

**FINDING OF NO SIGNIFICANT IMPACT
CONDUCT ADDITIONAL ADMINISTRATIVE HELICOPTER
AND FIXED WING FLIGHTS IN 2003
GLACIER NATIONAL PARK
WEST GLACIER, MONTANA**

A maximum of 102 new administrative flights are proposed for summer and fall of 2003 to accomplish critical maintenance and research objectives. The EA originally proposed 112. Approximately 34 helicopter flights are proposed to remove untreated human waste from the public toilets at Granite Park Chalet before it can open for the season, remove untreated human waste, and remove a failing composting toilet at the administrative patrol cabin in that area. Approximately 30 helicopter flights are proposed to rehabilitate the Porcupine Lookout in the backcountry and 6-8 helicopter flights are proposed to conduct radio tower maintenance throughout the backcountry of the park. In addition 15-30 fixed-wing flights are proposed to conduct wildlife monitoring for research purposes of bald eagles, bighorn sheep, bull trout, Canada lynx, gray wolves, grizzly bears and wolverine.

For about ten years, Glacier National Park has required that administrative flights be approved through an "Aircraft Use Flight Request Form." In 1999, Glacier National Park implemented a more stringent compliance process. The number of projects requiring flights has ranged from 3-10 per year. This information about the number of projects and flights has been updated subsequent to the EA. Note that these numbers do not include search and rescue and fire flights which are considered emergencies. Up until this year it has been determined that these flights are having negligible impacts, and categorical exclusions are on file since 1999. Additionally, biological assessments of impacts to listed species have been submitted to the US Fish and Wildlife Service. Given the increase in flights proposed this year, the park determined that an environmental assessment and biological assessment should be prepared.

ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE

Waste Removal from Granite Park: Untreated human waste will be removed from the biological mediation system unit (toilets) at Granite Park Chalet because it is not composting the waste and has reached capacity. Waste material will be moved to the side of the unit using shovels and rakes, and then moved out through the bottom side accesses. It will be shoveled into 55 gallon barrels approved for slinging under helicopters; and flown to the Logan Pit helispot, approximately 4 miles from the chalet. Barrels will be transported to and emptied into the park's sewage treatment facilities in West Glacier. Based on past history, each barrel, once full, weighs about 450 pounds. An estimated 16 barrels will be removed from the site. Working in close contact with untreated human waste exposes crews to disease and other organic organisms that could be harmful. Therefore, crews will be flown in and out of the site daily so they may shower and sanitize each day, as there are no shower facilities at the site. The duration of project could last up to four weeks depending on flying weather. There will be approximately 34 trips to move personnel up and back and human waste out of the area. These trips will begin in June 2003, and will be completed before July 1, 2003, when the chalet is scheduled to open. Waste was last removed from the chalet by this method in 2000, when the biological mediation system was installed.

Due to the public's concern about overflights and the park's concern about the number of flights, further consideration has been given to using a larger helicopter to remove the waste from Granite Park. Alternatively, the park engineer is designing a steel frame that may carry up to

four barrels of waste in one trip. If this is achieved, the helicopter flights for the waste removal portion of this project would be reduced by 12 trips.

Also, in that area, an above ground composting toilet that was installed near the Granite Park Patrol Cabin about 10 years ago is in danger of failing. Snow load and snow creep has broken the outer wall on the toilet. The untreated human waste from this toilet will also be shoveled into 55-gallon drums and flown to Logan Pit, to be loaded onto a truck and transported to the park's sewage treatment facility in West Glacier. About 180 gallons of waste will be removed along with the toilet. Approximately 4 of the 34 helicopter flights will be made from Logan Pit to Granite Park Patrol Cabin and back for this part of the project. There will be no landing at the cabin, and possibly only one landing at Logan Pit. These projects will occur at the same time.

Flight paths to the Granite Park Chalet and the Patrol Cabin will follow the preferred path in the Glacier National Park Aviation Management Plan (NPS 2000). The helicopter will depart from a commercial helicopter base outside the park in West Glacier and will fly up the Going-to-the-Sun Road corridor 2,000 feet AGL or higher. When it nears the chalet and cabin, it will leave the Road corridor and fly directly to the site. Once the barrels are full the helicopter will hover while the barrels are attached to the long line (approximately 100 feet long) at the chalet, cabin and Logan Pit. The helicopter will fly as direct a path as possible between the chalet and cabin and Logan Pit at as high an elevation as possible given the load being carried. The helicopter will have to land to load and unload personnel at Granite Park Chalet and Logan Pit. Flight time for each trip is estimated to be 30 minutes.

This is only a temporary solution to the toilet issue at the chalets, and the NPS realizes a long-term solution is needed. The service level that is offered at Granite Park will be determined in the Commercial Services Plan, a Record of Decision due in September 2003. In the meantime, the park engineer is evaluating a near term solution to the current overloading situation at Granite Park. Funding sources will be identified to implement an engineered solution. The near term solution may be to simply increase the number of units now on site to allow for the over 300 uses per day that occur during peak periods. The long-term solution will be similar to solutions being considered for Sperry Chalet. Currently, the park is working with the Intermountain Support Engineering Office on remedial design work for the Sperry Chalet composting system. In particular we are evaluating the feasibility of increasing the amount of introduced heat into the system to accomplish composting. Alternatively, we may replace the existing composting boxes with newly designed boxes that incorporate adequate warming technology and improved accessibility.

