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Wasatch Helibase Project

Environmental Assessment

Forest Service

Uinta-Wasatch-Cache National Forest – Ogden Ranger District April 2021

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PROJECT INFORMATION

Project Name: Wasatch Helibase Project

Project Initiation Date: 3/22/2021

Line Officer: Sean Harwood

District: Ogden Ranger District

County(ies): Weber

Anticipated Implementation: September 2021

Signing Authority: District Ranger

PALS Tracking #: 59969

Project File: Box\1900Plan\1950Proj\2Current\06OG_2021_Wasatch_Helibase_Project

GIS Info: T:\FS\NFS\UintaWasatchCache\Project\ORD\1950WasatchHelibase

Project Webpage: https://www.fs.usda.gov/project/?project=59969

General Location: By Pineview Reservoir and Huntsville City, near the intersection of SR39 and SR167

Applicable Management Areas: North Wasatch Ogden Valley Management Area

Legal Description: Township 5N, Range 1E, Sections 19 and 24 Salt Lake Sixth Principle Meridian

Elevation Range: 4,945 feet

Watersheds: South Branch South Fork Ogden River-Pineview Reservoir

PURPOSE & NEED AND PROPOSED ACTION

The Ogden Ranger District of the Uinta-Wasatch-Cache National Forest (UWC) is proposing to construct a helibase on National Forest System land near the town of Huntsville and Pineview Reservoir in Weber County, Utah. The helibase would be used to house the operations of the Wasatch Helitack program, which supports four helicopters. The crew and helicopters are critical resources used in the suppression of wildland fires across northern Utah (on all land jurisdictions) and elsewhere throughout the country. They also play a key role in the implementation of hazardous fuels reduction projects throughout the region.

The helibase would have three helipads, operations and warehouse buildings, vehicle parking, and a vehicle-based fuel containment area. Though the Wasatch Helibase would support four helicopters (one Type 1, one Type 2, and two Type 3 helicopters), it would only house up to three helicopters at a time on site. Helibase personnel would include a crew of 33 firefighters, four pilots, and as many as fourteen contract employees.

Activities proposed on National Forest System land as part of the Wasatch Helibase Project must conform to the 2003 Revised Forest Plan for the Wasatch-Cache National Forest and its Forest-wide Standards and Guidelines. The proposed location is in the North Wasatch Ogden Valley Management Area and Management Prescription 4.5 (Developed Recreation Areas) of the Forest Plan. The construction of the helibase is consistent with the activities allowed in these areas. Additional documentation, including more detailed analysis of project area resources, may be found in the project planning record. A list of supporting documentation is provided at the end of the document. These records are available for public review upon request.

BACKGROUND, LOCATION, AND SETTING

The helibase is the location from which helicopters supporting wildland fire and hazardous fuels missions are flown. It is where the helicopters assigned to that base are parked, serviced, and refueled. The Wasatch Helitack, a national wildland firefighting resource, is currently stationed at the Morgan County Airport in Mountain Green, Utah. The facility at the airport has been under lease from Morgan County. That lease will expire in March 2022, and the forest has exhausted the ability for extensions.

In 2018, the Wildland Fire Management portion of the Omnibus Bill repurposed $65 million to enhance firefighting mobility, effectiveness, efficiency, and safety. The goal is to improve current aviation equipment and facilities and to adopt new technology to enhance overall operational capability. The Wasatch Helibase project was selected to receive some of this funding to acquire a modern facility that will improve aviation operations and provide a long-term home for the helitack program.

The proposed site is situated solely on National Forest System land on the Ogden Ranger District approximately 15 miles east of Ogden, Utah on Highway 39 (Figure 1). It is near the town of Huntsville, Utah, and Pineview Reservoir, just north of the connection of Trappers Loop Road (SR 167) and Highway SR39 (Figure 2).

In addition to meeting the needs of the Wasatch Helibase Project, this site is well-suited for the helibase because it is located on the eastern side of Wasatch Range, separate from commercial aerial operations on the western side.

