

Decision Memo

Cook Creek Commercial Thinning and Salvage Project

USDA Forest Service
Pacific Ranger District, Olympic National Forest
Grays Harbor County, Washington
T22N, R10W, Section 28

BACKGROUND

The Pacific Ranger District has identified opportunities to treat second growth stands to enhance structural diversity, promote the development of late-successional stand characteristics, and capture the economic value of windthrown trees. The stands are located in the Cook Creek drainage within the Quinault Watershed in Grays Harbor County. The legal location of the project is: T22N, R10W, Section 28.

The stands proposed for treatment originated following past logging of old-growth forests, and are approximately 73 years old in the competitive exclusion/biomass accumulation stage of stand development. This stage of stand development tends to be one of relative structural uniformity and simplicity, with only one canopy layer, little understory vegetation, and low plant species diversity. During the winter of 2007-8, windstorms resulted in pockets of blowdown up to 2-3 acres in extent amounting to total of approximately 12 acres, in addition to individual windthrown trees throughout the stands. The remaining undamaged portions of these second growth stands average 224 trees per acre, predominately western hemlock, with lesser numbers of Douglas-fir, western redcedar, Sitka spruce and red alder, and estimated canopy cover is 90%. The stands are characterized by a single story that is experiencing slowing growth due to high tree density, and the calculated relative density for western hemlock is 67%. If no action is taken, this overstocked condition would result in stands with reduced vigor, increased mortality, and reduced diversity. Specifically in Riparian Reserves, if no action is taken stands will have reduced capability to produce the size and quantity of large woody debris sufficient to sustain physical complexity and stability of the Riparian Reserves and associated streams.

The Olympic National Forest LRMP designation for the project area is E1 Timber Management, where the primary goal is to produce timber on a long-term sustained yield basis. The Northwest Forest Plan-designated land allocations within the project area are Adaptive Management Area (AMA) and Riparian Reserve. Adaptive Management Areas are landscape units designated to encourage the development and testing of innovative technical and social approaches to achieving desired ecological, economic, and other social objectives. Riparian Reserves, overlaying other Northwest Forest Plan land allocations, are intended to protect the health of the riparian and aquatic system. Cook Creek is designated as Key Watershed (Tier 1), with a primary objective of providing high quality habitat for anadromous salmonids and resident fish species.

With the stated stand conditions and Forest Plan management direction in mind, the purpose and need for this project is to: 1) Increase structural diversity of forest stands, develop a multi-layered canopy, and enhance growth and coverage of herbaceous plants on the forest floor, and 2) capture timber value for economic benefit.

DECISION

I have decided to implement the salvage and thinning on 68 acres in the Cook Creek drainage as detailed below.

Windthrown and root-sprung or otherwise severely wind damaged trees of all species would be salvaged throughout the stands, and the remaining trees in the stands would be commercially thinned. The combination of salvage and thinning will result in a variable density thinning treatment that incorporates skips, gaps and areas of heavy thinning within the overall thinning treatment, and will promote variability (structural and spatial) and a growth response from the overstory and understory vegetation. In the Riparian Reserves, the goal will be to produce the size and quantity of large woody debris sufficient to sustain physical complexity and stability of the Riparian Reserves and associated streams. Riparian buffers, buffers to minimize the risk of further windthrow and other excluded areas total approximately 26% of the stands that will be left as unthinned skips. Salvage and commercial thinning will occur on the remaining area of approximately 50 acres. Areas of complete and partial blowdown within the stands differ in size and location from what might have otherwise been designed as gaps and heavy thinning areas, however salvage within these areas will meet the objectives for these components of the variable density thinning treatment. The heavy thinned and gap areas should provide enhanced foraging opportunities for deer and elk. Where commercial thinning is applied, the species and sizes of cut and retained trees will be determined to meet the ecological objectives. The thinning will be implemented using a prescription that results in variable spacing between retained trees and that is feasible for the Forest Service and contractors to implement. Approximately 100-130 trees per acre will remain in the post treatment stands. Outside of the blowdown pockets, stand relative density will be approximately 40% to 50%, with a range of 60%-80% canopy cover. Coarse woody debris will be retained in sufficient quantities to meet ecological objectives. The salvage and thinning will be designed to minimize disturbance to riparian areas, soils, retained coarse woody debris and retained vegetation.

