FINDING OF NO SIGNIFICANT IMPACT

FIRE MANAGEMENT FACILITY BIG THICKET NATIONAL PRESERVE TYLER COUNTY, TEXAS

PURPOSE AND NEED

The National Park Service (NPS) proposes to construct a fire management facility on property owned by the NPS near the town of Woodville, in Tyler County, Texas. The property is located at the junction of County Road 1040 and U. S. Highway 69, approximately three miles south of Woodville.

The purpose of the project is to provide a permanent fire management facility with adequate and functional space for the fire program staff at Big Thicket National Preserve, to minimize long term maintenance and operational costs, while sustaining an existing mutually beneficial operational relationship with the Texas Forest Service. The objectives of the project are to:

- Provide a permanent fire management facility for Big Thicket National Preserve: A permanent facility is needed because, although the preserve fire program is currently able to rent space in a Texas Forest Service (TFS) facility, there is no guarantee that the cooperative agreement will be permanent if State plans or needs should change.
- **Provide a facility with adequate and functional space:** A new facility is needed because existing arrangements are inadequate for efficiently accomplishing all of the duties and associated tasks of the preserve fire program. The current (TFS) facility provides inadequate office space, briefing room, training space, and vehicle maintenance space. The building in which most of the fire management staff works does not have running water. Staff there cannot obtain water or use a restroom in the building in which they work. There is no room to accommodate seasonal fire crews. Some fire fighting equipment is stored in off-site park facilities. Security fencing around the existing facility is inadequate; it is approximately 4 feet high, and access is controlled through metal swing gates that are locked after working hours. Most buildings at the existing facility do not meet the accessibility requirements of the Americans with Disabilities Act. Because the existing facility is not owned by the NPS, the preserve cannot significantly modify it or construct additional structures to better accommodate its needs.
- Minimize long term maintenance and operational costs: A new facility is needed because the buildings at the existing (TFS) facility are 50 to 60 years old. They are not energy efficient and they require frequent maintenance. The grounds of the existing facility require landscaping maintenance, such as watering, mowing and hedge trimming. The preserve shares the costs and labor needs for maintaining and operating the existing facility.
- Sustain an existing operational relationship with the Texas Forest Service: A facility in close proximity to the TFS is needed because preserve staff and TFS staff coordinate closely in fire management operations throughout the region. Personnel from the two services share equipment and duties, and sometimes operate as a single unit.

SELECTED ACTION

The selected action (preferred alternative, Alternative B) is to construct a new fire management facility. The facility under consideration will be approximately 6,800 square feet in size. It will include offices, meeting/conference/training rooms, storage and maintenance areas for tools, equipment, and clothing, plus open and covered storage areas outside for vehicles and equipment. It will be situated on a 6.25 acre parcel of land at the intersection of County Road 1040 and U.S. Highway 69, approximately 850 feet from the TFS facility.

Existing forest and dense brush understory along the western border and northern end of the property will be left in place. Approximately 3 acres of land will be cleared of vegetation and leveled. When construction is complete the areas impacted by construction activities but outside the footprint of the building, storage areas, and parking area (approximately 1 ½ acres) will be revegetated using native Texas plants and seeds.

The selected action will provide a permanent NPS owned facility to house fire management operations.

NPS staff will occupy a facility with adequate operations, equipment, training, staging, and storage space.

A new NPS facility will be energy efficient with low maintenance requirements.

A new NPS facility will be in close proximity to the TFS facility, maintaining an existing operational relationship with the TFS.

ALTERNATIVES CONSIDERED

The Environmental Assessment (EA) for the Fire Management Facility, September 2006, analyzed the preferred alternative (now selected and described above), and the no action alternative. The no action alternative would maintain the existing conditions at the Woodville District offices of the TFS. The NPS staff would continue to share space in the TFS facility. Some equipment, such as fire fighting vehicles, would continue to be stored at facilities in off-site park facilities.

The no action alternative would not provide a permanent facility. NPS would continue to rent space from the TFS.

NPS would remain in a shared facility without adequate operational, equipment, training, staging, and storage space.

NPS would remain in an older facility, sharing the maintenance and energy costs.

The existing operational relationship with the TFS would be maintained.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed in Section 101 of the National Environmental Policy Act. This includes:

- 1. Fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2. Assuring for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- 3. Attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- 4. Preserving important historic, cultural, and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;
- 5. Achieving a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities;
- 6. Enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (National Environmental Policy Act, Section 101).