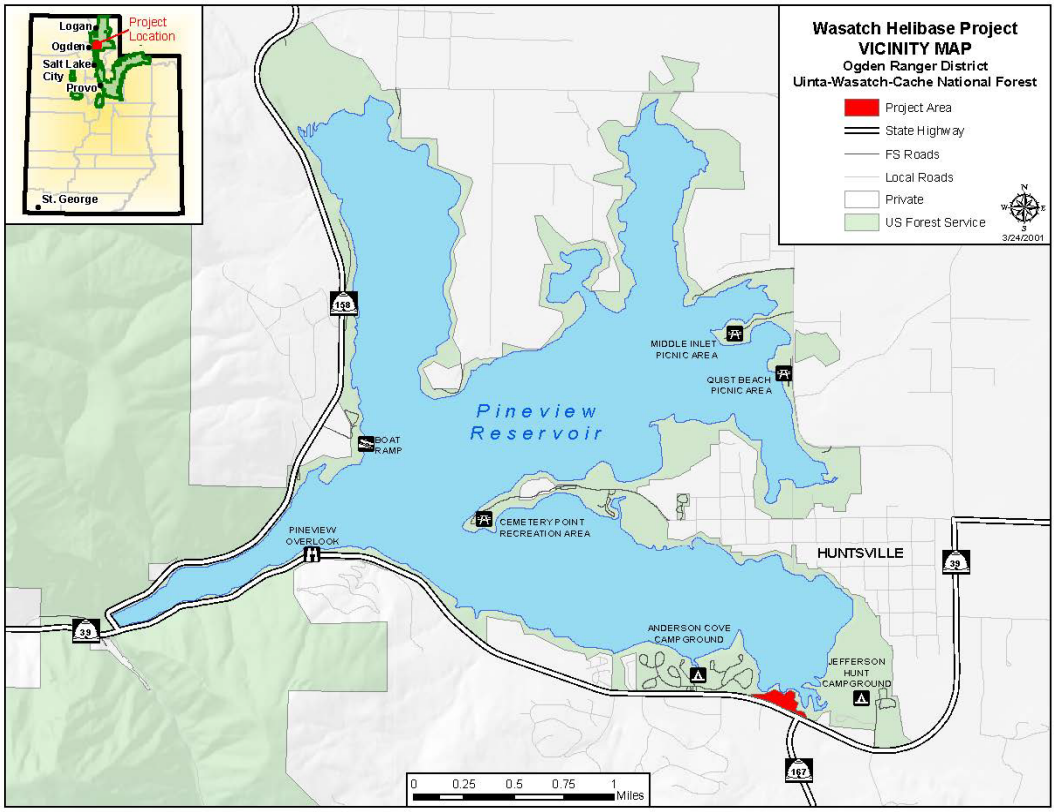

Figure 1. Vicinity map displaying the proposed helibase site near the southeast corner of Pineview Reservoir.

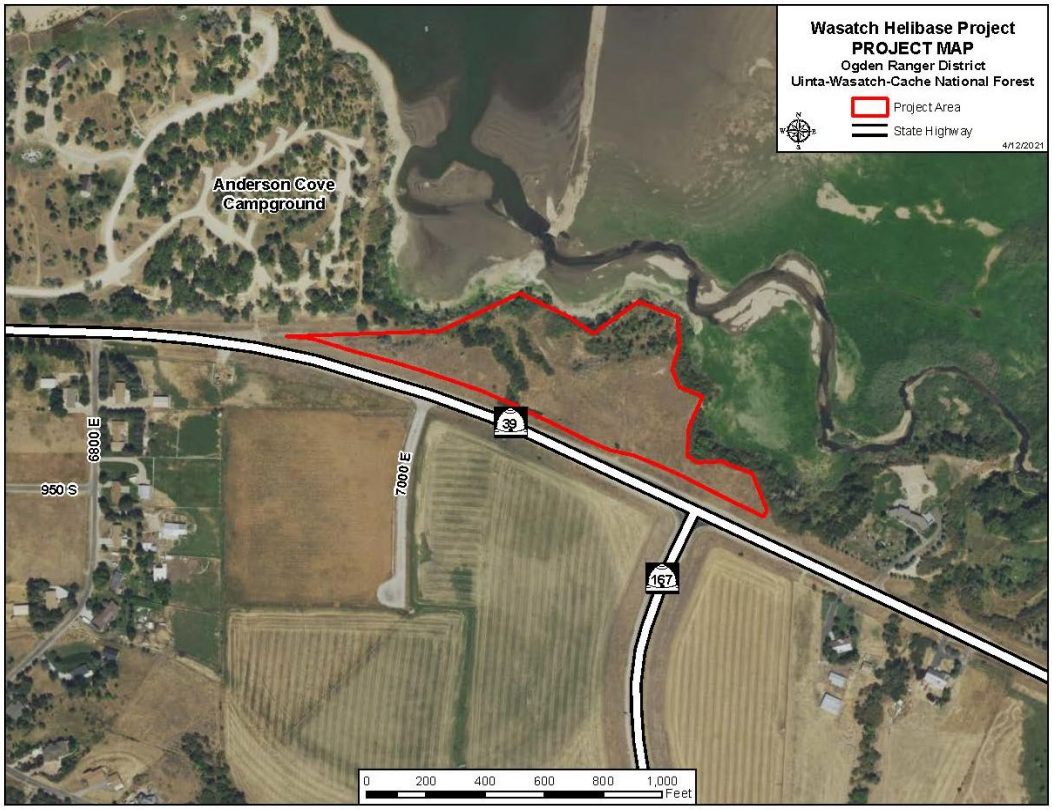

Figure 2. Project map showing the proposed site near the intersection of SR167 and SR39.

PURPOSE AND NEED

The Forest Service (FS) anticipates a continued need for the Wasatch Helitack program (currently the only FS helitack program in the State of Utah) for supporting wildland fire suppression and hazardous fuel projects. They are an integral component of the fire program that helps to provide for public and firefighter safety, the protection of other federal, state and private property, and the protection and restoration of natural resources such as municipal watersheds, critical wildlife habitat, and healthy forest ecosystems (Forestwide Goals 3 and 4, Revised Forest Plan for the Wasatch-Cache National Forest 2003). With more homes and communities being constructed in the wildland urban interface, and longer, more extreme fire seasons in recent years, the need is expected to increase for this type of aerial support.

Over the last few years, a considerable amount of time has been spent analyzing different locations to re-locate the helitack crew, evaluating numerous sites that are currently available to land helicopters. After multiple alternatives were considered, it became clear that the only alternative would be to build a new facility on National Forest System land. The proposed site near Huntsville, Utah was identified as the best location to meet the needs of the Wasatch Helitack program. Construction of the helibase must be completed by April 2022 to avoid impacts to the helitack program's operations during the 2022 fire season.