In the southeast corner of the Forest Service ownership, 400 feet of temporary road will be constructed on Rayonier Forest Resources L.P. land for access, continuing for an additional 100 feet on Forest Service land. The temporary road is not in Riparian Reserves and will not require any stream crossings. The entire length of temporary road will be decommissioned when salvage and thinning are completed.

Project Design Criteria:

Aquatic

Mitigation measures designed for the protection of soils and site productivity (as well as water quality) are generally referred to as Best Management Practices (BMPs) and are described in *General Water Quality Best Management Practices*, Pacific Northwest Region, November 1988.

- Follow all applicable general provisions listed in Appendix A of the Memorandum of Understanding (MOU) between the Washington Department of Fish and Wildlife and USDA Forest Service, Pacific Northwest Region, Regarding Hydraulic Projects Conducted by USDA Forest Service, Pacific Northwest Region (January 2005). The specific project provision found in Appendix A for timber felling and yarding will be followed.
- The following no-cut riparian buffers will be designed and implemented based on site specific conditions to eliminate potential impacts to aquatic resources:
 - Perennial fish-bearing streams (Unit 1) – a 100 to 400 foot variable-width buffer
 - Intermittent stream (Unit 2) – a 50 to 90 foot variable-width buffer.
- No salvage of windthrown trees will occur in no-cut riparian buffers.
- All existing coarse woody debris in streams and wetlands will remain.
- Any machinery maintenance involving potential contaminants will occur at an approved site or greater than 100 feet from wetlands, water bodies, or stream channels.
- Ground skidding equipment will be kept 33 feet back from the northern and western unit boundaries in Unit 2.
- Directionally fall trees away from no-cut riparian buffers to protect riparian vegetation from damage. Retain trees accidentally felled into these buffers to minimize stream sedimentation or damage to riparian vegetation.
- A watershed specialist or fish biologist shall be consulted prior to modifying any of the project design criteria that could impact aquatic resources.

Skid Trails, Landings and Temporary Road

- Operation during periods of excessive soil moisture (as determined by the Forest Service) will require the use of a skyline yarding system, and one end suspension of logs will be a minimum requirement.
- Temporary road locations shall be approved by the Forest Service prior to construction. Install sufficient ditch relief pipes on temporary roads to divert flow before it reaches stream channels.
- Weather conditions will be monitored, and log haul temporarily suspended during prolonged periods of precipitation when soil moisture becomes elevated. If road maintenance cannot be performed adequately due to weather, haul will be discontinued until conditions improve. During the wet season, ditches will not be bladed past the last cross-drain before a stream crossing.
- If the purchaser's plan of operations includes log haul between November 1 and May 31, a watershed specialist/fish biologist and Timber Sale Administrator will review the purchaser's plan to prevent sediment from entering stream channels. This may include

placing additional road surfacing, rock armoring ditches, constructing silt fencing, and straw mulching exposed soils along cutbanks and fillslopes. Precautions will be followed to minimize transport of trapped sediment material during removal, including the following: a) removal will be done when site conditions are dry, and/or b) relocate captured sediment to a stable location away from stream courses