Simply put, the environmentally preferred alternative is the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources.

Alternative A, the No Action alternative, is the environmentally preferred alternative because:

Alternative A would cause the least damage to the environment while protecting, preserving, and enhancing the resources of the preserve. Fire management operations at the preserve would continue and the cooperative relationship with the TFS would be maintained without disturbing the natural resources on the NPS owned property near Woodville.

Alternative B, Construct a Fire Maintenance Facility, is not the environmentally preferred alternative because:

Alternative B will require vegetation removal, excavation, and other construction related disturbance on the NPS owned property near Woodville. Construction of a new building and associated parking will permanently adversely impact natural resources such as soil, vegetation, wildlife habitat, and water quality. Some of the soil on the NPS property will be displaced and covered by the building, storage, and parking areas. Vegetation and wildlife habitat in those areas will also be permanently displaced. A sewage treatment system with a leach field will be installed to serve the new facility. Adverse effects on natural resources will be negligible to moderate, and will be greater than those created by the no action alternative.

The environmentally preferred alternative is not the NPS selected action. In considering the alternatives, the NPS has assessed their relative merits, and alternative B, construction of a new fire management facility, best fulfills the purpose of the proposed project and best meets the needs of the preserve, despite the fact that it is not the environmentally preferred alternative. Alternative B will provide a permanent facility with better operations, equipment, training, staging, and storage space than alternative A would, while maintaining an existing operational relationship with the TFS.

MITIGATION MEASURES

MITIGATION MEASURES OF THE SELECTED ACTION		
RESOURCE AREA	MITIGATION MEASURE	
Air Quality	Fugitive dust will be controlled by periodic water sprinkling.	
Soils	During periods of heavy rainfall, the project engineer could issue a temporary stop order and work would be halted. Sustainable best management practices will be utilized to control storm water runoff.	
	In accordance with Texas Pollutant Discharge Elimination System requirements, the NPS will prepare a Storm Water Pollution Prevention Plan	
	Topsoil will be removed from areas of construction and stored for later reclamation use. The topsoil will be spread in as near the original location as practicable in the construction zone and supplemented with scarification, mulching, seeding, and/or planting with species native to the immediate area.	

MITIGATION MEASURES OF THE SELECTED ACTION	
RESOURCE AREA	MITIGATION MEASURE
Vegetation	A revegetation plan will be developed and implemented to restore disturbed areas. Revegetation success will be monitored following construction and remedial and control measures will be implemented as needed.
	Ground surface treatment will include grading to natural contours, topsoil replacement, seeding, and planting. This work will occur as soon after the completion of construction as practicable.
	In an effort to avoid introduction of non-native / noxious plant species, no imported hay bales will be used during revegetation. On a case-by-case basis, the following materials may be used for any erosion control dams that may be necessary: certified weed-free rice straw, cereal grain straw that has been fumigated to kill weed seed, and wood excelsior bales.
	Undesirable plant species will be controlled and other undesirable species will be monitored and controlled, as necessary.
Wildlife and Special Status Species	In consultation with the USFWS and the State of Texas, the NPS will take measures to protect any sensitive species, whether they were identified through surveys or presumed to be present.
Cultural Resources	In the event that potentially significant archeological resources are discovered during construction, the NPS will halt or redirect work to another area of the project until finds can be documented, their significance assessed, and appropriate mitigation strategies developed in consultation with the Texas State Historic Preservation Officer.
	In the unlikely event that human remains or cultural items subject to the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered, the NPS will stop work in the area of the find, and follow the appropriate provisions of NAGPRA (43 CFR Part 10).

WHY THE SELECTED ACTION (PREFERRRED ALTERNATIVE) WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

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

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an EIS: No major adverse or beneficial impacts were identified that require analysis in an environmental impact statement. The foreseen projected adverse impacts of the selected action will be no greater than minor on soils; visitor use and experience; floodplains; wetlands; wildlife and threatened and endangered species; water quality; Indian Trust Resources; prime or unique farmland; environmental justice; designated critical habitat; ecologically critical areas; wild and scenic rivers; other unique natural areas; air quality; the socioeconomic environment, including land use; and cultural resources.