The proposed location was selected because it meets the following requirements of an operationally effective helibase:

- Large enough in size to house at least 3 helicopters, a crew of 33 firefighters, 4 pilots, and up to 14 contract employees, and the resources to maintain readiness to deploy quickly.
- Topography and weather favorable to taking off and landing helicopters (e.g. flat ground, no aerial hazards along flight paths, not unusually windy, etc.).
- Centrally located to minimize travel time to incidents for initial attack.
- Can accommodate a secure facility that meets FS policies and regulations.
- Provides a long-term and economically viable home for the Wasatch Helitack program.
- FAA ruled that the site will not have a negative impact on the airspace and was approved by the State Aeronautical Board.
- A Crash Rescue is within 5 minutes.
- Close access to the Mt. Ogden Repeater for the usage of national flight following on the victor aviation radio frequency.

The proposed location is the only alternative identified that meets the needs of the Wasatch Helibase Project. If it is not implemented this year, the future location of the Wasatch Helitack program is uncertain. They would likely be temporarily located at an airport at great expense to the agency or at Hill Air Force Base, which would be extremely challenging logistically, and in facilities that are not designed for their specific needs.

PROPOSED ACTION

The Ogden Ranger District proposes to construct a new helibase on a 9-acre site, entirely on National Forest System land. Within the 9-acre site, an estimated 2 acres would be used for buildings, helipads, parking areas and other improved surfaces (access road and safety circles) (Figure 3 and Table 1). Some additional smaller impact areas would result from running lines for electricity, water, and communications. The typical use of the helibase would be during the fire season from May to October. Although the base could support three helicopters, as the fire season picks up there would usually only be one on site to support initial attack locally. The other helicopters would likely be away from the base assisting fire suppression efforts across the country where needed. The number of takeoff and landings averages about one per day but varies depending on fire activity. The facility would be closed throughout the winter.

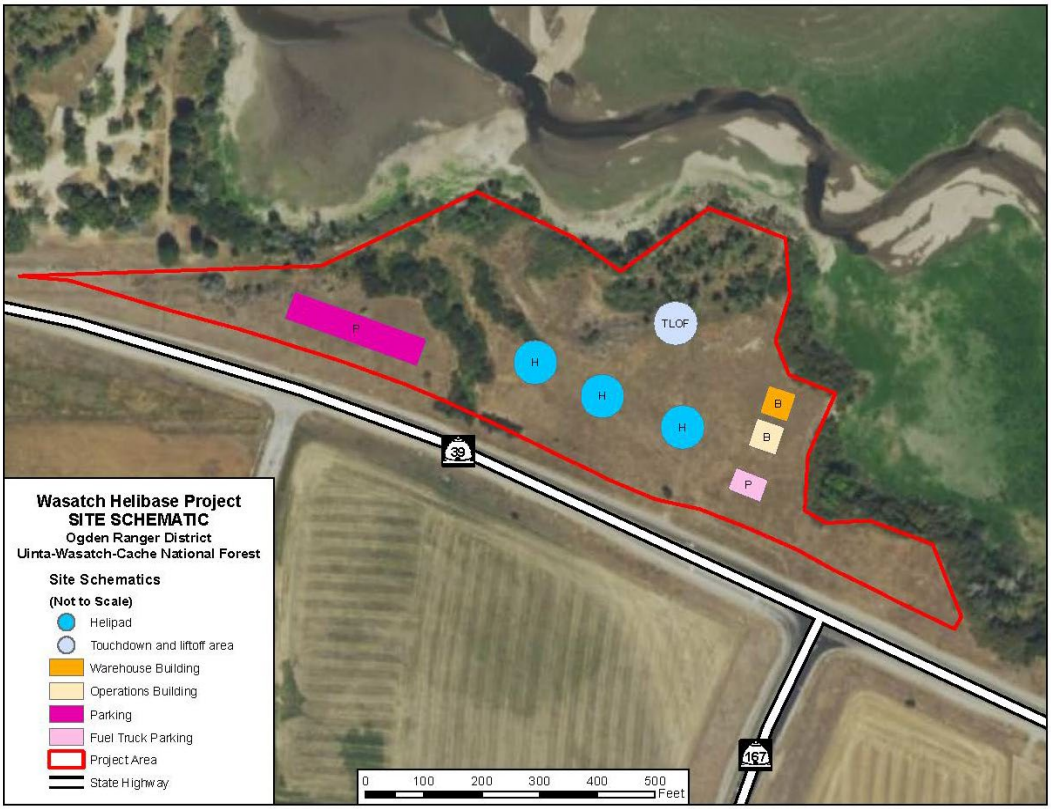

Figure 3. A schematic of the helibase facilities, not to scale.

Table 1. Summary of the Proposed Action with approximate measures. Exact sizes and the layout of the facilities within the site would be determined by the final engineering design.

Proposed Activity	Description
Site preparation	Removal of debris, leveling, and grading, where needed across the entire site
Removal of grass and shrubs	Where needed across the entire site
Touchdown and Liftoff area (TLOF)	54-feet by 54-feet concrete pad
Three helipads	One 30-feet by 30-feet and two 20-feet by 20-feet concrete pads
Four helipad/TLOF safety circles	Two 110-foot and two 90-foot asphalt, gravel, or undisturbed safety circles
Operations building	Approximately 2,750 square feet
Warehouse building	Approximately 2,500 square feet
Septic tank and drain field	Capable of treating 3,500 gallons of wastewater
Vehicle parking	Approximately 17,500 square feet
Fuel truck containment parking	Approximately 1,500 square feet
Fencing	No more than 4,100 feet of 6 to 8-foot fencing to surround the facilities
Security lighting	For building entrances, parking areas, and, if possible, helipads
Radio tower	Wired or attached to the operations building, extending a few feet beyond the height of the building.

