

## Transportation

**Goal:** Develop and manage roads and utility systems to support resource management; recognize the potential for future development of major transportation and utility systems.

**Objectives:** Provide access for Forest users and support Forest resource management activities. Manage and maintain roads to protect water, soil, fish, and wildlife resources.

**Transportation Question: Are the Standards and Guidelines used for forest development roads and log transfer facilities effective in limiting the environmental effects to anticipated levels?**

### Background

Two types of forest roads were inventoried and analyzed: National Forest System Roads that are needed for long-term motor vehicle access, but may be periodically closed (placed in storage), and temporary roads, which are not intended for long-term motor vehicle access and are to be closed (decommissioned) after their intended use is complete.

The data presented below is not intended to represent conditions across the Tongass National Forest. It is simply a listing of the blockage features and their effectiveness found in the FY 2006 surveys and collected for this year.

### Monitoring Results

#### National Forest System Roads

National Forest System Roads are intended for long-term use. During times of inactivity they may be closed to motorized traffic, and placed into a storage capacity. While open to vehicle traffic they may not be suited for highway vehicles due to the addition of drive through water bars that are installed to assist in surface water runoff during storms. These roads are suitable for high clearance vehicles such as 4-wheel drive pickup trucks. Roads placed into a storage capacity receive entrance treatments that are meant to eliminate motorized traffic during closure periods.

Four system roads with recently constructed closure devices were visited during surveys performed in FY 2006. The closure devices were removed structures with excavated material mounded on the roadway blocking traffic. None of the closure devices showed evidence of highway traffic beyond the closure device.

#### Temporary Roads

Temporary roads are intended for short-term use. The most common temporary road on the forest is one that leads to a landing within a harvest unit authorized by a timber sale contract, others may be access roads to a mine or mineral extraction area authorized by permit or lease, others may provide temporary access to power transmission corridors by permit. Once the contract, permit, or lease is terminated, temporary roads are stabilized by removing drainage structures, adding water bars, constructing pits and mounds of rock material to block further highway vehicle traffic, and returning the roadway back into vegetative production. If the

temporary road continues to receive motorized traffic after the contract, permit or lease authorizing its use is terminated; the road becomes an unauthorized road.

Two unauthorized roads with recently constructed closure devices were visited during surveys performed in FY 2006. All existing drainage structures were removed from the unauthorized roads, and a pit and mound was constructed at the beginning of each road to eliminate continued motorized traffic. None of the pits and mounds showed evidence of motorized traffic beyond the closure device.

### ***Evaluation of Results***

The monitoring results indicated that removing structures then constructing mounds with the excavated material can be effective roadway features when used to block access to motorized traffic on both system roads and unauthorized roads. The strategy can be effective if placed in locations that provide no alternative to go around the closure. During previous years of monitoring road closures, removed structures have been circumvented by off highway vehicles to some degree. However, carefully choosing the location of the device in relation to the local terrain can eliminate motorized traffic.

### ***Action Plan***

Each district on the Tongass is currently developing an Access and Travel Management (ATM) plan. The process involves a thorough look at the existing volume and condition of forest roads, existing annual and deferred road maintenance, projected funding amounts for road maintenance, the projected ten-year timber sale program, recreation, and community involvement. The decline in the amount of timber sale activity has left a void in the amount of road maintenance performed across the forest that was previously conducted by timber purchasers. The ATM plan is expected to perform a reality check on the amount of road miles each district can afford to keep open. While a few of the districts may complete their ATM plans as early as 2007, others will not be complete until 2009. It is expected that ATM plans will recommend additional road closures across the forest due to declining maintenance funding. Closing roads properly to motor vehicles in order to reduce user generated resource damage will be crucial to the effort.

## **Log Transfer Facilities (LTF)**

Monitoring will continue to be conducted for each log transfer facility (LTF) under terms of the LTF permits, in accordance with Alaska water quality standards and requirements from the Environmental Protection Agency for non-point source discharge. LTF monitoring for this report was accomplished through field inspection and documented through completion of a Log Transfer Facility Monitoring Table. The table is designed to tabulate assessments made of the success of the Best Management Practices (BMPs) stipulated as terms of the LTF permits. The assessment elements of the LTF Monitoring table include the following:

**Site Identification:** Common Name; Corps of Engineer Permit Name, NPDES General Permit.

**Transfer Activity:** Facility Transfer Type; Activity Status; Current year volume.

**Fuel Control:** Visible Oil Sheen per LTF guidelines M5 of Forest Plan (Alaska Timber Taskforce Guidelines); Discharge Reported to Alaska Department of Environmental

Conservation (ADEC) under requirements of Alaska Administrative Code (18 AAC 75.300-307); Discharge Reported to National Response Center (NRC) under requirements of the Clean Water Act (40 CFR 110,117, and 302).