- All landing locations will be approved by the Forest Service prior to construction. Use existing landings where possible. Build skyline cable landings in areas away from stream courses, wet areas, and unstable soils. Use short landing extensions to reduce and control potential runoff. Landings within Riparian Reserves, if necessary, should be located on existing roadways or on existing landings that may require only minimum reconstruction (e.g., clearing vegetation, sloping for drainage, or surfacing for erosion control purposes) to be made suitable for use.
- Rock will be used only when necessary to reduce erosion, puddling, and compaction on landings and temporary roads, and applied only where needed (spot rocking).
- If ground-based logging systems are used, use designated skid trails to maintain less than 20% of the stands' area in an adversely impacted condition. Where soil is displaced by skidding operations, pull soil back into the skid trail location when operations are completed, install erosion control devices such as backblading and waterbars, as necessary, and restore disturbed coarse woody debris.
- Locate skid trails a minimum of 25 feet away from no-cut riparian buffers, and use of equipment will be prohibited within the no-cut riparian buffers.
- Space ground-based skid trails no closer than 110 feet apart, center-to-center. Use existing skid trails where possible. Lining operations may be accomplished by yarding material to lead, or at a 30-45 degree angle towards skid roads wherever possible. Suspension of logs is not required during lining operations. If a processor is used, it may be allowed to make one pass between skid trails and occasional "pokes" off the skid trail, using existing openings between trees.
- On skid trails where rut depth exceeds 10 inches, the following actions will be required: 1) subsoiling the full width of the trail to the depth of the rut plus six inches, 2) returning all displaced soils on adjacent berms and any excavated material to the skid trail to approximate original soil contours, 3) replacing any disturbed large coarse woody debris as closely as possible to its original position, and 4) placing slash and stumps onto the trail so that it is contiguous with the surrounding area.
- Subsoil compacted and/or rutted soils in landing areas as necessary to the depth of the rut, plus six inches to provide seedbed. Restore disturbed coarse woody debris.
- Following project implementation, make skid trails impassable to motor vehicles and all-terrain vehicles.
- Decommission temporary road after last entry by purchaser. Methods may vary, but as a standard, road will at least receive treatments of backblading, waterbars and barriers to vehicular traffic. Further activities can be used to achieve decommissioning objectives. These methods include deep subsoiling, the return of all disturbed coarse woody debris, and the placement of slash such that it is contiguous with the surrounding debris. Stumps may also be placed on decommissioned roadbeds.

- Minimize disturbance to coarse woody debris planned for retention. Keep big, old stumps intact whenever possible and avoid uprooting.

Botany and Invasive Plants

Project design criteria in this section are based on Best Management Practices and the standards set forth in the record of decision for the Pacific Northwest Region invasive plant program (USDA 2005). Follow the standards in the Olympic National Forest site-specific invasive plant treatment project (USDA 2008).

- Treat existing invasive plant infestations with appropriate herbicide, mechanical, or manual methods before ground disturbing activities when practical. If timing or resources prevent treatment before the project begins, then treat infestations in the project area upon completion of the project in order to prevent invasive plants from colonizing the disturbed ground.
- The contractor shall be responsible for preventing the spread of invasive plants in the project area as stated in the noxious weed/exotic plant prevention and control supplemental clause. The contractor shall consult with Forest Service invasive plant specialists to develop and implement a site-specific plan for invasive species prevention.
- Contractor shall ensure that off-road equipment used outside the limits of the road prism is free of invasive plant material including soil, seeds, vegetative matter, or other debris that could contain or hold seeds.
- When the opportunity exists, use only gravel, fill, sand, and rock that are judged to be weed-free by district or forest weed specialists.
- Site restoration planning shall include an evaluation of the need to seed a site or use other erosion control measures. When needed, use weed free straw and give priority to seed mixes/plantings with local native species.

Wildlife

- Any active raptor nest located during thinning operations will have appropriate conservation measures applied (species specific).
- All snags will be retained unless they pose a hazard to human safety. Where human safety is jeopardized, however, the snags could be felled, but must be left on-site as coarse woody debris.
- Retain all coarse woody debris that existed prior to winter 2007-8.
- A wildlife biologist shall be consulted prior to modifying any of the project design criteria that could impact wildlife resources.

Cultural

If subsurface archaeological evidence or previously unidentified cultural resources are located during implementation of this project, activities will cease pending an evaluation of cultural significance by a qualified archaeologist, who will determine appropriate mitigation measures, if any. The Forest will fulfill its consultation requirements in accordance with 36 CFR 800.11.

This action is categorically excluded from documentation in an environmental impact statement or an environmental assessment as under the Forest Service Handbook Title 1909.15 Chapter 30, Section 13.2(12): "harvest of live trees not to exceed 70 acres, requiring no more than 1/2-mile of temporary road construction." The categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects which may significantly affect the environment, and it does not, individually or cumulatively, have a significant effect (40 CFR 1508.27) on the quality of the human environment.