Vegetation removal and site preparation: Activities would be implemented where needed across the entire 9-acre site. The area would be cleared of grass and light brush to construct the buildings, parking area, helipads, and provide safe ingress/egress of the aircraft flight paths. There is no large timber on the site to be removed, and the grasses would be maintained except near the helipads and safety circles to keep loose debris at a minimum. In the past the area has been used as a storage for barrier rocks, dirt, and tree remnants that have been removed from

the nearby recreation site. Heavy civil construction equipment (e.g. dozer, excavator, grader, etc.) would be used for clearing, grubbing, excavation, leveling, and grading. Leveling the site may include a road crossing with a culvert over an ephemeral channel. Erosion control and slope stability measures may be implemented depending on the final engineering design.

Road access and parking: SR39 runs east and west of the proposed site along the southern edge of the property. Forest engineers are working with the Utah Department of Transportation (UDOT) to design an ingress and egress from the highway. Coordination with UDOT would occur for proper permits and easements for the entrance to the property. Parking for vehicles/trucks/trailers would also be constructed to engineering standards. The helibase requires room for eight FS vehicles, two FS trailers, 40 private vehicles, and six contractor vehicles (approximately 17,500 square feet). All these vehicles would be parked on improved surfaces.

Helipad/TLOF construction: Three helipads and a TLOF would be constructed to support two Type 2 helicopters and one Type 1 helicopter. The desired area for the pads and safety circles is shown in the Table 2. The helipads and TLOF would be constructed out of cement concrete pavement capable of supporting the weight of the helicopters. Safety circles would be made from asphalt, gravel, or not disturbed if the existing ground surface meets requirements.

Table 2. Helipad and safety circle sizes.

	Touch Down Pad Size	Safety Circle (measured from the center of the helipad)
T2 Helicopter	20-feet by 20-feet	90-feet
T1 Helicopter	30-feet by 30-feet	110-feet
TLOF	54-feet by 54-feet	110-feet

Operations building with septic system: The building would be approximately 2,750 square feet and be used for operations, fitness, and ready rooms. The building may include an outside pavilion, and an outside hazmat/flammable storage locker and would be designed in a similar fashion and style as the other recreation facilities around the lake. The associated wastewater system would include a buried septic tank and buried leach field large enough to treat 3,500 gallons of wastewater.

Warehouse building: A warehouse building approximately 2,500 square feet that may be attached to the operations building or built separately.

Fencing: The facilities would be fenced with 6 to 8-foot chain link fencing. If funding allows, a more aesthetic fence would be used. Two swing gates would be installed for the parking area and access to helipads.

Security lighting: Security lighting would be installed for building entrances, parking areas, and if possible, for the helipads if there is a location that does not create an aerial hazard.

Fuel truck parking: Containment parking for three trucks; each truck is up to 50-feet long and up to 3,500 gallons. This area is meant to contain any spillage due to a tank failure.

Radio Tower: A radio tower would be wired to the operations building. The tower would be no more than a few feet higher than the operations building.

Design criteria for the project are identified in the resource sections below.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Many alternatives have been considered over the last few years and are documented below.

Ogden Airport Alternative
This alternative was analyzed extensively, and it was the original preferred alternative. This alternative would have resulted in the forest purchasing a building on the Ogden Airport. The facility was located directly south of the original airport tower and had all the amenities required to run a successful, high functioning helibase. Due to issues with the agency buying a building on leased property, the FS was not able to reach an agreement with Ogden City, the owner of the property, and this alternative was abandoned.

Jefferson Hunt Alternative
This alternative was developed by the Regional Engineers. The site is located very close to the proposed site, however a site visit revealed that the location is part of the flood plain of the South Fork River. North of this site are the remains of the Jefferson Hunt Campground, decommissioned in 2019 because of flooding problems. The same water problems that closed the campground would have to be dealt with at this site, and therefore it was not analyzed further.

Miscellaneous Airport Location Alternatives
Because of the requirements needed by the Wasatch Helitack program, many airports were evaluated as possible alternatives. Existing airports that were reviewed for viability include: Brigham City, Logan, Morgan, Wood Cross, Tooele, South Jordan, Evanston, Heber, Provo, Spanish Fork, Nephi, Wendover, Camp Williams, and Hill Airforce Base. Location, amenities, access, safety and security, and consideration for affected employees were all criteria in these evaluations. Some of these sites were found suitable but would not accomplish one of the main goals for this project, to find a long-term and economically viable home for the Wasatch Helitack. Many of these options would still require short-term leases that could increase in cost over time. For one reason or another these sites were not analyzed further. Additional information is in the project record.

PROJECT SCREENING

REGULATORY CONSIDERATIONS AND ISSUES CONSIDERED FOR ANALYSIS

The Responsible Official has requested documentation to demonstrate compliance with the following regulatory considerations in addition to NEPA:

- NFMA/Land Management Plan
- Endangered Species Act (ESA)
- Sensitive Species (FSM 2670)
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- National Historic Preservation Act (NHPA)
- Tribal Consultation
- Clean Air Act (CAA)
- Clean Water Act (CWA)

The Interdisciplinary Team of resource specialists on the UWC identified the following issues to be analyzed: wildlife, threatened and endangered species, sensitive species, cultural resources, recreation, water and air quality, noise, and scenery. The effects of the Proposed Action on these resources is addressed in the Environmental Impacts Review section.