Radio Tower Maintenance: Communications among park personnel is considered a life safety issue, so when batteries fail or repeaters malfunction, radio tower repairs must be completed immediately. Radio tower repairs in 2003 will require at least 6-8 helicopter flights to Apgar, Scalplock and Swiftcurrent Lookouts (Figure 1). Preferred flight paths will be followed (NPS 2000). The weight of the repair equipment and the need to complete these repairs as quickly as possible requires a helicopter. Each project is likely to require one or two trips, depending on the type of repair needed. All flights will originate from a commercial helicopter base outside the park in West Glacier.

Apgar Lookout, elevation 5,236 feet, is located in the Middle Fork Geographic Area of the park (NPS 1999a). Flight distance from West Glacier to Apgar Lookout is approximately 3 miles, and the flight path will be over the Middle Fork of the Flathead River, lower McDonald Creek, and the southeast end of the Apgar Mountains. Each flight is expected to last approximately 30 minutes.

The helicopter will land at Apgar Lookout to drop off maintenance personnel and equipment.

Scalplock Lookout, elevation 6,919 feet, sits approximately 16 miles from Nyack Flats and 24 miles from West Glacier, and this flight will occur over the Middle Fork of the Flathead River and Scalplock Mountain. The Scalplock Lookout flight will be staged either at Nyack Flats or the West Glacier horse pasture. Flight distance from West Glacier to Nyack Flats is approximately 9 miles, and flight distance from this staging area to the lookout is approximately 2 miles; flight distance from the West Glacier horse pasture to the lookout is approximately 10 miles. Each flight is expected to last approximately 30 minutes.

Swiftcurrent Lookout is located within the Many Glacier and the Going-to-the-Sun Road Corridor Geographic Areas, in the central portion of the park. A large portion of these geographic areas lies above treeline along the Continental Divide. Elevations range from 3,100 feet at Lake McDonald to 8,436 feet at Swiftcurrent Lookout. Swiftcurrent Lookout sits at the summit of Swiftcurrent Mountain on the Continental Divide. The flight distance from West Glacier to Swiftcurrent Lookout is approximately 22 miles. Each flight is expected to last approximately 30 minutes.

Rehabilitate Porcupine Lookout: The park's Cultural Resource Plan states that nine of the historic lookouts in the park will be maintained. Porcupine Lookout, in the Goat-Haunt-Belly River geographical region of the park, is among those to be rehabilitated. Helicopter flights will be conducted twice in early July, and once in mid September for delivering crews and supplies for rehabilitation of the Porcupine Lookout and trail, and for installation of radio equipment. The radio repeater is needed at Porcupine Lookout to allow Goat Haunt Ranger Station to communicate with park headquarters, which is considered a Homeland Security need. Once the lookout building is rehabilitated, the radio equipment will be stored in a weatherproof location and will require less maintenance than if it were in the open. The trail to Porcupine Lookout is not currently traversable, so work crews will be flown in.

Flight distance from West Glacier to the Goat Haunt Ranger Station is approximately 34 miles, and flight distance from this staging area to the lookout is approximately 2 miles, requiring approximately 10-15 minutes per trip. The flight path will begin at West Glacier, the helicopter will fly over 2,000 feet above ground level over McDonald Creek, Flattop Mountain, Waterton River, and will land at a flat area several hundred feet above the lookout to unload a crew to help with sling loads on the ground. The helicopter will proceed to Goat Haunt Ranger Station, where it will land to pick up the next crew. From Goat Haunt, the helicopter will travel approximately 3.5 miles southwest along the Waterton River valley, and will land at a flat site a few hundred feet above the Lookout to deliver the crew. Because of local winds, to gain enough altitude to get to the lookout the helicopter may need to swing out north over Upper Waterton Lake before heading south toward the lookout. The helicopter will return to Goat Haunt to carry sling loads up to Porcupine Lookout. Approximately 12 trips are estimated for each of the July work days, and approximately 6 trips for the September work day. Total flight time for the Porcupine Lookout work is estimated at 12-15 hours. Then the helicopter will return to West Glacier at an altitude above 2,000 feet AGL.

Wildlife Monitoring: Fixed wing flights will be used to monitor bald eagles, bighorn sheep, bull trout, Canada lynx, gray wolves, grizzly bears, and wolverine.

Bald Eagle. Monitoring of the threatened bald eagle is a requirement of the Pacific States Bald Eagle Recovery Plan (USFWS 1986), and flights have occurred over the last ten or more years. Two or three fixed-wing aircraft flights are needed to monitor the early season nesting activity (occupancy) of bald eagles at nine of the thirteen nest sites in or near the park. The other four nests can be monitored from roads. The nine nests that require aerial monitoring are located

east and west of the Continental Divide in valley bottomlands ranging from 3,153 to 4,882 feet elevation. Ground monitoring of these nests is not feasible due to hazardous conditions created by avalanche conditions and spring ice breakup. In addition, ground monitoring will require up to a month of surveys. Bald eagle nests in the park are located in old-growth coniferous forests near rivers and lakes. Three to six hours of flight time will be needed for up to two days between late March and early to mid-May, until backcountry nest sites can be more readily accessed by trail. The type of aircraft will be a Cessna 185, or similar craft. Each flight will last about 2-3 hours. Flight routes will be over lakes and rivers, and intervening ridges and passes. Most flight time will be at or above 2000 feet above ground level (AGL), but observation and data collection at each nest will require brief periods (1-2 minutes) where the flight is at or near 500' AGL. Over 20 years of monitoring bald eagle nests has provided Glacier National Park with the most complete population trend information on any species of wildlife in the park. These data not only contribute to recovery goals, but provide valuable information to resource managers and the public.