PUBLIC INVOLVEMENT

This project was listed in the Schedule of Proposed Actions since April 3, 2008, and letters soliciting public comment were mailed on April 24, 2008. In addition, the Quinault Indian Tribe was consulted with on this project. Six comments were received regarding this project; three responses indicated that they were in favor of the project, and three responses indicated that they opposed the project.

Substantive comments made on this proposal were carefully considered by the interdisciplinary team during environmental analysis and project design. While the project record contains reports and documents on how the comments were considered, I would like to summarize consideration of some of the comments. Concerns were expressed about harvesting within Riparian Reserves as identified in the Forest Plan. My decision will allow some harvesting within Riparian Reserves, which is important to help achieve desired conditions for these areas. Project design features, such as no-cut riparian buffers and requirements for leaving appropriate levels of snags and down woody debris, will ensure that aquatic resources will be protected and Riparian Reserve standards and guidelines will be met (as documented in the Aquatic Conservation Strategy consistency report). Project design features will also mitigate against impacts to soils and keep the project within Forest Plan standards and guidelines. There was also a concern expressed concerning future windthrow of the residual stands. The risk of extensive blowdown within these stands due to future wind storms will be minimized by placing unthinned buffers along some property boundaries, and by limiting the proportion of the stand removed during the commercial thinning.

I would also like to clarify a misunderstanding about one of the project's stated benefits that is providing important gaps within the stand for increased forage and species diversity. Salvage of pockets of blowdown will occur within wind-created gaps within the stands, but the intent is not to maintain them as openings into the future. The benefit of removing the windthrown trees to allow access to these areas by foraging animals would persist until a new stand of trees develops.

FINDINGS REQUIRED BY OTHER LAWS

As required by the National Forest Management Act, this decision is consistent with the Olympic National Forest Land and Resource Management Plan (1990) as amended by the 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl, and its amendments, as well as its attached Standards and Guidelines.

Threatened and Endangered Species The proposed action was assessed and found to be consistent with the 2003 – 2008 *Programmatic Biological Assessment for Selected Forest Management Activities, Olympic National Forest*, which addressed potential effects of projects on federally listed threatened and endangered species. It was determined that this proposed project “May Affect, but is Not Likely to Adversely Affect” northern spotted owl, marbled murrelet and bull trout and would have “No Effect” on designated critical habitat for northern spotted owl and marbled murrelet. The proposed project would have “No Effect” on Puget Sound Chinook salmon, Hood Canal summer chum salmon and Puget Sound steelhead trout.

The proposed action would not affect northern spotted owl suitable habitat (nesting, roosting, or foraging), prey species, or the habitat they depend on. The salvage of downed wood should not alter habitat. Retention of snags and adequate levels of down wood should retain important features as these blowdown areas or adjacent standing forest develop into spotted owl habitat.

The proposed project would be consistent with the Northwest Forest Plan (1994, as amended) and the 2008 Final Spotted Owl Recovery Plan and would contribute to the long-term objectives outlined in the Spotted Owl Recovery Plan.

Additionally, on August 8, 2007, the bald eagle was delisted as a threatened species by the U.S. Fish & Wildlife Service, and automatically became designated as a Regional Forester’s Sensitive Species. The Forest Service is still required to follow conservation measures outlined in the post-delisting plan, which includes minimizing harassment. There are no known eagle nest locations within four miles of the project area. There should be no impact to eagles with this project.

Sensitive Species. Potential effects of the proposed project on Regional Forester’s Sensitive plant and animal species were evaluated. The commercial thinning units and salvage areas were reviewed for likelihood of habitat of sensitive fish and wildlife species. It was determined that this project “May Impact” individual Olympic Peninsula Coastal Cutthroat Trout, Olympic Mudminnow, Van Dyke’s Salamander, warty jumping slug, Burrington’s jumping slug, Townsend’s big-eared bat, Keen’s myotis and Pacific fisher but is not likely to contribute to a trend towards federal listing or cause a loss of viability to the population or species. The project will have no impact to other sensitive fish and wildlife species

Surveys for sensitive plants were conducted to determine if there were any special status plant, fungi and lichen species documented in the project area. Existing field records in addition to field surveys determined that there were no new occurrences. Therefore, there are no anticipated adverse effects to any of the listed sensitive amphibians, birds, mammals or plants.

