

Wilderness

Goal: Manage designated Wilderness to maintain an enduring wilderness resource while providing for public access and uses consistent with the Wilderness Act of 1964 and the Alaska National Interest Lands Conservation Act of 1980 (ANILCA).

Objectives: In Wilderness, manage for the adopted ROS class when approved through a management plan. Current forest language notes that where ROS has not been adopted, manage for no greater development than Semi-Primitive Motorized (with certain localized exceptions due to the effects of activities outside Wilderness and ANILCA exceptions). During the update to the Forest Plan, a change to this language is recommended to emphasize decisions that favor the Primitive ROS class. The management of sites to a Semi-Primitive Motorized ROS Class would be the exception.

Background: Congressionally designated Wilderness in the Tongass National Forest comes from two pieces of legislation. ANILCA established 14 Wildernesses totaling 5.5 million acres within the Tongass. Two of the areas, Admiralty Island and Misty Fiords, were also previously designated as National Monuments. Prior to ANILCA, there was no designated Wilderness on the Tongass. In 1990, the Tongass Timber Reform Act (TTRA) amended ANILCA and designated five new Wilderness areas and one Wilderness addition totaling 296,080 acres. This brings the total to 5.7 million acres in 19 Wilderness areas on the Tongass National Forest.

In 2005, the Chief of the Forest Service adopted a 10-Year Wilderness Stewardship Challenge to have all wildernesses managed to standard by 2014. In 2014, the Wilderness Act will be 50 years old. The Tongass Leadership Team has accepted this challenge and districts are working together to bring all wildernesses to standard by this date.

Wilderness Area Question 1: Are Standards and Guidelines for the management of Wilderness being implemented?

In general, the Standards and Guidelines for the management of Wilderness are being implemented. The geographic distribution and expanse of the 19 Wilderness units totaling 5.7 million acres, and the challenge of coordinating the monitoring requirements for all of the affected resources, make monitoring of the Forest Plan Standards and Guidelines within wilderness difficult. The implementation monitoring results as well as the evaluation of those results will be discussed with the monitoring of the effectiveness of the Standards and Guidelines below.

Evaluation Criteria

Threshold: Thresholds for encounters or use have been established for many areas on the Tongass through planning efforts addressing the appropriate levels of commercial recreation use. Districts where all or part of a wilderness have been evaluated for the appropriate levels of use include Admiralty National Monument, and the Hoonah, Juneau, Petersburg, Sitka, and Wrangell Ranger Districts. Wilderness with some or all of the area covered by analysis include; Chuck River, Kootznoowoo, Kuiu, Petersburg-Duncan Salt Chuck, Pleasant-Inian-Lemesurier, South Baranof, South Etolin, Stikine-LeConte, Tracy Arms, and West Chichagof-Yakobi Wilderness.

Monitoring Results

Standards and guidelines for wilderness are prescribed by resource for Wilderness on page 3-8 and for Wilderness Monuments on page 3-25 of the Tongass Land and Resources Management Plan. Data collection included:

- Lichen sampling to be used as indicators for air quality monitoring. Information gathered from 2003-2005 was sent to a lab for analysis in 2006. The information from this analysis is being compiled in a report and should be available for review in 2007.
- Trail condition surveys to assess current trail conditions and to identify areas of needed or deferred maintenance, which are planned for a five-year cycle unless improvements to the trail require an update to the condition survey.
- Facility condition surveys to assess current conditions and deferred maintenance needs, which are planned for a five-year cycle unless improvements to the trail require an update to the condition survey.
- Vegetation inventories were completed in several wildernesses for sensitive plants and to document any invasive plant species. Several districts completed draft invasive plant strategies as directed by the forest-wide strategy.
- Information related to outfitter/guide activities was collected for entry into a forest-wide database. This information will be used to determine whether encounters in wilderness are in keeping with ROS direction for the forest.
- Campsite inventories were completed in several locations. While detailed analysis was not performed, the information does establish a baseline from which future work can be compared.

Ketchikan/Misty Ranger District

Misty Fjords National Monument

Standards and guidelines for the Wilderness Monument management are being implemented for a majority of Misty Fjords National Monument, with the exception of the geographic area around Rudyerd Bay. In addition to the Wilderness standards and guidelines elements from the 10 Year Wilderness Stewardship Challenge are being addressed. For example, Wilderness use site inventory and site plan is completed, heritage resources have been inventoried with the assistance of the District Archaeologist and invasive plant surveys were completed this year, yielding three previously un-recorded populations of non-native plants.

Petersburg Ranger District

The standards and guidelines are being implemented for the Petersburg Creek-Duncan Salt Chuck, Kuiu, and Tebenkof Bay Wildernesses on the Petersburg Ranger District. In order to calculate primary output for wilderness under The Chief's Ten-Year Wilderness Stewardship Challenge, however, a wilderness area must meet exceed a total score of 60%. These are the ten output elements for wilderness that will be used to determine if a wilderness area is "managed to standard". At this time, the Petersburg Ranger District does not meet six criteria.

