I have selected will have only a minimal effect on the roadless character of the area. The Deep Creek Analysis area is on the edge of the 9,651 acre Lookout Peak Roadless Area and would remove about 150 acres from that total. The Snow Bench Analysis area is on the edge of the 27,936 acre Thousand Lake Mountain Roadless and would remove 80 acres from that total. Since both sales are on the edges of the roadless areas the effects are minimal. Both roadless areas will still meet the definition of a Roadless Area.

7. Timber Management

I believe that the alternatives that I have selected will provide proper management of the area. It will provide for higher productivity of the site and provide for a healthy forest for future generations.

8. Cultural Resources

There were no cultural resource sites identified during the analysis.

9. Threatened, Endangered, and Sensitive Species

There were no threatened, endangered, or sensitive plant species identified within the area. Five animal species with threatened, endangered, or sensitive status were identified in the area. They included the bald eagle, peregrine falcon, Mexican spotted owl, willow flycatcher and the northern goshawk. No adverse direct or indirect effects are expected for bald eagles or peregrine falcons. The selected alternative will not likely effect the willow fly catcher. The goshawk and its habitat will be beneficially effected by the selected alternatives. No Mexican spotted owl nests have been found in the area. Three years of surveys have been completed. Nests have been located in the canyons to the east in Capitol Reef National Park. Further telemetry studies are on going, which will study the juvenile owls dispersal from the Park nests.

10. Access

A total of two miles of road will be constructed and four miles of road reconstructed under the alternatives that I have selected.

11. Air Quality

Burning logging slash from harvest operations may have an effect on the air quality of the area and the adjacent Class I airshed over Capitol Reef National Park. Mitigation measures will be implemented to improve smoke dispersal and reduce particulates. Effects will be short term and minimal.

PUBLIC INVOLVEMENT

I conducted a public involvement process designed to identify the issues and concerns regarding the Deep Creek and Snow Bench Timber Sales. Both sales are listed in the ten year timber sale schedule in the Forest Plan. Identifying issues for the Deep Creek Timber Sale began with a June 27, 1988 project initiation letter. On March 24, 1989 a letter was sent to known concerned publics asking for comments on the proposed Deep Creek Timber Sale. The request for comments appeared in the Richfield Reaper on April 5, 1989 and was announced on KSVC radio. A Notice of Intent to prepare an environmental impact statement for the proposed Deep Creek Timber Sale and Forest Plan amendment appeared in the Federal Register on July 14, 1989. A public field review was announced and conducted on September 7, 1989. As a result of comments received during the public field review, additional public input was requested concerning the proposed Forest Plan amendment. A decision was also made to

include the proposed Snow Bench sale in the on going analysis. Comments were requested in February, 1990 regarding the Snow Bench Timber Sale. An amended Notice of Intent to prepare an Environmental Impact Statement on both the Deep Creek and Snow Bench timber sales including the Plan Amendment appeared in the Federal Register in June, 1990.

Notice of availability of the Draft Environmental Impact Statement for the Deep Creek and Snow Bench Timber Sales appeared in the Federal Register and local newspapers in May, 1991. Comments were received on the Draft EIS until July 1, 1991. As a result of the comments received, additional analysis was conducted for; old growth, threatened, endangered and sensitive species, visuals, regeneration, roads, and diversity. Notice of availability of the Final EIS appeared in the Federal Register and local newspapers in July of 1992. Comments were again requested prior to completion this Record of Decision. I received five written comments on the Final EIS. I have used these comments along with the analysis completed on the proposed project to make my final decision. The comments received on the Final EIS are discussed in the following paragraphs.

A concern was raised about the on going study of a Mexican Spotted Owl nest located in the Deep Creek drainage within the Capitol Reef National Park and the disbursement of juveniles from the nest. Even though inventory protocol had been completed, we funded an additional year of inventory, which also did not find any Mexican Spotted Owl in the area. We are now cooperatively funding a telemetry study of nesting owls in Capitol Reef National Park. Radio transmitters will be placed on juveniles produced in the nest. By tracking these young, we will be able to determine conclusively whether the old growth trees within the project area are utilized by the young for dispersal. The planned sale implementation date of 1994 will allow ample time to complete the study and to implement any necessary protection measures.