Bighorn Sheep. Up to three fixed-wing flights may be conducted for the retrieval of GPS collars from bighorn sheep on the east side of the park, as part of a study of bighorn habitat use and behavior. Each flight, if needed, would last approximately two hours. The project will focus on the Many Glacier Valley, and low elevation radio flights may occur up to a ten-mile range from there. The aircraft will generally fly above 2,000' AGL, but may need to approach 500' AGL for brief periods. GPS collars are programmed to drop off on November 1. Since all of the animal location data is stored on the collar, loss of the collar will result in loss of all location data for that animal. No bighorn sheep monitoring flights are anticipated and will only be conducted in the unlikely event that ground-based telemetry is unable to locate the collar signal. No landing will occur; collars will be retrieved by hiking into the site located from the air. Furthermore, if flights are deemed necessary, attempts will first be made to combine them with other wildlife monitoring flights. Data from the bighorn sheep study will be used to assist resource managers in assessing risks to the bighorn population.

Bull Trout. Monitoring of the threatened bull trout is a requirement of the recovery plan (USFWS 2002). Monitoring bull trout from the air will provide information on bull trout movements, spawning locations and mortality. Fixed-wing flights will be conducted in 2003 for bull trout monitoring. These have been occurring over the last three years. Two to four flights will be scheduled around September during spawning. Flights would last approximately two hours. The park fisheries biologist will travel the main stem St. Mary River from headwater areas in the park downstream to St. Mary Reservoir in Alberta, tracking approximately 25 radio-tagged fish on downstream and upstream legs of the flight. They will also search Boulder, Kennedy and Otatso Creeks, and Divide Creek if time permits. The plane will fly at about 650 feet AGL.

Canada Lynx. One or two fixed-wing flights may be needed during October to locate a radio-collared Canada lynx, as part of a study of lynx habitat use and dispersal. Each flight would last approximately two hours. The project will focus on the Many Glacier, Cut Bank and Two Medicine drainages. The aircraft will generally fly above 2,000' AGL, but may need to approach 500' AGL for brief periods. Telemetry locations derived from these flights will supplement, and validate, more frequent locations from a GPS transmitter (signals are transmitted to satellites and not requiring monitoring flights), and will facilitate location of one lynx for the purpose of capture and replacement of a transmitter collar with limited battery life. Overall data derived from the lynx study are intended to assist resource managers in perpetuating the population of this threatened species.

Gray Wolves. Monitoring of the threatened gray wolf is a requirement of the Northern Rocky Mountain Gray Wolf Recovery Plan (USFWS 1987). One or two fixed-wing flights may be conducted to monitor radio-collared gray wolves. Flights would last approximately two hours. The number of flights depends on whether radio-collared wolves are present, and on cooperative monitoring from other agency personnel. If needed, flight routes will be over the North and Middle Fork drainages, along the west boundary of GNP. This is where three established wolf packs maintain territories; flights could occur in other areas of the park if new packs are discovered. Known wolf den sites have typically been located in old growth coniferous forests adjacent to water sources and meadows and are generally found at lower elevations. The aircraft will generally fly above 2,000' AGL, but will approach 500' AGL for brief periods of observation and data collection. Flights could occur in any month, but will most likely occur during the spring and summer. The purpose of these flights is to collect information on the location of wolf dens and rendezvous sites, production of pups, pack size, and other relevant information to allow the park to make management decisions based on the most current and reliable information. Some information is also provided to the public to enhance appreciation of the natural attributes of the park.

The frequency of the flights will be limited to the minimum necessary for management purposes. Past research has indicated that fixed-wing flights are less intrusive to wolves than alternative ground locations that require a relatively close approach to obtain comparably accurate locations and counts. Research has also demonstrated that fixed-wing aircraft have less impact to wildlife than helicopters.

Grizzly Bears. Monitoring of the threatened grizzly bear is a requirement of the Grizzly Bear Recovery Plan (USFWS 1993). From one to five fixed-wing flights may be conducted this year to monitor management grizzly bears (bears captured for management purposes and fitted with radio collars). The number of flights depends on whether management bears are present, and on cooperative monitoring from other agency personnel. The aircraft will generally fly above 2,000' AGL, but will approach 500' AGL for brief periods of observation and data collection. These flights could potentially be park-wide and occur year-round, as movements and locations of bears are difficult to predict, and for this reason flight hours are also unknown in advance.

The purpose of these flights is to collect information on grizzly bear activity, mortality, and other information relevant to park management decisions. The frequency of the flights will be limited to the minimum necessary for management purposes. Past research has indicated that fixed-wing flights are less intrusive to grizzly bears than alternative ground locations that require a relatively close approach to obtain comparably accurate locations and counts. Research has also demonstrated that fixed-wing aircraft have less impact to wildlife than helicopters.