AGENCIES & PERSONS CONSULTED

The following agencies, organizations, tribes, and persons were consulted during the project development and analysis.

- Federal Aviation Administration- Information Specialist, Administrative Officer, Community Planner
- Utah Department of Transportation
- Utah Department of Transportation Division of Aeronautics – Director, Engineer

- Northwest Band of Shoshone Nation (An invitation letter to consult was mailed on March 29, 2021)
- Morgan County – Director of Emergency Management, Fire Warden
- Weber County – Fire, Commissioners, Engineering, Sheriff, Search and Rescue
- Town of Huntsville – Mayor, Town Council, and public group
- Ogden City
- Snowbasin Resort
- Utah Recreation Company

ENVIRONMENTAL IMPACTS REVIEW

The following effects (or impacts) discussions focus on changes to the human environment from the Proposed Action that are reasonably foreseeable and have a reasonably close causal relationship to the Proposed Action, including those effects that occur at the same time and place as the Proposed Action and may include effects that are later in time or farther removed in distance from the Proposed Action.

AFFECTED ENVIRONMENT

The proposed helibase site is located on an undeveloped parcel of Forest Service land that is currently used to store barrier rocks, dirt, and tree remnants removed from nearby recreation sites. The site is located on the north side of the Ogden River Scenic Byway SR39, next to the intersection of SR39 and SR167. This main travel corridor is surrounded by a variety of businesses, agricultural farm buildings and fields, recreation facilities, and primary and secondary residential homes. The site itself is surrounded by farmland to the south, a subdivision about 0.25 miles to the southwest, FS Anderson Cove Campground to the west, Pineview Reservoir and floodplain to the north, and scattered residences approximately 0.25 miles to the east (Figure 2).

Pineview Reservoir is a very popular and heavily used recreation area with approximately 2 to 2.5 million visitors in the summer. As a destination for recreation-based activities, the reservoir has several developed recreation sites, including trailheads, parking areas, fishing access, campgrounds, day use picnic areas, and beach access. The proposed helibase site is highly visible from SR39, SR167, and the three campsites on the east side of Anderson Cove Campground, but it is in a semi secluded area of the reservoir and partially screened by vegetation on the north side, making it difficult to see from the reservoir.

NATIONAL FOREST MANAGEMENT ACT (NFMA) – LAND MANAGEMENT PLAN CONSISTENCY

The pertinent specialists have reviewed the project and found it to be consistent with the 2003 Revised Forest Plan for the Wasatch-Cache National Forest.

REQUIRED MODIFICATIONS

Modifications to the Proposed Action are not required, however Forest Plan Guideline G12 directs the Responsible Official to locate new actions (such as incident bases, fire suppression camps, staging areas, livestock handling facilities, recreation facilities, roads and improvements including trails) outside of Riparian Habitat Conservation Areas (RHCA). If the only suitable location for such actions is within Riparian Habitat Conservation Areas, sites would be located to minimize resource impacts. Resource impacts to riparian resources have been minimized by locating the improvements with the greatest potential to cause detrimental effects to riparian resources outside of the 150-foot RHCA buffer. Some encroachment into the RHCA buffer around Pineview Reservoir may occur, however the infrastructure would be in dry, upland sites that do not contain riparian habitat.

ENDANGERED SPECIES ACT

THREATENED, ENDANGERED, PROPOSED AND CANDIDATE SPECIES &/OR CRITICAL HABITAT

The pertinent specialists reviewed the project and made the following determinations for threatened, endangered and/or proposed species.

Table 3. TEPC Effect Determinations for ESA

Species/Habitat	Status	Proposed or Designated Critical Habitat Present?	Determination*	Brief Rationale (or refer to other project documentation)
Black-footed ferret	Endangered	No	NE	Do not occur in the project area.
Canada lynx	Threatened	No	NE	Do not occur in the project area.
Yellow-billed cuckoo	Threatened	No	NE	No records of the species in the area. Small patches of willows exist in the project area, but not enough to support breeding.
Ute Ladies'-tresses	Threatened	No	NE	See Biological Assessment/ Biological Evaluation (BABE).
Razorback sucker	Endangered	No	NE	Do not occur in the project area.
Humpback chub	Endangered	No	NE	Do not occur in the project area.
Colorado pike minnow	Endangered	No	NE	Do not occur in the project area.
Bonytail chub	Endangered	No	NE	Do not occur in the project area.
June sucker	Endangered	No	NE	Do not occur in the project area.

***NE** – No Effect; **NLAA** – May Affect, Not Likely to Adversely Affect; **LAA** – May Affect, Likely to Adversely Affect; **No Jeopardy** - Not Likely to Jeopardize the Continued Existence or Adversely Modify Critical Habitat

SENSITIVE SPECIES (FSM 2670)

The pertinent specialists reviewed the project and made the following determinations for sensitive species.

Table 4: Sensitive Species Impact Determinations

Species	Determination*	Rationale (or refer to other project documentation)
Wolverine	NI	Do not occur in the project area.
Bald eagle	NI	Bald eagles roost in the area in winter, but helicopters would be only be flying May-October.
Northern goshawk	NI	Do not occur in the project area.
Flammulated owl	NI	Do not occur in the project area.
Peregrine falcon	NI	Do not occur in the project area.