Invasive Plants. Noxious weeds and other invasive plants may pose a serious threat to the health of National Forests. Executive Order 13112, Invasive Species (Feb. 1999), provides direction that “Federal agencies shall: (1) prevent the introduction of invasive species; (2) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (3) monitor invasive species populations accurately and reliably; (4) provide for restoration of native species and habitat conditions in ecosystems that have been invaded.”

No invasive plants were found in the project area.

Cultural Resources. A cultural resource effects determination was prepared and submitted to the Washington State Office of Archeology and Historic Preservation (OAHP) on May 19, 2008. Field surveys were conducted for the thinning area. No cultural resources were identified, and therefore, it was determined that there would be no impacts to cultural resources.

Aquatic Conservation Strategy Consistency Finding and Rationale

I have reviewed the relevant analysis for this project that pertains to the Aquatic Conservation Strategy Objectives (NWFP ROD 1994), and I find that this decision meets these objectives. I have reviewed the analysis of the existing condition and desired future condition or range of natural variability of important physical and biological components as documented in the Quinault River Watershed Analysis (USDA 1999), the Boulder and Cook Creek Watershed Analysis (USDA 1996) and specialist input. I am confident with my finding that this decision will meet the Aquatic Conservation Strategy Objectives.

IMPLEMENTATION DATE

If no appeal is filed within the 45-day time period, implementation of the decision may begin on the 5th business day following the close of the appeal-filing period. If an appeal is filed, the decision may not be implemented until 15 business days following the date of appeal disposition [36 CFR 215.9].

ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

This decision is subject to appeal pursuant to Forest Service regulations at 36 CFR 215, pursuant to the September 16, 2005, order issued by the U. S. District Court for the Eastern District of California in Case No. CIV F-03-6386JKS. Any individual or organization who submitted comments during the comment period specified at 36 CFR.6 may appeal. Written notice of appeal must be postmarked or received by the Appeal Deciding Officer, Forest Supervisor Dale Hom, ATTN: Appeals, Olympic National Forest, 1835 Black Lake Blvd. SW, Suite A, Olympia, WA 98512 within 45 days of the date of publication of notice regarding this decision in *The Daily World* (Aberdeen, WA). The appeal must state that the document is an appeal pursuant to 36 CFR 215, and at a minimum must meet the content requirements of 36 CFR 215.14, and include the name and address of the appellant, and must identify the decision by title, subject, date of decision, and name of the Responsible Official. The appeal narrative must be sufficient to identify the specific change(s) to the decision sought by the appellant or portions of the decision to which the appellant objects, and must state how the Responsible Official's decision fails to consider comments previously provided. If applicable, the appeal should state how the appellant believes this decision violates law, regulation, or policy.

Appeals (including attachments) may be filed by regular mail, fax, e-mail, hand delivery, express delivery, or messenger service. The publication date of the notice regarding this decision in the newspaper of record is the sole means of calculating the appeal filing deadline, and those wishing to appeal should not rely on dates or timelines from any other source. E-mail appeals must be submitted to: appeals-pacificnorthwest-olympic@fs.fed.us, and must be in one of the following three formats: Microsoft Word, rich text format (rtf) or Adobe Portable Document Format (pdf). FAX appeals must be submitted to: 360-956-2330. Appeals may be hand-delivered

to the Olympic National Forest, 1835 Black Lake Blvd. SW, Suite A, Olympia, WA 98512 between 8:00 AM and 4:30 PM Monday-Friday.

It is the responsibility of each individual and organization to ensure their appeal is received in a timely manner. For electronically mailed appeals, the sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender does not receive an automated acknowledgement of the receipt of the appeal, it is the sender's responsibility to ensure timely receipt by other means.

CONTACT PERSON

For further information concerning this project or decision, contact the Project Leader, Mark Senger, Olympic National Forest, 1835 Black Lake Blvd. SW, Suite A, Olympia, WA 98512, ph: 360-956-2358.