Wolverine. In support of a wolverine study that began in January 2003, monthly maintenance flights will occur from May through December 2003, all above 1,000 feet AGL. Each flight would last approximately two hours. Given the propensity of wolverines to range over large areas, flights may be conducted throughout GNP, but will likely focus on the Many Glacier valley. Similar flight frequencies may be required during 2004. Performance and persistence of GPS transmitters (that utilize satellites and do not require flights) may permit the reduction or elimination of flights after 2003. Results of this study will help identify risk factors for wolverine. Fixed-wing flights for other purposes will be used to monitor wolverine, where appropriate, and telemetry flights for wolverine, lynx and bighorn sheep will be combined where possible.

The maximum of 102 flights proposed in this EA total approximately 93 hours.

Mitigation Measures

- Flights will maintain a distance of 2 km (1.2 mi) from known mountain goat cliffs, and other areas where mountain goats are observed during flights will be avoided as much as possible.
- Known grizzly bear seasonal concentration areas, such as the army cutworm moth sites on several mountain peaks, or the Apgar Range, will be avoided from July through September when possible. In addition, any grizzly bears observed during flights will not be approached.
- Helicopters will follow suggested flight paths away from sensitive areas.
- Flights will occur between one hour after sunrise and one hour before sunset if possible.
- The helicopters will fly at a minimum of 2,000 feet AGL except when landing or taking off or when delivering supplies on a long-line.
- Fixed wing aircraft will fly at a minimum of 2,000 feet AGL except when it is necessary to fly lower to gather information on species under observation.
- A flight manager will be assigned to each project to insure that conditions are met, safety is observed and that threatened and endangered species activity is monitored.
- No flights will be conducted at times and places that may interfere with grizzly bear den construction (mid September-mid November and during emergence in April-May).
- Flight paths will avoid open alpine meadows (other than in winter), where grizzly bears that are present will not have access to cover. If a low-level flight or landing is needed in an alpine area, and a bear is seen, the flight may be postponed depending on the judgement of the flight manager.
- When wolf den locations are known for 2003, low level flights in those areas will be postponed until after the critical denning period. This will be coordinated through the park's wildlife biologist.
- A buffer zone of 0.25 miles will be maintained around bald eagle nests for all flights except those involved in monitoring. Eagle nests will not be surveyed aerially during inclement weather to avoid chilling of the young in case birds are forced from the nest.
- Eagles on nests will be allowed to see the aircraft approaching, to avoid startling birds off nests.
- When possible, a larger helicopter will be used to reduce the number of flights needed. A larger helicopter will be used on two of the projects discussed under Cumulative Impacts to reduce the total number of helicopter trips.

The other alternative considered was No Action. **Waste Removal From Granite Park:** The No Action alternative would result in closure of Granite Park Chalet for the 2003 summer season. The toilet is currently full, so beginning with the day use season in June, no collection facility would be available for chalet guests, hikers, and employees. Visitors would disperse human waste over a wide area surrounding the Chalet and Patrol Cabin, as was done before construction of the toilet in 1994.

Radio Tower Maintenance: The No Action alternative would result in limited or non-existent radio communications for some areas of the park. This would limit the park's ability to protect visitor and employee life and safety. Park employees would hike into the repeater sites where possible to perform repairs. Some repairs would not occur because the equipment needed would be too large to either hike or pack into the backcountry.

Rehabilitate Porcupine Lookout: The No Action alternative would mean that Porcupine Lookout would not be rehabilitated and a structure listed on the national register would

deteriorate beyond repair. The trail to the lookout is not currently useable; it would be two years or more before the trail was rehabilitated enough to get pack stock up to the lookout. By that time, funding for the project may no longer be available. In addition, the radio system would not be installed, and Goat Haunt Ranger Station would not have communication with park headquarters.

Wildlife Monitoring Flights: Under No Action, no flights would be conducted for monitoring of radio-tagged animals or for locating animals. Radio and GPS collars may not be retrieved. Limited staff would monitor wildlife from the ground. Less data would be collected.

Limited bald eagle nest surveys would be conducted from the ground. Backcountry eagle nests are inaccessible from the ground during the early part of the nesting season (March-April).

Monitoring of radio-tagged bull trout would be done on foot. Limited staff would monitor bull trout and less data would be collected.

Monitoring of gray wolves and grizzly bears would be done from the ground. Data collected from the ground would be less reliable and accurate than that collected from the air.

No flights would occur for bighorn sheep research. Ground-based telemetry would be used to locate the collars. Ground-based telemetry has limited success, and some collars and their information would be lost.

Under No Action, approximately 22 helicopter flights have already been approved and will occur. Twenty-eight flights were initially approved for 2003, but have been reduced to 22 by combining projects and using a larger helicopter. These flights will occur in two locations in the park. Approximately 20 flights will occur between the parking lot at Logan Pass and locations along the boardwalk trail to pick up materials left over from the rehabilitation of the boardwalk trail. These flights will occur over 2 ½ hours in one day. They will occur late in the summer or early fall. Two flights will occur from Logan Pass to Sperry Chalet to deposit and pick up supplies and equipment to rehabilitate the water intake system. This project was begun in 2002 and is scheduled to be completed in 2003. These flights will occur at the same time as the Logan Pass flights.