**Runoff Control:** Reference BMP 14.27 - Drain to Sediment Trap; Vegetated Filter Strip.

**Bark and Debris:** Reference BMP 14.27 Excessive Churning Prevented; Remove Debris and Bark from LTF/yard; Bark and Debris Properly Disposed; Marine Bark Zone of Deposit; Date Last Dive.

### Monitoring Results

Two general types of monitoring occur: upland and marine. The upland monitoring is summarized into assessments developed by Forest Service timber sale administrators, and is recorded under the general categories of "Fuel Control," "Runoff Control," and "Bark and Debris." These assessments were made for all the active sites. Contracted divers perform underwater bark debris surveys to accomplish marine monitoring.

### Bark Monitoring and Reporting

Bark monitoring is required annually for each log transfer facility (LTF), under the EPA General NPDES Permit No. AK-G670-1000 and EPA General NPDES Permit No. AK-G70-0000. This monitoring is required at sites that are planned to transfer a total volume of 15 million board feet (mmbf) or more during the next five years and are located in less than 60 feet mean lower low water (MLLW). Monitoring for bark accumulations is not required on LTFs classified as Type V or VI log transfer facilities under Part I.B. If the annual bark monitoring survey conducted at the beginning of the season indicates continuous coverage by bark and wood debris of 0.9 acre or greater, the next annual bark monitoring survey is conducted after cessation of log transfer, or in the following year prior to any additional log transfer. Otherwise the annual bark monitoring survey is not required during years when the LTF is not operating.

The purpose of the bark monitoring program is to determine compliance with the Alaska water quality standards for settleable – residues in marine waters. In accordance with 18 AAC Section 70.210, ADEC has authorized a zone of deposit for facilities authorized to discharge under the general NPDES permit. The zone of deposit may include continuous coverage, discontinuous coverage, and trace coverage by bark and wood debris.

Bark monitoring dives were conducted at 1 LTF in 2006 (Transportation -1). The bark monitoring conducted in 2006 was done in accordance with the EPS General NPDES Permit Number AK-G70-0000. Copies of the surveys for the bark monitoring sites are available from ADEC.

#### Transportation-1. Log Transfer Facility Annual Bark Monitoring Dives, FY 2006

Site Name	Common Name	Date Dive Completed in 2006	Zone of Deposit Acres
Yakutat Bay 6	Sawmill Cove LTF	05/26/06	0.20

## **Oil Sheen Monitoring and Reporting**

During periods of log transfer operation, receiving waters at the LTF shall be visually monitored daily for the presence of oil sheen. The presence of oil sheen shall be recorded, with the date, name of observer, cause or source of oil sheen, and corrective measures taken, and shall be reported to EPA within 24 hours in accordance with Part IX.B.

### ***Evaluation of Results***

In 2006, all active log transfer facilities were operated in accordance with their permits. The cases where fuel/hydraulic fluid spills were a problem were handled as specified in the Spill Prevention Control and Counter Measure Plan (SPCC) anticipated in their operating plans. The actions of the sale administrators, which are prescribed in the standards and guidelines for log transfer facilities, have served to limit the environmental effects of LTF operation to anticipated levels. The guideline for locating LTFs along straits and channels proved to be effective in reducing underwater bark accumulations.

The Daily Oil Sheen Logs proved to be very useful in documenting causes of sheens and corrective actions. The logs are required by stipulation of NPDES permits in some cases and by Forest Service contract in others.

### ***ACTION PLANS***

The monitoring of oil sheen is required by regulation and will continue at all sites during times of operation. The monitoring of bark accumulations and oil sheens will continue in the next fiscal year. This information will be included in the annual report that is due by January 31 of the year following each calendar year of operation and discharge under the General NPDES Permit.