Specific examples of monitoring include the following.

Petersburg Creek-Duncan Salt Chuck

The Wilderness crew and other recreation personnel surveyed the condition of the Salt Chuck East Cabin and the Petersburg Lake Cabin and performed routine maintenance on the building and grounds.

A portion of the Petersburg Lake Trail and the area around the cabin and lake were inventoried for TES and non-native species in FY2006.

The Petersburg Lake Trail, of which six miles are within the wilderness boundary, was logged out and brushed. An alternative route was maintained to avoid degradation to the original trail. The trail was evaluated for a more permanent solution to this reroute.

A Level 2 monitoring report was completed for the Turning Point campsite adjacent to the Petersburg Lake Trail, and photos were taken for comparison with previous years' findings.

Cotula coronopifolia (brass buttons), a non-native plant present in the upper portions of Duncan Canal, was surveyed to determine range extent.

Kuiu

Six field days were spent surveying formerly inhabited sites, such as fur farms, cannery sites, and home sites, to determine TES species and non-native plant species in the Tebenkof Bay and Kuiu Wildernesses.

One day was spent in the field logging out and brushing the Affleck-Petrof Portage Trail with hand tools.

Six days were spent in the field inspecting outfitter/guide campsites and archaeological sites in wilderness as well as non-wilderness areas.

Tebenkof Bay

Six field days were spent surveying formerly inhabited sites, such as fur farms, cannery sites, and home sites, to determine TES species and non-native species in the Tebenkof Bay and Kuiu Wildernesses.

One day was spent in the field logging out and brushing the Affleck-Petrof Portage Trail with hand tools.

Six days were spent in the field inspecting outfitter/guide campsites and archaeological sites in wilderness as well as non-wilderness areas.

Eight field days were spent monitoring recreation and cultural sites by kayak in the Tebenkof Bay Wilderness.

Monitoring Results

Ketchikan/Misty Ranger District

Misty Fjords

The Ketchikan-Misty Fjords District employs a separate monitoring crew for the summer that covers most of the Wilderness Monument. However, the kayak rangers completed both Level II campsite monitoring and fixed-wing monitoring for several areas. Using the Tongass protocols, monitoring took place in Smeaton Bay, Walker Cove, Rudyerd Bay, and selected areas in the northern portions of the Behm Canal. No significant changes in impacts were found when comparing data collected this year against past reports. One Level III inventory was undertaken at Hut Point, located in Walker Cove. While time and labor intensive, more Level III inventory work will likely take place in the campsites found in Rudyerd Bay and Walker Cove next season in order to better track issues such as erosion and invasive plants. Also, district botanist, spent time completing rare and invasive plant inventories. Campsites and historic sites were visited in Princess Bay, Rudyerd Island, Smeaton Island, and Punchbowl Cove.

In Misty Fjords, a trail condition survey was completed on the lower portions of the Punchbowl Lake trail, to determine the number of erosion control structures that need to be built. Stabilizing the trail will not only make it safer for users, but also reduces the sediment runoff to the adjacent anadromous fish-bearing stream.

Visitor use observations and social encounters were recorded this season. Areas outside the core geographic area were found to have social encounter levels within the limits set for the established ROS class. Social encounter levels within the geographic core area, specifically at Big Goat Lake were found to exceed the limit set for the established ROS class. In years past, high encounter levels on Big Goat Lake corresponded with high encounter levels on another Wilderness lake. It can be inferred that encounter levels at that lake exceeded limits set by the established ROS class as well. It is in these areas that the standards and guidelines for Wilderness management are not being met. Social encounters, in the form of permitted aircraft landings on Wilderness lakes, have consistently exceeded the social encounter standards established by the designated ROS class.

Petersburg Ranger District

Petersburg Creek-Duncan Salt Chuck

The Petersburg Creek-Duncan Salt Chuck Wilderness receives a lot of use due to its close proximity to the communities of Petersburg and Kupreanof, and the resource of Petersburg Creek. Visual surveys found that the use at the mouth of Petersburg Creek might have exceeded the Semi-primitive Motorized encounter guideline of six parties on several occasions. This was a qualitative observation since there was not any standardized sampling done to monitor this site.

During the FY2006 plant survey, the TES species *Hymenophyllum wrightii* (Wright's filmy fern) was identified on the perimeter of Petersburg Lake.

The Level 2 monitoring report concluded that the Turning Point campsite is not receiving significant impacts in addition to the impacts reported in previous years.

One day was spent in the field surveying the North Arm of Duncan Salt Chuck for *Cotula coronopifolia*. The crew marked the plant locations on an aerial photo and traced the survey route.

Special Use permits were reviewed for compliance with wilderness standards and guidelines.

Kuiu

A number of non-native species, as well as the sensitive species, *Poa laxiflora* (lax-flowered bluegrass), were identified during plant surveys in the Kuiu Wilderness.

Signage in the large muskegs on the Petrof-Affleck portage trail is minimal, and there is a need for major rerouting in two areas.

Special Use permits were reviewed for compliance with wilderness standards and guidelines.