Other alternatives were considered but eliminated from further study in the environmental assessment. The park considered hauling waste from Granite Park Chalet using pack stock. The un-composted and untreated human waste material would be shoveled into pack-stock containers that would have to be specially designed and developed. Packing human waste via stock would risk a spill along a heavily used trail, and would expose workers and visitors to disease-causing agents. The number of animal trips required to haul the current amount of waste out is estimated at 40, plus 10 trips for supplies and materials. Since day use visitation begins in June, and snow conditions usually prevent entry of stock until late July, it would not be possible to accomplish the project in the required timeframe (before July 1), and waste would have to be packed out during the heavy visitor use season. Delaying opening of the chalet would result in significant impacts to the concessioner and the public as the concession has a very short operating season, and reservations are booked well in advance. In addition, the park considered having personnel remain at the chalet rather than being flown in and out each day. However, since the personnel will be working with untreated human waste, they will need adequate sanitizing shower facilities. There are no current shower facilities at Granite Park as there is not an approved or adequate waste water system or an operational water system. These systems, once approved by regulating authorities, will have to be engineered, installed, and activated.

Consideration was also given to using a larger helicopter and larger barrels to remove waste from Granite Park. This was rejected for a number of reasons. The park engineer is working on a design of a new rig to carry up to four barrels of waste each trip. However using a larger barrel remains considered but rejected. A larger barrel could not be handled by crew on the ground and would require mechanical equipment to move it safely. Furthermore, since the crews must be flown in and out each day so they can take showers and clean up after handling untreated human waste, a larger helicopter would not reduce the number of flights carrying crew.

Using a larger helicopter on the Rehabilitation of the Porcupine Lookout would reduce the number of supplies and materials flights by approximately 8 trips, but would require another helicopter to be used to transport the crews. Hiking the crews in was also considered, but was determined to be infeasible because there is no trail and the crews will be carrying equipment cross-country that will cause safety concerns. Using a larger helicopter would actually result in more flights for the Porcupine Rehabilitation Project than proposed. Therefore this alternative was rejected.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by Council on Environmental Quality (CEQ) regulations. CEQ regulations provide direction that “the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s § 101.

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety or other undesirable and unintended consequences;
4. Preserve important historic, cultural and natural aspects of our national heritage and maintain whenever possible, an environment that supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life’s amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A, Conduct administrative helicopter and fixed-wing flights in 2003, would allow the park to safely and efficiently remove human waste from toilets at Granite Park Chalet and Patrol Cabin. This meets criteria 1, 2, 3, and 5 by preventing contamination of the area and minimizing employee exposure to pathogens by flying the waste out. Waste removal also would allow continued operation of the chalet, which meets criteria 2 and 4 by preserving historic use.

Flights to maintain radio towers and preserve communications throughout the park reduce risk to visitor and employee safety and provide a high standard of living; this meets criteria 2, 3, and 5. Rehabilitation of Porcupine Lookout would also enhance radio communications, and it would preserve historic use of the lookout, meeting criteria 2 and 4.

Wildlife monitoring flights meet criteria 1, 4, and 5 by collecting data that would be used to preserve natural resources.

Alternative B, the No Action alternative, would require closing Granite Park Chalet to prevent sewage overflows, and would not meet criteria 1, 2, 3, 4, or 5. Alternative B would provide a risk to public health and safety, by not allowing timely and full repair of radio communication towers. Alternative B would not allow for adequate monitoring of federally listed species by fixed wing-aircraft. To meet monitoring requirements in their recovery plans, monitoring would have to be conducted on foot in close proximity to the animals causing a greater level of disturbance to the animals, thus it would not meet criteria 4 well. Although there are benefits to visitors and wilderness values by not conducting these administrative flights, the consequences would have greater and significant adverse impacts on natural and cultural resources. As a result, Alternative B does not meet the six criteria as well as Alternative A.

After careful review of potential resource and visitor impacts and developing proposed mitigation for impacts to natural and cultural resources, the environmentally preferred alternative is Alternative A. Alternative A surpasses the No Action alternative in best realizing the full range of national environmental policy goals as stated in section 101 of the National Environmental Policy Act.

WHY THE PROPOSED ACTION WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR Section 1508.27, significance is determined by examining the following criteria:

Impacts that may be beneficial or adverse

There will be moderate short term adverse impacts on natural soundscapes, minor to moderate short term adverse impacts on wildlife, including bald eagles, bighorn sheep, Canada lynx, gray wolves, and grizzly bears due to noise and disturbance. There will be long term beneficial impacts to all these species from the wildlife monitoring flights due to information obtained which is used in management strategies. There will be minor, short term adverse impacts on visitors from the noise from the flights, as well as minor to moderate long term beneficial impacts from allowing continued operation of the chalet and safety provided by radio communications. There will be moderate short-term adverse impacts on proposed wilderness due to noise and disturbance from flights.

Degree of effect on public health or safety

There will be moderate beneficial impacts on public health and safety by removing the un-composted waste from the toilets and opening them for public use and by repairing the radio repeaters.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetland, wild and scenic rivers, or ecologically critical areas.

Granite Park Chalet is a national historic landmark. Porcupine Lookout is listed on the national register of historic places. Approximately 95% of the park is identified as suitable for inclusion in the national wilderness preservation system. It is managed as proposed wilderness. Visitor experience in the park's proposed wilderness will be adversely affected, especially by helicopter flights, however only a portion of each flight will occur below 2000 feet and most of the flights will occur before the peak visitor season in the backcountry.