Long term, moderate, adverse impacts and long term beneficial impacts on vegetation are expected. The impacts on preserve operations are expected to be short term, minor, and adverse. Long term beneficial impacts on preserve operations are also anticipated. Short term, minor, adverse, and long term, negligible, adverse impacts on noise levels in the project area are expected.

Degree of effect on public health or safety: The selected action will have a beneficial impact on preserve staff and visitor safety. A new facility will provide secured, improved training and planning facilities for permanent and seasonal fire management staff. It will maximize universal design processes, to be useable by all people to the greatest extent possible. The new facility will increase the efficiency of NPS fire response capabilities, further benefiting public health and safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: The property on which the new fire management facility will be constructed does not include unique park lands, wetlands, surface waters, or ecologically critical areas. Cultural resources reconnaissance surveys were completed by preserve staff in July and August 2006 and no significant historical or archeological items or features were found. An archeological monitoring plan which includes ground checking by personnel during the clearing of the land and during subsequent excavation will be implemented during construction activities.

The project area is classified as prime farmland. However, such soils are common throughout the area, and the proposed fire management facility will only impact approximately 3 acres. Because the amount of land affected will be small compared to the size of the resource throughout the area, the impact on prime farmland will be minor.

Degree to which effects on the quality of the human environmental are likely to be highly controversial: There were no highly controversial effects identified during either preparation of the EA or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: There were no highly uncertain, unique, or unknown risks identified during either preparation of the EA or the public review period.

Degree to which the action may establish a precedent for further actions with significant effects or represents a decision in principle about a future consideration: The selected action neither establishes a precedent for future actions with significant effects, nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: No cumulatively significant impacts were identified. Cumulative impacts were determined by combining the impacts of the selected action with other past, present, and reasonably foreseeable future actions. In the project area past, present and reasonably foreseeable actions that may have the potential to cumulatively impact resources include transportation projects, private construction projects, and the mowing of brush and other forest understory on the NPS owned property near Woodville.

The moderate, long term, adverse impacts and long term beneficial impacts of the selected action will add a slight contribution to the overall long term moderate adverse cumulative impacts on vegetation.

The minor, short term adverse impacts and long term beneficial impacts of the selected action will add a slight contribution to the overall short term, minor, adverse and long term, beneficial, cumulative impacts on preserve operations.

The short term, minor, adverse impacts of the selected action will add a noticeable contribution to the overall short term, moderate, adverse, cumulative impacts on noise. There will be no long term, adverse, cumulative impacts.

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: The selected action would not adversely affect any properties or objects listed or eligible for listing on the National Register of Historic Places. The NPS has conducted two cultural resource surveys of the parcel and no significant resources have been identified.

In accordance with Section 106 of the national Historic Preservation Act and its implementing regulations, 36 CFR Part 800, documentation of "no adverse effect" on historic properties was sent to the Texas State Historic Preservation Officer (SHPO) on August 14, 2006 and October 31, 2006. The Texas SHPO responded on November 11, 2006 and agreed that there were no historic properties affected.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: Threatened, endangered, or candidate species of special concern are known to inhabit the general vicinity of the project area of the selected action.

The U.S. Fish and Wildlife Service (USFWS) in Houston, Texas recommended a plant survey for the Texas trailing phlox if suitable habitat for that perennial herb exists on the NPS property. The USFWS advised of no other special concerns or objections regarding the proposed action.

The Texas trailing phlox grows on sandy soils in fire-maintained open pine woodlands. The NPS owned property does not provide such habitat, so a survey for the plant is not considered necessary.

The Texas Parks and Wildlife Department provided a listing of plants and animals for which occurrences have been reported within the general vicinity of the proposed project. Preserve staff indicated that the plants and wildlife included on the list would be present in the area only intermittently or were unlikely to be found in the area of the proposed project. The site would not provide either the open fire-maintained forest dominated by longleaf pine required by some of the state species, or the streams, bogs, and creek bottoms necessary for others.

It is unlikely that federal or state listed species will be adversely impacted by the construction of the new fire management facility.

Whether the action threatens a violation of federal, state, or local environmental protection laws: The selected action (preferred alternative) violates no federal, state, or local environmental protection laws.