A concern was raised about the effect the sales will have on local economies. I feel that the timber sales do have the potential to provide jobs in support of local economies. Due to our bidding procedures we can not guarantee which communities would get the additional jobs generated, but I believe they would occur. Our Forest Plan points out that many of the small communities of Wayne County rely on National Forest timber as part of their economy. Forest Service small business set-aside policy will require us to provide small operators like those operating in Wayne County a share of the available sawtimber.

There were two comments regarding the road building planned for the timber sales. A total of two miles of road construction are planned. One mile on each sale. At the conclusion of the harvest activity these roads will be closed to the public and gated. Both roads will be properly drained and revegetated to prevent erosion. In addition four miles of existing road will be improved. It is the road improvement from past harvesting that has increased the roaded dispersed recreation use in the area. The timber sales will provide the opportunity to maintain and provide additional gravel surface on existing Thousand Lake Mountain roads. Since the new roads will be closed there will be no long term impact to the elk populations of the area. Slash created as a result of timber harvest will be piled and burned along roads and trails to maintain the visual qualities of the area. If demand for firewood

warrents, the roads will be left open to the public for 1-2 years to allow for firewood gathering.

Comments were received regarding threatened, endangered, and sensitive species. I feel that they were thoroughly evaluated and the results of the evaluations are found in Chapter IV of the Final EIS. Further information is contained in the Biological Evaluation, which is available for review.

Comments were received regarding the old growth issue. As stated in the Final EIS, the area does not meet the Region 4, U. S. Forest Service draft definition of a spruce-fir "Old Growth Forest". There is no question that there are old trees in the area. The trees that will be harvested are mature to overmature and are at risk to insect and disease infestations. The majority of the trees in the area of in the 100-150 year old age class. Some of these trees are important for diversity and for use by many wildlife species. The alternatives that I have selected will provide for an adequate number of old trees to remain in the area after harvest.

One person asked if the proposed Forest Plan amendment would have an effect on other resources across the Forest. The answer is no. The preferred harvest method for the spruce-fir type stated in the Forest Plan was an error. The intent was to use group selection as the preferred method in the spruce fir type. I do not expect that more acres will be treated in order to meet the outputs predicted in the Forest Plan.

A comment was raised concerning the importance of monitoring management indicator species (MIS). Monitoring for the goshawk, a MIS species, has been conducted in the area for the past three years. It is the conclusion of our Forest Biologists that goshawk and its habitat will benefit through application of proposed harvest methods. We will continue monitoring both timber sale areas for any new nests built in areas to be cut over. Deer and elk, both MIS species, will continue to be monitored.

Comments on the Final EIS expressed concern for elk thermal and hiding cover. On the Thousand Lake Mountain portion of the Forest, hiding and thermal cover is not the limiting factor. It is the lack of forage. The sales will improve the food to cover ratio. The roads constructed into the timber sales will be closed to the public and should not effect the elk use of the area in the long term.

The U. S. Environmental Protection Agency (EPA) has reviewed the Final EIS and continues its lack of objections to the proposed action, as was expressed in their review of the Draft EIS. The EPA gave the Draft EIS a "LO - Lack of objections" rating.

ALTERNATIVES CONSIDERED

This section describes an array of alternative actions for meeting the purpose and need of the project. Seven alternatives; including a No Action Alternative, as required by the National Environmental Policy Act (NEPA); were developed. Public issues and the analysis done by the Interdisciplinary Team were used to formulate alternatives. These alternatives include mitigation measures, management constraints, and monitoring requirements. A Wilderness

recommendation is outside the scope of this analysis due to PL 98-428. However, the no action alternative would preserve the area in a condition where Wilderness designation could be considered at a future date. At the conclusion of this project the Lookout Peak and Thousand Lake Roadless Areas will still meet the size and other requirements needed to maintain their integrity as roadless areas.

Alternative 7, Patch Clearcutting and Shelterwood was developed as a result of the further analysis that was completed in response to comments received on the Draft Environmental Impact Statement. Generally, the effects of this new alternative are described under the Patch Clearcutting alternative and the Shelterwood alternative.

The alternatives of burning the area for wildlife habitat improvement and of harvesting large clearcuts (up to 40 acres) were identified and then eliminated from further study since they were not acceptable for the area. These alternatives would not meet the objective of the Forest Plan. The effects on the site would be harsh.