Degree to which effects on the quality of the human environment are likely to be highly controversial;

Overflights have been a controversial issue at Glacier for many years. The 1999 General Management Plan's decision was to ban scenic air tours over Glacier, however since FAA has jurisdiction over airspace, the park cannot enforce this decision without an Air Tour Management Plan on which FAA will be the lead agency. The GMP discussed that administrative flights do occur after consideration and only upon approval by the Superintendent. Two members of the public have expressed concern about the park's commitment to ban scenic air tours. Glacier National Park's intent remains as stated in the General Management Plan, to phase out and eventually ban scenic air tours. However, administrative flights will continue to be needed for maintenance activities, fire and search and rescue. The park will continue to stringently review and analyze all administrative flights. This increase in flights for 2003 will not be used to justify an increase in administrative flights in future years. The park will continue to explore other means of accomplishing work when possible without the use of helicopter or fixed wing flights.

Degree to which the possible effects on the quality of the human environment is highly uncertain or involves unique or unknown risks.

None.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration;

As stated above, Glacier National Park's intent is to phase out and eventually ban scenic air tours. Administrative flights will continue to be needed for maintenance activities, fire and search and rescue. The park will continue to stringently review and analyze all administrative flights. This increase in flights for 2003 will not be used to justify an increase in future years. The park will continue to explore other means of accomplishing work when possible without the use of helicopter or fixed wing flights.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Although the combination of administrative flights, other agency flights, and scenic air tour flights flown by private businesses outside the park will have cumulative effects, the impacts added by the administrative flights are expected to be minor since most of the administrative flights will occur during periods of low visitor use in the backcountry of Glacier.

In the near future, the Park will be required to upgrade the entire radio system, since the current radios do not meet Federal Communications Commission or Department of Interior narrow band digital standards. If this is not accomplished, the park will not be able to operate its radio system. The upgrade will require an increase in the number of repeater sites, but not all will require air support. No change in the number and locations of proposed flights for 2003 is anticipated with this upgrade.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources.

None.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

A Biological Assessment was submitted to the US Fish and Wildlife Service on February 18, 2003. They concurred with the determination of “may affect, not likely to adversely affect” grizzly bears, bald eagles, Canada lynx and gray wolves. The park determined “no effect” to bull trout, slender moonwort, Spalding’s campion and water howellia. Due to the recent court decision, the NPS had to enter into formal consultation with the USFWS for Canada lynx, even though we determined “may affect, not likely to adversely affect”. A Biological Opinion was issued.

Whether the action threatens a violation of federal, state or local environmental protection law.
None.

In addition to reviewing the list of significance criteria, Glacier National Park determined that implementation of the preferred alternative will not constitute an impairment of the park’s resources and values. This conclusion is based on a thorough analysis of the impacts described in the environmental assessment, comments received, and the professional judgment of the decision-maker in accordance with the National Park Service’s *Management Policies*, 2001 (December 27, 2000). As described in the environmental assessment, implementation of the preferred alternative will not result in major adverse impacts to resources or values whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation for Glacier National Park; (2) key to the natural or cultural integrity of the Park or to opportunities for enjoyment of the park; or (3) identified as a goal in the park’s general management plan or other relevant National Park Service planning documents.

PUBLIC INVOLVEMENT

Public scoping was conducted in December 2002 by mailing out letters to individuals and agencies on the park’s mailing list, asking for comments and concerns. Two letters were received from members of the public stating concern about the number of proposed administrative flights over the park, and urged the park to address a long-term solution for human waste at Granite Park. One letter was received stating support of the project. The State Historic Preservation Office stated that cultural resources would not be affected by the proposed flights.

The environmental assessment was made available for public review and comment during a 30-day period that ended June 6, 2003. A press release was issued May 2, 2003 announcing availability of the EA. The environmental assessment was placed on the park’s website and approximately 50 copies were mailed out to the park’s mailing list. During the 30-day comment period, six letters and a phone call were received from the public and agencies. Two of the letters expressed support for the proposed action.

The Blackfeet and Confederated Salish and Kootenai Tribes were notified about this EA during scoping, and EAs were mailed to them. No comments were received.

One letter was from the U.S Fish & Wildlife Service. A Biological Assessment was submitted to the US Fish and Wildlife Service on February 18, 2003. They concurred with the determination of “may affect, not likely to adversely affect” grizzly bears, bald eagles, Canada lynx and gray wolves. The park determined “no effect” to bull trout, slender moonwort, Spalding’s campion and water howellia. Due to the recent court decision, the NPS had to enter into formal consultation with the USFWS for Canada lynx, even though we determined “may affect, not likely to adversely affect”. A Biological Opinion was issued.

Two letters and a phone call from National Parks Conservation Association and Montana Wilderness Association (MWA) raised a number of concerns described and considered below.

1. "The EA does not address the apparent increasing trend in administrative use of helicopters and fixed-wing craft."

We believe there is not an increasing trend toward administrative use of helicopters and fixed-wing aircraft. Prior to 1993, administrative use of aircraft was likely far more common than it is today. However, the park did not keep records of all administrative use of aircraft. The park has used helicopters and fixed-wing aircraft when necessary to accomplish work in the backcountry of the park. Since 1999, three to six projects a year have been evaluated and determined to meet the requirements for aircraft and qualify as a categorical exclusion. Admittedly, we have proposed an increase in administrative flights for 2003, but we don't believe this indicates a trend toward increasing flights. The review process has resulted in denial of aircraft use.

Furthermore, actual trends and comparisons are difficult to make because of the variation in length of flights in relation to total flights. Each flight to Granite Park may take only a few minutes, while an eagle nest reconnaissance would be only one 2-3 hour flight. However, looking at individual projects provides a better picture.