IMPAIRMENT OF PRESERVE RESOURCES OR VALUES

In addition to reviewing the list of significance criteria, the Superintendent of Big Thicket National Preserve has determined that implementation of the selected action will not constitute an impairment of the preserve's resources or values. This conclusion is based on a thorough analysis of the impacts described in the EA, the agency and public comments received, and the professional judgment of the decision-maker in accordance with the NPS' *Management Policies, 2006* (August 31, 2006). Implementation of the selected action will not result in major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Big Thicket National Preserve, (2) key to the natural or cultural integrity of the preserve; or (3) identified in the preserve's general management plan or

other relevant National Park Service planning documents as being of significance. Therefore, there will be no impairment of the preserve's resources or values.

PUBLIC INVOLVEMENT

The EA was made available for public review and comment from September 11 to October 10, 2006. A notice announcing the document's availability was placed in the *Tyler County Booster* and the *Beaumont Enterprise* during the second week in July 2006. The NPS also sent 24 copies of the EA to various Federal, State, local, and civic organizations for their review and comment, and copies of the EA were available for the review on the NPS public internet site http://parkplanning.nps.gov, and at the preserve headquarters. As of the end of the public review period on October 10, 2006, the NPS received correspondence from two sources, with comments on the EA. The NPS responses to those comments are included as an attachment to this FONSI.

CONCLUSION

The selected action (preferred alternative), under this Finding of No Significant Impact, does not constitute an action that normally requires preparation of an environmental impact statement. The selected action will not have a significant effect on the quality of the human environment. Adverse environmental impacts that could occur are negligible to moderate in intensity. Mitigation measures will be incorporated into the selected action to reduce or eliminate impacts. There are no significant adverse impacts to public health, public safety, threatened or endangered species, or archeological resources. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

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

Approved:

Michael D. Snyder, Director Intermountain Region, NPS

Date

5 December 2006

ERRATA SHEET

For the Environmental Assessment for a Fire Management Facility, September 2006 Big Thicket National Preserve

The term "fire maintenance facility" should read "fire management facility" in the following locations throughout the environmental assessment:

Page i, Table of Contents, line 32, The Preferred Alternative....

Page 13, line 22, The Preferred Alternative....

Page 19, line 11, Alternative B....

Page 27, first line, The Preferred Alternative....

Page 29, line 4, The Preferred Alternative....

Page 30, line 30, The Preferred Alternative....

On page 9, second paragraph, second sentence, change to read "A septic tank and leach field for the proposed facility would meet all state regulations, and would be designed to minimize adverse impacts to ground water, such as contamination by waste water constituents."

On page 12, second paragraph beneath *Cultural Resources*, fifth sentence, change to read, "An additional cultural resource survey was conducted in August 2006 following vegetation clearing. No significant cultural resources were identified, but monitoring would be conducted in accordance with the Archeological Monitoring Plan during construction, as the vegetation is cleared and as grading and subsurface excavations occur."

On page 12, fourth paragraph beneath *Cultural Resources*, add a new second sentence that reads, "On November 11, 2006 the Texas State Historical Preservation Officer agreed that there were no historic properties affected.

COMMENT RESPONSE

The following section is a response to substantive comments received during the public review of the environmental assessment (EA). The comments are paraphrased from the originals.

COMMENT: External scoping for the EA was not sufficient. The commenter was not advised

that scoping was being conducted for the proposed construction of a fire

management facility.

REPLY: The National Park Service (NPS) posted a press release that was issued to several

regional newspapers on July 11, 2006 and to the website

http://parkplanning.nps.gov. This website was designed to allow the public to know when environmental compliance documents are available for the public to view and comment on, which saves taxpayers money that would be spent on mailing out notices of availability to all interested parties. Checking this site periodically will allow the commenter to be constantly aware of NEPA scoping

notices and decisions concerning Big Thicket National Preserve.

COMMENT: The NPS did not sufficiently assess the potential impacts to threatened and

endangered species, because the NPS has conducted no survey for Texas Trailing

Phlox.

REPLY:

The site proposed for the building was examined and determined unsuitable habitat for Texas Trailing Phlox by park biologists and therefore a phlox survey was not required by the US Fish and Wildlife Service (see letter on page 36). The vegetation on the building site was dense with shrubs and had not been maintained by fire. This habitat is very different from the open fire maintained community that Texas Trailing Phlox is found in.

COMMENT:

The NPS did not sufficiently address the potential impacts to water quality. A septic system should not be used. There should be no ground water impacts due to the fire management facility.

REPLY:

Since the NPS property is located several miles outside of the city limits, the only practical option is to install a septic system to collect and treat waste water. The use of a septic system for this facility is in compliance with all applicable Federal, state, and local laws and regulations.