Species	Determination*	Rationale (or refer to other project documentation)
Three-toed woodpecker	NI	Do not occur in the project area.
Great gray owl	NI	Do not occur in the project area.
Boreal owl	NI	Do not occur in the project area.
Spotted bat	NI	No data are available in the project area. There is a possibility of the species foraging around the project area. Since flights occur during the day, it is unlikely that there would be collisions with foraging bats.
Townsend's big-eared bat	NI	No data are available in the project area. There is a possibility of the species foraging around the project area. Since flights occur during the day, it is unlikely that there would be collisions with foraging bats.
Greater sage-grouse	NI	Do not occur in the project area.
Rocky Mountain bighorn sheep	NI	Do not occur in the project area.
Gray wolf	NI	Do not occur in the project area.
Fisher	NI	Do not occur in the project area.
Sharp-tailed grouse	NI	Do not occur in the project area.
Wheeler's angelica	NI	No suitable habitat within project area.
Crenulate moonwort	NI	See BABE.
Slender moonwort	NI	No suitable habitat within project area.
Wasatch fitweed	NI	No suitable habitat within project area.
Brownie lady's slipper	NI	No suitable habitat within project area.
Lesser yellow lady's slipper	NI	No suitable habitat within project area.
Wasatch shooting star	NI	No suitable habitat within project area.
Wasatch draba	NI	No suitable habitat within project area.
Burke's draba	NI	No suitable habitat within project area.
Rockcress draba	NI	No suitable habitat within project area.
Maguire's draba	NI	No suitable habitat within project area.
Santaquin draba	NI	No suitable habitat within project area.
Cronquist draba	NI	No suitable habitat within project area.
Garret's fleabane	NI	No suitable habitat within project area.
Logan buckwheat	NI	No suitable habitat within project area.
Utah ivesia	NI	No suitable habitat within project area.
Wasatch jamesia	NI	No suitable habitat within project area.
Wasatch pepperwort	NI	No suitable habitat within project area.
Arctic poppy	NI	No suitable habitat within project area.
Cache beardtongue	NI	No suitable habitat within project area.

Species	Determination*	Rationale (or refer to other project documentation)
Cottam cinquefoil	NI	No suitable habitat within project area.
Uinta greenthread	NI	No suitable habitat within project area.
Barneby woodaster	NI	No suitable habitat within project area.
Frank Smith's violet	NI	No suitable habitat within project area.
Colorado River cutthroat trout	NI	Do not occur in the project area.
Bonneville cutthroat trout	NI	Bonneville cutthroat trout occur in the South Fork Ogden River but would not be impacted by the proposed project due to vegetative buffer.
Boreal toad	NI	Do not occur in the project area.
Columbia spotted frog	NI	Do not occur in the project area.
Northern leatherside chub	NI	Do not occur in the project area.
Southern leatherside chub	NI	Do not occur in the project area.
Monarch butterfly	MIIH	See BABE.

NI – No Impact; **MIIH**- May Impact Individuals or Habitat, but Will Not Likely Contribute To A Trend Towards Federal Listing Or Loss Of Viability To The Population Or Species; **WIFV** - Will Impact Individuals or Habitat with A Consequence That the Action May Contribute To A Trend Towards Federal Listing Or Cause A Loss Of Viability To The Population Or Species

WILDLIFE

Pineview Reservoir, the surrounding wetlands, and the vegetative areas around the reservoir provide habitats for migratory birds, resident birds, game birds and big game species. Large sized birds, such as wild turkeys, Canada geese, sandhill cranes, ospreys, and red-tailed hawks and other smaller sized birds have been observed in the area. Other species of migratory birds will arrive at the reservoir later in spring. Records show over 120 species of birds using the area and the reservoir. The project area is not within the mapped mule deer or elk habitats, but signs of mule deer use of the project area have been observed.

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) prohibits the taking of migratory birds, their parts, nests, eggs, and nestlings. Executive Order 13186, signed January 10, 2001, directs federal agencies to protect migratory birds by integrating bird conservation principals, measures, and practices into agency activities and to avoid or minimize, to the extent practicable, adverse impacts to migratory bird resources when conducting agency actions. Birds can be killed if they collide with a helicopter, and large sized birds could potentially cause serious damages to the helicopter and passengers. The following design criteria would apply to mitigate impacts to migratory birds:

- Pilots to be briefed about birds in the area.
- Remove trees and vegetation as much as possible from the project sites to eliminate nesting, roosting, feeding and perching birds.
- Potential impacts to nesting habitat for migratory bird species would be minimized by doing vegetation clearing outside of the nesting season (April 1 to July 15) whenever possible.
- Minimize grass areas within the helibase property to discourage birds from roosting and feeding and to control rodent populations which would attract raptors.
- Dumpsters within the helibase must have a lid.

MULE DEER AND ELK

Even though signs of mule deer were observed, the project area is not within the mapped habitat for mule deer and/or elk; therefore, the proposed project is not expected to contribute to habitat and population trends for these species. Mule deer and elk should be excluded from the helibase with a minimum 6 to 8-foot high fence with no gaps at the bottom.