Tebenkof Bay

A number of non-native species, as well as the sensitive species, *Poa laxiflora*, were identified during plant surveys in the Tebenkof Bay Wilderness.

Signage in the large muskegs on the Petrof-Affleck portage trail is minimal, and there is a need for major rerouting in two areas.

Special Use permits were reviewed for compliance with wilderness standards and guidelines.

There was nothing of critical importance recorded during the Tebenkof Bay monitoring trip by kayak.

Evaluation: The evaluation of whether or not thresholds were exceeded has not been thoroughly evaluated as information is just now being put into the outfitter/guide database. Once this information is verified, some evaluation of use and consistency can take place.

Evaluation of Results

- Continued field monitoring to improve information related to general public use of wilderness is critical to evaluate encounters within wilderness
- Campsite inventories are now in place for most wildernesses and can be used for evaluating sustained or expanding impacts to wilderness resources.
- Support is needed to complete the evaluation of air quality monitoring done through lichen sampling within Tongass wildernesses
- Sensitive plant and invasive species monitoring should continue to be incorporated into other resource inventories or field activities.

The standards and guidelines for wilderness and most standards and guidelines associated with the management of specific resources are being used when applicable or appropriate.

Wilderness Question 2: Are standards and guidelines for the management of wilderness effective in maintaining the wilderness resource?

Standards and guidelines for the management of resources within wilderness and wilderness monument are presented on page 3-8 and 3-25 of the Forest Plan. The specific applicability of the standards and guidelines for each wilderness has not been developed.

In 2005, a national wilderness steering committee introduced a draft technique to be considered for monitoring wilderness character. This model was tested on the Kootznoowoo Wilderness as a part of a national effort in 2006. Adjustments to the monitoring tool were made at the national level and the tool is now available for consideration, when appropriate for implementation.

Evaluation of Results

Standards and guidelines for Wilderness are necessary and effective in maintaining the Wilderness resource. The current Forest Plan Standards and Guidelines for maintaining wilderness character are not specific. Further development of these standards and guidelines would be useful. Specific clarification of these standards and guidelines as well as protocols needs to be developed.

Ketchikan/Misty Ranger District

Misty Fjords

Questions continue to arise about the effectiveness of the Standards and Guidelines for Misty Fjords National Monument. There is a consensus that with the types of complex and diverse issues we continue to face, the standards and guidelines are too general to address all the current and potential issues. Social encounters and noise issues continue to be an issue in the core geographic area and the main travel corridors into that area from Ketchikan. These impacts continue to affect the Wilderness character of the area, especially the feeling of solitude, remoteness and unconfined recreation. This is a major impact to the quality of experience that Misty Fjords National Monument is able to provide to visitors. The area is a major pristine Wilderness Resource as part of the National Wilderness Preservation System.

Since many of the social impacts are occurring from commercial tours within Misty, managers dealing with commercial use should continue to educate commercial tour operators, permitted and non-permitted, about Wilderness ethics and ideals. Visitors using outfitters to access Misty will have a more satisfying experience if they are able to enjoy the solitude and remoteness the Wilderness has to offer, subsequently providing outfitters with higher approval ratings and greater economic benefit. It is important that the Forest Service holds the outfitters accountable as stewards of the Wilderness resource when use is permitted.

Visitor impacts within Misty Fjords National Monument continue to be low except in a few isolated high use areas within the core geographic area. Most of these impacts are a result of recreational or subsistence use and are concentrated along the saltwater shoreline, around recreation shelters and recreation cabins.

Conclusions

In general, results indicate monitoring is essential to provide information on the status of management relative to Wilderness Standards and Guidelines. Information on many heritage sites was collected during the monitoring effort. Compliance of outfitter/guides with the Wilderness Standards and Guidelines is required by permit. Implementation and effectiveness of these Wilderness Standards and Guidelines was confirmed through monitoring. Some plant inventory documentation of threatened, endangered and sensitive plants as well as non-native plants was completed. Specific emphasis needs to be placed on collecting baseline inventory data on threatened, endangered and sensitive plants as well as non-native plants in wilderness areas. Monitoring also highlighted the need for cabin and trail maintenance on some of the districts. Noise impacts reported on the Admiralty National Monument, Juneau Ranger District and Ketchikan-Misty Ranger District were caused by motorized boat and air traffic outside the jurisdiction of the Forest Service. These impacts affect the solitude, remoteness, and sense of isolation of the Wilderness.

Action Plan

Monitoring of Wilderness Standards and Guidelines is supported through repeated observation and documentation using standard protocols and scientific methods. Application of monitoring protocols and further refinement of the Wilderness Standards will continue in an attempt to help reach the Forest Service 10 Year Wilderness Stewardship Challenge of having all wildernesses eventually managed to standard. Additional focus will be placed on monitoring levels of use and quantifying the monitoring data. Conflicts associated with the wilderness objectives of solitude, primitive recreation, and aircraft over flights, boat traffic, and facilities constructed adjacent to or on private property within the wilderness will continue to be addressed through interagency collaborative planning, where possible.