The large clearcut alternative would satisfy the short term demands for sawtimber and economic efficiency, but may not meet the objective of maintaining a continuous supply of timber in the future. Regeneration within five years would be difficult in large clearcuts. The visual quality objectives established in the Forest Plan (Plan, pages IV-74 and IV-115) could not be met with large clearcuts.

Burning would improve the plant and animal diversity by opening up the dense timber stands. This would stimulate aspen sprouting. Other forbs and grasses would also increase in areas opened up by burning. Burning stands of timber could only be done under extreme weather conditions because of a general lack of fine fuels on the forest floor. These conditions make it highly likely that a fire could escape from the prescribed area leading to high suppression costs and undesirable effects. In addition burning would not meet the objective of satisfying the short-term demands for sawtimber, would not meet the purpose and need for the area as described in Chapter I, but would damage and destroy valuable resources. The timber could be partially salvaged but would bring a significantly lower price. Regeneration of a new stand would be very difficult. The visual quality objectives established in the Forest Plan (Plan, pages IV-74 and IV-115) could not be met.

1. ALTERNATIVE #1--NO HARVEST

The Deep Creek and Snow Bench sales would not be sold under this alternative. It serves as a benchmark to compare the environmental effects of other alternatives. Current management practices would continue and new developments might be constructed if supported by proper NEPA documentation. Current management practices include trail maintenance, small wood product sales, dispersed recreation, hunting, grazing, and use of the Deep Creek Lake road, number 206/209 to provide access to the spring source of Torrey's culinary water source and to provide access to other timber sales. New developments might include such things as construction of a trailhead for the Great Western Trail or the construction of observation points to view the desert scenery to

the east. Travel management would be managed as specified in the current Forest Travel Map.

2. ALTERNATIVE #2--PATCH CLEARCUTS

With this alternative patch clearcuts of 2 to 5 acres would be created. Approximately 800 MBF of sawtimber would be removed from about 35 acres on the Deep Creek Timber Sale and approximately 500 MBF of sawtimber would be removed from about 20 acres on the Snow Bench Timber Sale. Harvest activities would occur within the Lookout Peak and the Thousand Lake roadless areas over a two to five year period. The openings would be shaped to meet the visual quality objectives for the area. The slash would then be jackpot piled. Approximately 50 percent of the area would be machine piled. Areas of advance spruce regeneration would be avoided. The balance of the slash would be lopped. Damaged trees and subalpine fir trees would be removed as a sale area improvement project. The patches would then be fully planted with Engelmann spruce seedlings. In areas where they would not cause competition to the spruce seedlings, other species such as aspen, grass, shrubs, and forbs would be allowed to invade due to their benefits to wildlife and soil stabilization. Thinning of established regeneration would occur as necessary. The objective would be to obtain a pure stand of Engelmann spruce for the next rotation. An even-aged forest would be maintained within the patches. The area could be harvested every 20 to 30 years. At that time other patches could be placed in the areas between the original patches.

Approximately two miles of road would be constructed within the Lookout Peak and Thousand Lake Mountain Roadless Areas. These roads will be gated and closed to the public. Roads would be constructed with proper drainage and would be revegetated, but would remain available for administrative use and future harvest entries. However, the roads may be opened to the public for a short period after the sales are completed to allow for firewood collection. Approximately four miles of road reconstruction would occur on existing roads. Several borrow sites would be used for construction and reconstruction of the roads.

3. ALTERNATIVE #3--PATCH CLEARCUTS WITH SANITATION

With this alternative the patch clearcuts alternative (Alternative number 2) would be implemented as described above. In addition sanitation cutting would occur between and around the patch clearcuts to remove insect attacked or diseased trees. Approximately 1,200 MBF of sawtimber would be removed from about 150 acres on the Deep Creek Timber Sale and approximately 700 MBF of sawtimber would be removed from about 80 acres on the Snow Bench Timber Sale. Road construction, road reconstruction, and other activities would be the same as the patch clearcuts alternative.