NATIONAL HISTORIC PRESERVATION ACT (NHPA) – SECTION 106 REVIEW

Section 106 review meets compliance stipulations of a Programmatic Agreement. A Class III Cultural Resource Inventory was performed of the entire Area of Potential Effect (APE) for this proposed undertaking on 3/29/21. No historic properties or cultural resources were noted. The area has been subject to heavy disturbance in the recent past. This was noted by the presence of bermed material indicating that the area has been subject to heavy equipment surface scraping, a bladed roadbed with aggregate fill, a large buried but abandoned water pipe, and storage of potential barrier rock. The site is also littered with discarded cement from unknown structures, some of which was working out of the north facing cut bank that leads down to the flood plain at a depth of up to three meters. Due to the lack of historic properties with the APE of this proposed undertaking, the Forest Service has made the determination of No Historic Properties Affected as per 36 CFR 800.4(d)(1), and recommends the project proceed as planned. The Uinta-Wasatch-Cache National Forest will report this undertaking to the Utah State Historic Preservation Office in the annual Small-Scale Undertakings report. This is done in compliance with the Small-Scale Undertakings Programmatic Agreement, when projects fall under a 50-acre threshold, and Historic Properties are not affected by the undertaking.

CLEAN AIR ACT (CAA)

Northern Utah's non-attainment area reaches only to the crest of the Wasatch Mountains. The Ogden Valley is in attainment for all air quality standards. Air quality would continue to be good under the Proposed Action. Criteria pollutant emissions and fugitive dust would increase locally in the short-term from heavy equipment and vehicles due to tailpipe emissions, site preparation and construction activities. In the long-term, based on the average take off and landings expected at the helibase, no adverse impact to air quality or change in attainment status is expected to occur because of this project.

CLEAN WATER ACT (CWA)

Prior to beginning construction activities, the contractor selected for implementation would be required to obtain a General Permit for Storm Water Discharges from Construction Activities from the Utah Division of Water Quality (UT DWQ). This permit would be issued in compliance with the provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code, as amended under delegated authority according to Title 33 U.S. Code Section 1342 with federal oversight from the Environmental Protection Agency (EPA) under the Federal Clean Water Act, Title 33 U.S. Code Section 1251, et. seq., as amended, and the rules and Regulations made pursuant to those statutes. Compliance with the terms and conditions of this permit would authorize the owner/operator responsible for the helibase construction to discharge pollutants in accordance with the limitations that have been set by the UT DWQ under Federal Clean Water Act authority that has been delegated to the State of Utah by the EPA.

WATERSHED RESOURCES

The primary effects to watershed resources during construction of the helibase would be the loss of effective ground cover, disturbance of soils, and localized erosion during runoff producing precipitation events. Offsite transport of eroded soils and water sedimentation is not expected as the selected site is relatively flat and construction stormwater management BMPs such as silt fencing and/or straw wattle placement would be required in order comply with the Storm Water Pollution Prevention Plan that would be developed prior to implementation. Additional protection of water resources in Pineview Reservoir would be achieved by maintaining an intact, undisturbed vegetative buffer between the water body and the active construction site. In most cases this buffer would be at least 150 feet wide, however the final design for the helibase and site layout would most likely require minor encroachment into the outermost portion of this buffer.

While no wetlands or active stream channels would be impacted during construction or operation of the helibase, there is a potential for a road crossing to be built across an ephemeral gully that is in the western portion of the site. The source water for this gully is the outflow from a highway culvert that has been installed to convey excess agricultural pivot sprinkler runoff and stormwater from an adjacent, undeveloped residential development. Both developments are located south of the helibase site, across the adjacent highway.

During debris removal, site preparation, and construction, up to 8 acres may be disturbed. An estimated 2 acres would be occupied by the helibase developments and are assumed to represent a permanent commitment of the soil and watershed resources.

The long-term effects of the helibase would be the loss of soil productivity on these 2 acres as well as decreased infiltration and localized increased runoff from the impervious surfaces. Refueling and servicing of the helicopters would be accomplished in designated sites outside of the RHCA buffer, by qualified personnel who have spill containment kits on hand should the need arise. The parking area for the helicopter fuel trucks would have adequate fuel containment capacity for the full volume of the trucks should a leak occur. Wastewater generated on site would be treated in a designated and appropriately sized septic tank and leach field. The refueling area, fuel storage and containment area, and wastewater treatment areas all would be located outside of the RHCA buffer for Pineview Reservoir and are not expected to result in impacts to water or riparian resources.

DESIGN CRITERIA

The final layout for the helibase improvements would be designed such that encroachment into Forest Plan defined Riparian Habitat Conservation Areas would be minimized to the greatest extent possible. This includes a commitment to locate the fuel truck parking area and septic system at least 150 feet (slope distance) from the maximum pool elevation for Pineview Reservoir.

Prior to implementation, the construction contractor would be required to obtain a Utah Pollutant Discharge Elimination System (UPDES) Construction Stormwater Permit from the Utah Department of Environmental Quality Division of Water Quality. A complete permit application would include a Storm Water Pollution Prevention Plan that would be reviewed and approved by watershed staff in the Uinta Wasatch Cache NF Supervisor's office to ensure that sufficient water quality protection best management practices (BMPs) have been incorporated into the construction planning efforts.

PERTINENT EXECUTIVE ORDERS

The Responsible Official and/or applicable specialist(s) have determined the project is in compliance with the following Executive Orders (EO), which were deemed pertinent based on the nature of the project.