Waste Removal from Granite Park. Since the reopening of the Chalet in 1997 and the reconstruction of the composting toilet, waste has been flown out one other time in 2000. Basically the current system is too small for the overnight and day users who visit the area to allow any composting and reduction of waste, and there is not enough heat generated for composting to occur. There are more flights proposed for this year than in previous years because of sanitation and safety concerns for crews, although the park's engineer is trying to design a helicopter carrier that will allow us to remove four barrels at a time from Granite Park Chalet, instead of the one described in the EA. If this is successful we will reduce the number of flights needed for the waste removal portion of this project by 12 trips. The toilet at the Granite Park Patrol Cabin was experimental, and since this design had worked in North Cascades National Park, this failure was unanticipated.

Pending a final decision from the Commercial Services Plan, we would proceed with the design and construction of a composting toilet that would allow the removal of composted waste by mule, thus eliminating flights. As stated earlier, the park engineer is evaluating solutions for the situation at Granite Park Chalet. The near-term solution may be to increase the number of units on site. A long-term solution is being designed with the Intermountain Support Engineering Office. We are evaluating the feasibility of increasing the amount of introduced heat into the system. We are also considering replacing the existing boxes with newly designed boxes that address warming technology and improve accessibility. We are also working on better designed composting toilets for the patrol cabin and campground that would also allow the removal of composted and dried waste by mule rather than helicopter. However, both these solutions may involve some helicopter use for construction. The park's goal is not to rely on helicopter transport to remove waste from backcountry locations. Unfortunately, system overloads and failure has required this. Although we wish to discontinue this reliance, we will have to improve infrastructure first.

Radio Tower Maintenance. Helicopter flights have been made to complete emergency repairs and make equipment upgrades where the type and sensitivity of equipment prevent foot or mule access. These have typically averaged 6-8 flights per year. With the improvement and upgrading of radio systems we are hoping to reduce the need for flights for both emergencies and equipment replacement. As we work to improve the effectiveness and reliability of our radio system, we are hoping to reduce emergency failures and new equipment needs.

Porcupine Lookout. This is the last lookout to need substantial repairs of those the park is preserving, and the availability of the funding, the poor condition of the lookout, and the need for the additional radio repeater meant that work would have to take place prior to the restoration of the trail. We should not need any more flights to this lookout in the foreseeable future. We anticipate the trail will be ready for foot traffic by September 2003 and for stock, sometime next summer. We have no other projects like Porcupine Lookout, where the trail to a facility is unusable. This will be a one-time project.

Wildlife monitoring flights are described below as management actions and research projects. The management actions are monitoring requirements included in species recovery plans and park species management plans.

Wildlife Management

- Bald eagles – Early season nest reconnaissance flights have been made regularly for the last decade to determine occupancy before visitation, and possible disturbance could occur. Nest interiors can only be viewed from aircraft. These preliminary flights help us set our management objectives for the breeding season.
- Grizzly bears – Monitoring flights occur only when needed to track collared, management bears. Although this has not been done by the park in recent years, we wanted to analyze potential flights.
- Gray wolves – Monitoring flights are used to determine den sites, if other means are not feasible and if collared animals are in a denning pack.

All these flights are somewhat routine and critically needed for management but numbers may vary from year to year. The park did not conduct grizzly or wolf flights in the last two years. The eagle flights should continue at the same level. The fixed wing flights associated with wildlife management actions should remain stable, unless major problems arise.

Wildlife Research

- Wolverine – This is the second year of a three year project. These flights are necessary because GPS collars have failed.
- Canada lynx – This is the second year of a two-year project. These flights are necessary because the GPS sending unit on the lone, collared lynx has failed.
- Bighorn sheep- This is the second of year of a 5-year project. Flights will only occur if ground reconnaissance cannot locate GPS collars that have fallen.
- Bull trout – This is the fourth year of the study by USFWS and NPS. Three more are anticipated, but have not yet been funded.

Wildlife research has always been dependent upon limited funding, thus requests for flights are very sporadic. The wolverine and lynx studies have one and two years

respectively left the bull trout three. The wildlife research flights will vary with available funding and our desire to limit any aerial requirements. Advances in GPS collars, which store or send data via satellite, are the future along with DNA research.

In all the listed projects every attempt will be made to limit the number of flights to only those absolutely necessary. The projected number of flights and analysis was based on a "worst case" scenario so we are hopeful that the actual number will be less in many cases. The park is very committed to minimizing the number of administrative flights it conducts. That is why flights are evaluated through the park's compliance process.

For about the last ten years, the park has required that all administrative helicopter and fixed wing aircraft be submitted, reviewed and approved using an "Aircraft Use Flight Request Form." In 1999, Glacier National Park implemented a more stringent compliance process. All administrative helicopter and fixed-wing flight requests are required to go through this more stringent process. Since 1999 the number of projects requiring flights has ranged from 3-6 per year. These flights were determined to meet a categorical exclusion under the National Environmental Policy Act and "may affect, not likely to adversely affect" under Section 7 of the Endangered Species Act. This was determined based on the length of the flight, the altitude, and time of year. However, given the number of flights proposed for 2003 the park determined that an environmental assessment and biological assessment should be prepared. The park continues to be concerned and sensitive about the level of administrative use of helicopters and fixed wing aircraft. However in some cases it is unavoidable.