4. ALTERNATIVE #4--SHELTERWOOD

With this alternative a two step shelterwood harvest system would be implemented. This cut would be the seed cut of the system and would remove 40 to 70 percent of the basal area. This percentage is consistent with the standards given on page IV-118 of the Forest Plan. Approximately 1400 MBF of sawtimber would be removed from about 150 acres on the Deep Creek Sale and

approximately 1000 MBF of sawtimber would be removed from the Snow Bench Timber Sale from about 80 acres. Harvest activities would occur within the Lookout Peak and the Thousand Lake Mountain Roadless Areas over a two to five year period. Visual quality objectives for the area would be met. The logging slash would be machine piled within one to two years in the landings and any other openings large enough to accommodate the machinery without damaging the residual stand. Hand piling would occur in areas along roads, trails, areas with high concentrations of slash, and other highly visible areas where damage would occur to the residual stand if it were machine piled. The logging slash would be lopped to within two feet of the ground on the remainder of the area. Fill in planting with Engelmann spruce seedlings would be required in the landings and other areas as needed to speed up the regeneration process. Natural regeneration is expected on the majority of the stand. An even-aged forest would be maintained. Road construction, reconstruction and timber stand improvement would be the same as the patch clearcut and patch clearcuts with sanitation alternatives.

5. ALTERNATIVE--#5 GROUP SELECTION (Snow Bench Timber Sale selected alternative)

With this alternative the harvest method would be a group selection system. Groups of trees ranging from one quarter to two acres in size would be removed. Approximately 1600 MBF of sawtimber would be removed from about 150 acres on the Deep Creek Timber Sale and approximately 1200 MBF of sawtimber would be removed from about 80 acres on the Snow Bench Timber Sale. Logging slash would be treated in the same manner as the shelterwood alternative. Fill in planting with Engelmann spruce seedlings would be required in the landings and other areas as needed to speed up the regeneration process. Natural regeneration is expected on the majority of the stand. An unevenaged forest would be created, however the groups would be evenaged. Road construction, reconstruction and timber stand improvement would be the same as in alternatives 2, 3 and 4. Harvest activities would occur within the Lookout Peak and the Thousand Lake Mountain Roadless Areas over a two to five year period. Visual quality objectives for the area would be met.

6. ALTERNATIVE #6--INDIVIDUAL TREE SELECTION

With this alternative individual trees would be harvested throughout the stand. An unevenaged forest would be created. Approximately 800 MBF of sawtimber would be removed from approximately 150 acres on the Deep Creek Timber Sale and approximately 600 MBF of sawtimber would be removed from 80 acres on the Snow Bench Timber Sale. Logging slash would be treated in the same manor as the shelterwood and the group selection alternatives. Fill in planting with Engelmann spruce seedlings would occur in the landings and other areas as needed to speed up the regeneration process. Natural regeneration is expected on the majority of the stand. Road construction, reconstruction and timber stand improvement would be the same as in alternatives 2, 3, 4 and 5. Harvest activities would occur within the Lookout Peak and the Thousand Lake Mountain Roadless Areas over a two to five year period. Visual quality objectives for the area would be met.

7. ALTERNATIVE #7--PATCH CLEARCUTS AND SHELTERWOOD (Deep Creek Timber Sale selected alternative)

This alternative would use a combination of alternative #2 and alternative #4. This proposed alternative would only apply to the Deep Creek Analysis Area. Patch clearcuts would be applied to the southern and northeast portions of the analysis area. Shelterwood would be applied to the northwest portion of the analysis area. A even age forest would be created. Approximately 1200 MBF of sawtimber would be removed from about 150 acres on the Deep Creek Timber Sale. The Snow Bench Timber Sale would be harvested by one of the other alternatives. Treatments and effects for the patch clearcut portion would be as described under the patch clearcut alternative. Treatments and effects on the shelterwood portion would be as described under the shelterwood alternative. Road construction, reconstruction would be the same as in alternatives 2, 3, 4, 5, and 6. This alternative was not in the Draft Environmental Impact Statement. It was developed as a alternative that would assure regeneration of the Deep Creek Timber Sale.

LAWS AND REGULATIONS

The alternatives that I have selected are consistent with the National Forest Management Act (NFMA) of 1976 in meeting the management requirements detailed in implementing regulations 36 CFR 217.27 (a) through (g). Specifically, the management prescriptions for the selected alternatives provide for the protection of soil, water, air, wildlife, fishery resource and the multiple uses under 36 CFR 217.27 (a)(1) through (12).

All forest land identified for commercial harvest has been determined to be on suitable land as defined in 36 CFR 219.3.