- EO 11988, Floodplain Management
- EO 11990, Protection of Wetlands
- EO 12898, Environmental Justice
- EO 13007, Indian Sacred Sites
- EO 13112, Invasive Species
- EO 13175, Consultation & Coordination w/ Indian Tribal Governments
- EO 13186, Migratory Birds

NOISE AND RECREATION

The primary source of noise in the project vicinity is from highway SR39 and SR167 traffic noise, specifically the high volume of vehicle traffic and the acceleration and deceleration noise from trucks at the SR39/SR167 intersection. Additional noise sources include boat traffic on Pineview Reservoir, private and military aircraft, and recreation use in the adjacent Anderson Cove Campground.

In the short-term, noise levels would increase in the project vicinity due to construction activities. In the long-term, given the surrounding noise levels, the proximity of the proposed helibase site to residences and campsites (Table 5), and an average of one takeoff/landing per day (during daylight hours), there would be no noticeable increase in noise levels under the Proposed Action.

Table 5. Typical noise levels for common activities in the project area compared to helicopter operations, and the approximate distance of the noise source from the closest residences or campsites.

Activity	Noise level (dBA)	Distance of Activity to Closest Residences/Campsites
Highway traffic	70-80 (from 50 feet)	200 feet
Boat Traffic	60-70 (from 50 feet)	> 500 feet
Helicopters	95-98 (from 100 feet)	800 feet
Helicopters	73-80 (from 400 feet)	> 500 feet when overhead

Pineview Reservoir is a heavily used and developed area. Recreationists are already accustomed to the noise levels described above, and the additional helicopter traffic would have minimal impact to their recreation experience.

SCENERY

In the short-term, already disturbed areas of grass would be removed leaving some temporary effects of barren ground, dust, and construction activities leaving the site disturbed and incomplete. Viewers seeing the site from SR39 and SR 167 would be the primary effected group during construction. Some viewers from the surrounding homes to the east, south and south west of the project may also see effects of project implementation, however, they would be of lesser degree due to distance zones transitioning from the foreground to middle ground distances. Short-term effects from the town of Huntsville, surrounding reservoir shore, and recreation facilities to the north, east, and west would likely not be noticeable as these locations are beyond the foreground viewing areas due to the location's vegetative buffers and seclusion. The proposed site could see immediate improvement of scenic values by removing and rehabilitating areas of discarded piles of large rocks and lumber left on the site over the past several decades.

In the long-term, the Proposed Action would have some effects in terms of the foreground and middle ground perspectives, however some effects may be neutralized by effective design to maintain the scenic integrity of the site within the landscape character. Existing developments at Anderson Cove Campground and nearby businesses and residences would allow the facilities to blend somewhat with surrounding developed sites. Changes in vegetation patterns would be noticeable, especially when viewed from a foreground perspective. The helibase facilities would have an effect on foreground views of the site, with some effects to middle ground views from areas to the south, east and west. The site is currently not illuminated at night, so security lighting could affect nighttime views within the foreground and potentially the middle ground views. Overall, long-term effects to scenic integrity would be mitigated with the design criteria described below.

DESIGN CRITERIA

Helibase facilities should reflect form, line, texture, and color found in the site's surrounding landscape character. As plans for the site are further refined during the engineering design process, they should be reviewed specifically for harmony and unity with the surrounding landscape character by a landscape architect.

Where possible, follow the guidelines described in the Forest Plan for maintaining a "high" Scenic Integrity Objective for the project area.

A planting plan should be developed to utilize vegetation where possible to improve viewsheds while integrating built features into the natural and constructed vegetation patterns of the area.

Cultural elements, such as buildings, the radio tower, fencing, and the fuel truck containment areas should harmonize with architectural themes associated with the area's rural and agricultural heritage and other FS

developed sites. Screening (vegetative or constructed) should be used when feasible to reduce conflicts between site elements and the surround landscape character if such conflicts arise.

ADMINISTRATIVE REVIEW

This 30-day comment period on the Proposed Action represents the only opportunity for the public to provide specific written comments on the project and thereby have standing to object (see 36 CFR 218.24(a)(2)). This project implements the Forest Plan and is not proposed under the authority of the Healthy Forests Restoration Act. It is subject to the objection regulations found at 36 CFR 218, subparts A and B.

SUPPORTING DOCUMENTATION

The following documents were used to complete the analysis and findings in the resource sections above and are included in the project record.

Document	File Location
2003 Revised Forest Plan for the Wasatch-Cache National Forest	https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5347083.pdf
Biological Assessment/ Biological Evaluation	In the project record.
Fences Handbook	https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf88242803/pdf88242803dpi300.pdf
Project Recommendations for Migratory Bird Conservation. (U.S. Fish and Wildlife Service, Utah Field Office. 2020)	In the project record.
Scenic Resource Report	In the project record.
Living with Noise (Corbisier, Chris. Public Roads, Federal Highway Administration Research and Technology, July/August 2003, Issue no: Vol. 67 No. 1)	https://www.fhwa.dot.gov/publications/publicroads/03jul/06.cfm
Environmental Handbook for Towed Sports (International Waterski & Wakeboard Federation, 2021 Update)	http://iwsf.com/EnvironmentalHandbook/IWSFEnviron.pdf
Sound Levels of Helicopters Used for Administrative Purposes at Grand Canyon National Park (Falzarano, Sarah and Levy, Laura. Grand Canyon National Park, National Park Service. 2007)	https://www.nps.gov/grca/learn/nature/upload/GRCA-07-05-SoundLevels-Helicopters.pdf