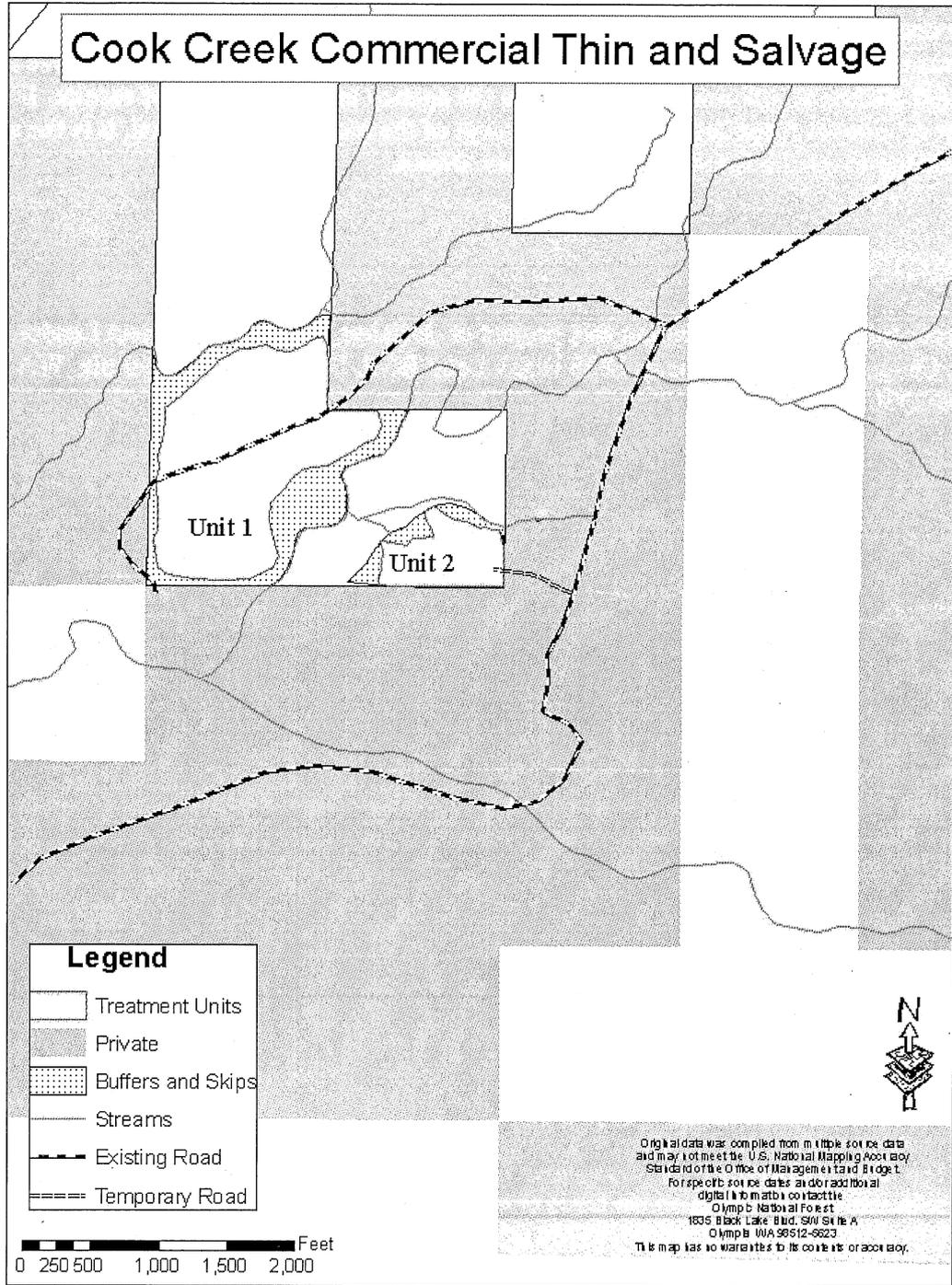
Lance Koch
Pacific District Ranger

16 June 2008

Date

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Cook Creek Commercial Thin and Salvage



T22N R10W Sec. 28