All practicable means to avoid or minimize environmental harm from the alternatives selected have been adopted. A monitoring and enforcement program shall be adopted for mitigation measures. (40 CFR 1505.2)

Clearcutting will be used on 25 acres of the Deep Creek Timber Sale in the alternative that I have selected. Where clearcutting is to be used, it must be the optimum method (16 U.S.C. 1604 (g)(3)(FO(i)). A silvicultural prescription prepared by a certified silviculturist has been completed for the Deep Creek Timber Sale. It selected the patch clearcut method as the best for the south and northeast portions of the Deep Creek Analysis Area. I have concluded that patch clearcuts, two to five acres in size, are appropriate for that area. The patch cuts will be reforested within five years of the harvest.

Regeneration requirements were of particular importance to the publics who commented on the Draft EIS. CFR 219.27(c)3 requires "When trees are cut to achieve timber production objectives, cuttings will be done in such a way as to assure that technology and knowledge exists to adequately restock the lands within five years after final harvest....Five years after final harvest means five years after clearcutting, five years after final overstory removal in shelterwood cutting, five years after final removal in seed tree cutting or five years after selection cutting....Adequate restocking means that the cut area will contain the minimum number, size, distribution, and species

composition of regeneration as specified in regional silvicultural guides for each forest type."

The Snow Bench Timber will be harvested using the group selection method of harvest. Under this method regeneration within five years is required. Forest and District silviculturists expect that natural regeneration will occur through use of this system. To assure that the five year requirement is met, some of the cut over areas will be planted with three year old Engelmann spruce seedlings. The Deep Creek Timber Sale will be cut using the shelterwood and patch clearcut methods. This will be the initial cut of the shelterwood system where the five year requirement would not apply. The patch cuts will be planted with three year old Engelmann spruce seedlings. There is some existing regeneration in both sales which will be protected during harvest operations as much as possible. Other timber sales in the area have been adequately restocked. This has convinced me that these sales can also be regenerated.

All management activities proposed that will affect the timber resource will meet all regional, NFMA, CFR and FNF-LRMP requirements for regeneration establishment and monitoring.

The even-aged management system prescribed for the Deep Creek Timber Sale under the selected alternative meets the objectives and requirements of the Forest Plan. 36 CFR 219.27 (d)

The selected alternatives comply with the terms of the seven requirements of 36 CFR 219.27(b) regarding vegetative manipulation.

1. The timber sales are suited to the multiple-use goals established for the area.

2. The harvested areas can be adequately restocked within the required time period.

3. The proposal was not chosen primarily because it returns the greatest amount of dollars or timber, although those factors were considered. Economics was an issue that was evaluated in the analysis. Both sales showed positive PNV. Silvicultural practices are governed largely by the existing forest condition and resource protection standards, not economics or timber outputs.

4. Potential effects on residual trees and adjacent stands were considered during the analysis process.

5. The proposal will not permanently impair the site productivity of the area. The soil and water resources of the area will be conserved. Soil and water resources was an issue that was analyzed thoroughly to determine potential effects.

6. The proposal will provide desired effects on water quality and quantity, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation uses, aesthetic values and other resource yields. These valuable resources were also analyzed to assure that the projects effect on them would not be detrimental.

7. The proposal is practical in terms of transportation and harvest requirements.

The proposal will preserve and enhance the diversity of plant and animal communities. 36 CFR 219.27(g)

No conflicts have been identified with other Federal, State and Local agencies. We have worked to assure that the resources of Capitol Reef National Park are protected.

The alternatives that I have selected comply with the Endangered Species Act in protecting threatened and endangered species.

No flood plains or wetlands will be adversely affected as defined in Executive Orders 11988 and 11990.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The enviromentally preferred alternative is the alternative that best fulfills the following six goals as stated in the National Environmental Policy Act (Title I, Section 151(b)):

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.

2. Assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings;

3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and a variety of individual choices.

5. Achieve a balance between the human population and resource use which permit high standards of living and a wide sharing of life's amenities;

6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depleteable resources.

All of the action alternatives fulfill the six goals stated above to at least a minimum degree. The patch clearcut alternative best fulfills these six goals since it would effect the least number of acres overall.

IMPLEMENTATION DATE

I plan to offer the Deep Creek Timber Sale for sale during Fiscal Year 1994. I plan to offer the Snow Bench Timber Sale for sale during Fiscal Year 1995.

ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

This decision is subject to administrative review in accordance with 36 CFR 217. Any appeal of this decision must include the information required by 36 CFR 217.9 (content of a Notice of Appeal), including the reasons for appeal. Two (2) copies must be filed with the Regional Forester, Intermountain Region, 324 25th Street, Ogden, Utah 84401 with 45 days of the date of publication in the Richfield Reaper, Richfield, Utah. This decision may be implemented 45 calendar days after the legal notice of the decision is published in the newspaper.

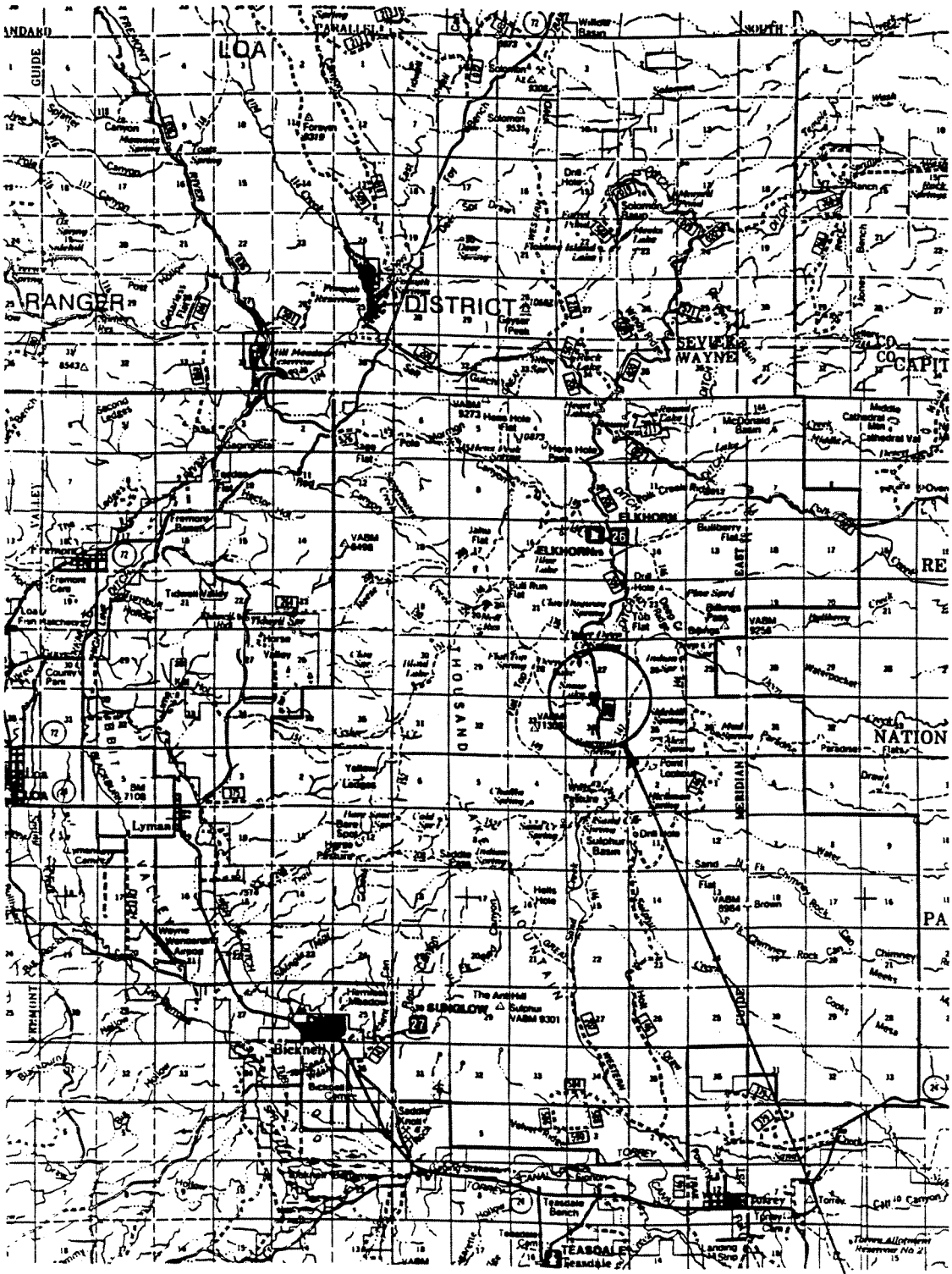
For further information contact Gary Laing, District Ranger, Loa Ranger District, Fishlake National Forest, 138 South Main, Loa, Utah 84747, telephone 801-836-2811; or Allen Henningson, Forester, Fishlake National Forest, 115 East 900 North, Richfield, Utah, 84701, telephone 801-896-9233.