COMMENT:

The NPS did not sufficiently address the potential impacts to water quality. The discussion of the preferred alternative (alternative B) does not say anything about impacts on ground water or surface water.

REPLY:

On page 14, there is a general description of what construction is necessary to build a fire management facility. The statement, "A septic tank and leach field would be installed to treat sewage," describes the method for waste water treatment. Pages 8-9 discuss the impacts of construction on the water quality. There one can find the statement, "Impacts to ground water might be detectable, but the system would keep impacts well below water quality standards or criteria."

COMMENT:

The use of the phrase "fire maintenance facility" on some pages and the phrase "fire management facility" on other pages is confusing.

REPLY:

The correct title for the building is the Fire Management Facility. The use of the word "maintenance" will be corrected to "management" in an errata sheet.

COMMENT:

The NPS did not sufficiently explain why the alternative of constructing a new fire management facility around the visitor center and maintenance facility was considered but dismissed.

REPLY:

Constructing a new fire management facility around the visitor center and maintenance facility was dismissed since the location near the corner of FM 420 and U.S. 69 would not meet the purpose and need for the fire management facility.

COMMENT:

The NPS did not sufficiently assess impacts to preserve operations. The NPS talks about how the fire management facility must be grouped with the Texas Forest Service "to enhance mutual aid capabilities", but does not discuss the primary use of the fire management facility, which is to reestablish the role of fire in Big Thicket to restore its fully functioning ecological processes.

REPLY:

Being in proximity to the Texas Forest Service (TFS) is not the prime concern of Big Thicket National Preserve. On page 21, the document states "The primary objective

of the fire management program is to allow fire to function in its natural ecological role, restore ecosystem balance (stand structure and diversity) of phyric communities, and manage hazardous fuels in the urban interface through the use of prescribed fire and mechanical treatments."

The close proximity to TFS greatly aids in both resources and response time to wildfires within the mutual aid zone.

COMMENT:

The NPS does not sufficiently assess cumulative impacts, because the EA does not discuss the proposed expansion of U.S. Highway 69 and its effects on the use and capacity of the current route of U.S. Highway 69.

REPLY:

The projects were discussed with the Woodville Director of Public Works and the Woodville/Newton/Jasper Area Engineer of the Texas Department of Transportation. The proposed expansion of US Highway 69 was not listed as a current or future action because it will occur east of the facility.

COMMENT:

The NPS does not adequately identify the impact levels of the alternatives, because the EA does not sufficiently define the impact threshold definitions. Impact thresholds are too often defined qualitatively rather than quantitatively. Dictionary usage of words or phrases will not suffice to provide the public with a clear picture of what the intensity, significance, and context of environmental impacts are. Quantitative assessment, analysis, and evaluation are necessary to ensure that alternatives and environmental impacts are clearly defined.

REPLY:

The National Park Service (NPS) has written the environmental assessment (EA) in plain language the general public can understand (40 CFR § 1502.8). Words used are intended to be understandable using standard dictionary definitions. In addition, the Fire Management Facility EA sharply defines the environmental impacts of the alternatives in comparative form in Table 3, Summary of Environmental Consequences, as required in 40 CFR 1502.14 for EIS's.

Environmental assessments are a tool for determining whether proposed alternatives have the potential for significant impacts on the environment, and thus, whether preparation of an environmental impact statement is needed. In Section 1508.27, CEQ Regulation 1508 requires considerations of both intensity and context to identify the significance of impacts. To assess the intensity or severity of impact, the NPS identifies impact intensities as "negligible", "minor", "moderate", or "major". (A "major" impact would be tantamount to "significant"). Context is discussed in terms of local, preserve-wide, or regional impacts. Consequently, the EA characterizes the impacts relative to the components of significance as presented in the CEQ Regulations.

The impact intensity definitions in the Fire Management Facility EA are concise, clear, and to the point, without specifying quantifiable thresholds for impacts to vegetation, preserve operations, or noise. Some impact topics do not lend themselves to quantification, and are typically addressed in a qualitative fashion. Where appropriate and useful, NPS has disclosed impact quantities, i.e., acres of vegetation to be removed during construction of the facility, supplemented by existing data and professional judgment. The NPS believes the analysis presented in

the EA provides adequate detail and analysis relative to the action proposed, impacts anticipated, and the technical requirements of an environmental assessment.