The park's proposal is for approximately 102 administrative flights for 2003. It will not be used to justify any attempt to increase administrative flights in the future. Administrative flights are sometimes necessary to accomplish maintenance and insure visitor safety and resource management objectives. The park will continue to put all administrative flight requests through a stringent review process. Glacier National Park remains committed to banning scenic air tours in the park. The NPS Soundscape Office in Fort Collins has recently notified us that the Federal Aviation Administration (FAA) is beginning the process of developing an Air Tour Management Plan for Glacier. We are in early discussions with them through the NPS Soundscape Office to insure that they understand it is our decision to ban scenic air tours so any Air Tour Management Plan we participate in will only explore alternative ways to phase out air tours in Glacier. FAA has the lead on this planning effort. According to the legislation we are considered a "cooperating agency."

2. "The EA should assess the cumulative effects of administrative AND commercial helicopter and fixed wing flights on wildlife and visitor experience."

These flights were considered as listed on page 27 of the environmental assessment and discussed under the cumulative impact analysis on page 30, 33, 36, 38 and 40. An errata sheet is attached for cumulative impact actions.

Regarding trend data on commercial tour flights, this year is the first year that operators outside the park were required to submit numbers of flights to the FAA. According to that information, commercial operators took 1,658 flights through the park in 2000. They were not required to submit records for previous years. There is some concern as to how accurate this data is.

3. "As a component of a cumulative effects analysis, flight path maps should be provided to the public."

It was our original intent to provide a map showing flight paths, however during internal review it was found to be confusing and rather inadequate. We decided the description in the EA provided more accurate information that could be portrayed in a map. However, we have prepared a flight map that is attached and considered an errata sheet for the EA. This flight map shows the part of the routes where the aircraft will be 2,000 feet above ground level (AGL) as solid lines, and below 2,000 feet AGL as dotted lines.

4. Is it accurate to state that the proposed flights are a doubling of administrative use?

The park has not kept detailed records on how many administrative flights have occurred. We have kept records on how many projects have needed administrative flights. The 50 flights discussed in the EA were estimated as occurring since 1999, rather than annually. The last time human waste was removed from Granite Park Chalet was in 2000 and park staff who were involved have stated that it took about 40 flights. That is the project that has required the largest number of administrative flights. According to Office of Aircraft Services reports for 2001 and 2002, there were 16 and 9 flights totaling approximately 50 and 18 hours of flight time, respectively. Flights proposed in this EA total approximately 93 hours.

5. "If use is measured in total flight hours versus number of flights, then the increase may not appear so substantial."

In the FONSI we have added information about the number of flight hours proposed. The proposed flights total approximately 93 flight hours, confirming the level of increase described in the EA.

6. "Please discuss in the final decision why the flight elevation would be set at 2000', especially for the longer-distance hauls, rather than 5,000 feet."

We are not aware of a 5000' suggested AGL. When the FAA Advisory was in place, 2000' was the recommended AGL. The advisory expired a few years back and to our knowledge has not been re-issued. However, the Glacier National Park Aviation Management Plan (2000) requires that aircraft fly at least 2000' AGL unless the project or safety considerations require lower altitude flights. For administrative flights delivering equipment and hauling waste, flying at 5000' AGL is not feasible and adequate wildlife monitoring cannot be accomplished from this altitude. As stated in the EA and this FONSI we will fly at or above 2000' AGL whenever possible.

7. The park should try to further reduce the number of flights proposed.

Flights to Apgar are proposed because equipment is of a size and type that is too risky to haul using pack stock. Flights to carry personnel in and out of the Chalet are needed because the Chalet lacks a reliable source of water and heat necessary for employees handling human waste to shower. Showering is required to insure the health and safety of the crews conducting this work.

The rehabilitation of Porcupine Lookout is being done this year because the historic structure has seriously deteriorated and needs to be rehabilitated immediately before the park will be able to rehabilitate and re-open the trail. This is the last historic lookout that requires rehabilitation. Rehabilitation on the other historic lookouts has been completed.

Wildlife monitoring by air will be kept to a minimum; research flights for bighorn sheep and Canada lynx are proposed only when GPS collars fail. Eagle nests will only be

monitored from aircraft when conditions prevent monitoring by ground. A worst case number of flights were proposed in the EA and for analysis.

A copy of this Finding of No Significant Impact will be sent to all commenters.

CONCLUSION

The park remains committed to banning scenic air tours as stated in the GMP. Administrative flights have and will continue to go through a stringent review process to insure there are no other reasonable alternatives available to accomplish maintenance, research and management needs. The EA has presented the worst-case scenario of 102 flights. The park will continue to find ways to reduce these flights even after this FONSI is approved. However, most of these proposed flights will be for short distances and duration only. Most of them will occur before and after the peak visitor season. Flight paths are primarily over the Going-to-the-Sun Road and other developed areas. Only a portion of each flight will be below 2000' AGL. If these flights do not occur, significant impacts will occur. Granite Park Chalet will be closed this season, Porcupine Lookout (a national register property) will be lost, critical wildlife data on federally listed species will not be collected and visitors and staff could be placed in serious life safety conditions if radio contact throughout the park is not maintained.

The proposal does not constitute an action that normally requires preparation of an environmental impact statement (EIS). The proposal will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor or moderate. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state or local environmental protection laws.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended: Michael O. Holm
Superintendent

6/12/03
Date

Approved: Michael P. Snyder
Intermountain Regional Director

6/13/03
Date