Tobias Martinez

TOBIAS A. MARTINEZ
Forest Supervisor
Fishlake National Forest

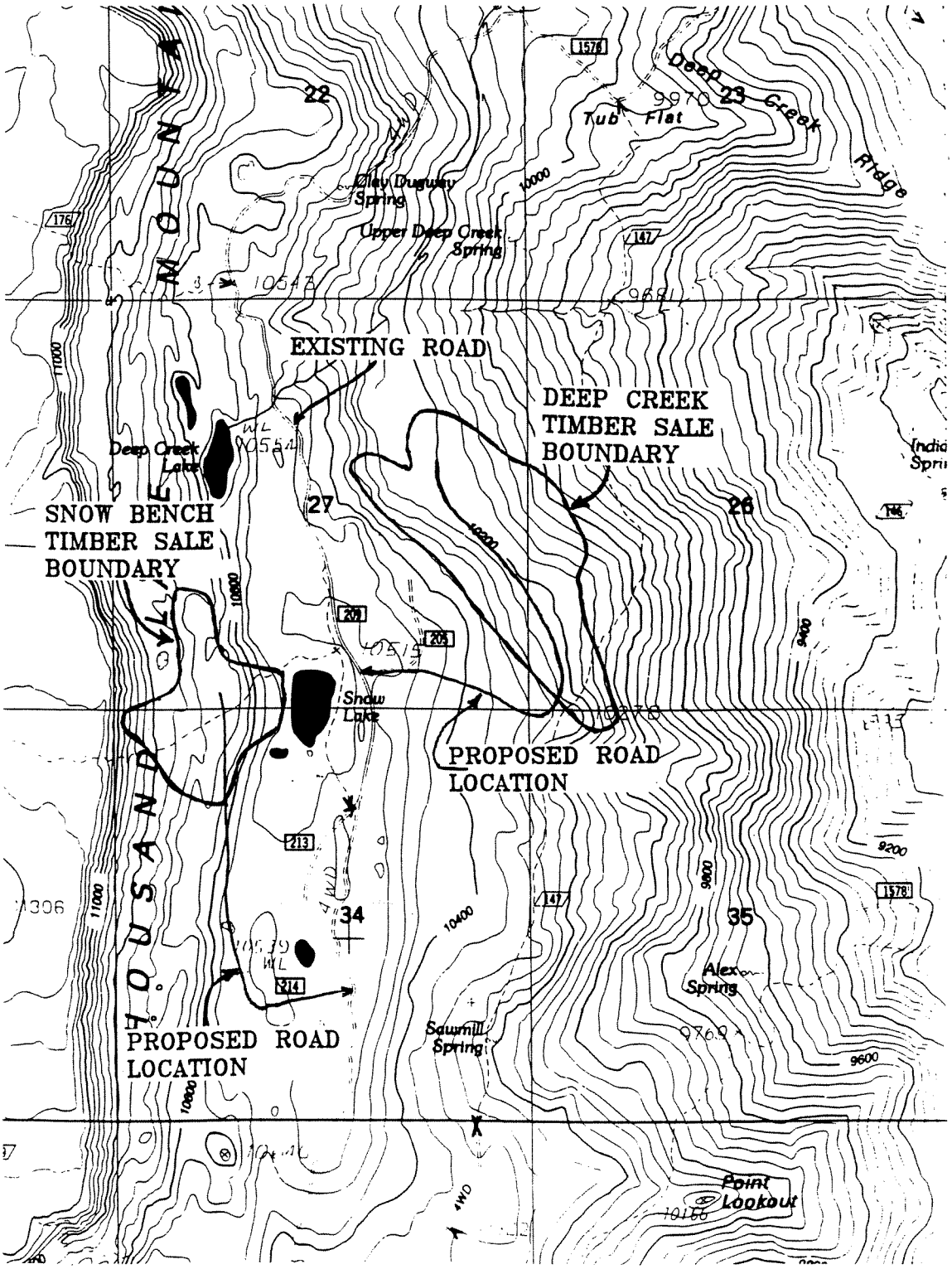
9-29-93
Date

Vicinity Map - Thousand Lake Mountain



ANALYSIS VICINITY

Project and Road Location Map



ANALYSIS LOCATION