

**DRAFT FINDING OF NO SIGNIFICANT IMPACT  
MOUNTAIN HOME AIR FORCE BASE  
SUSTAINABLE WATER SUPPLY PROJECT  
MOUNTAIN HOME AFB, IDAHO**

The Idaho Water Resource Board (IWRB) has submitted an application for a right-of-way (ROW) grant from the Bureau of Land Management (BLM) under the Federal Land Policy Management Act of 1976, as amended (FLPMA) for the construction, operation, and maintenance of a water system to convey, treat, and provide water from the CJ Strike Reservoir to Mountain Home Air Force Base (AFB). Pursuant to the provisions of the National Environmental Policy Act (NEPA), Title 42 United States (U.S.) Code (USC) Sections 4321 to 4347, implemented by Council on Environmental Quality (CEQ) Regulations, Title 40, Code of Federal Regulations (CFR) Parts 1500-1508, and 32 CFR Part 989, Environmental Impact Analysis Process, the U.S. Air Force (USAF) assessed the potential environmental consequences associated with the establishment and operation this system.

**PURPOSE AND NEED**

The USAF's *purpose* of the Proposed Action is to establish a long-term, sustainable water supply for Mountain Home AFB, which supports an average population of approximately 7,000 military and civilian day personnel, as well as 800 military families.

The USAF's *need* for the Proposed Action is to establish a long-term, sustainable water supply for the base, necessary because of declining water levels in regional aquifers and concerns regarding nitrate contamination in base wells. The new water supply would support the population and mission of Mountain Home AFB, and transitioning the base's water supply to a surface water source would alleviate stresses faced in the Mountain Home Groundwater Management Area, which was established in 1982. Mountain Home AFB currently relies on groundwater resources for its drinking and irrigation water supply. However, regional aquifers from which the base currently extracts and distributes its water supply have been declining at a rate of approximately 2 feet per year, which is not sustainable. Further, since 1980, eight wells at the base have had to be decommissioned because of nitrate contamination. Studies conducted and reports prepared by the Idaho Department of Water Resources (IDWR) have further documented these issues, and reports prepared by IWRB indicate that drawing water from the CJ Strike Reservoir and treating it for Domestic, Commercial, Municipal, and Industrial (DCMI) purposes at the proposed Water Treatment Facility is a feasible solution.

The EA considers all potential impacts of the No Action Alternative (Alternative A), the Eastern Alignment Alternative (Alternative B), and the Western Alignment Alternative (Alternative C). The EA also considers cumulative environmental impacts with other past, ongoing, and reasonably foreseeable future actions (RFFAs). While neither of the two action alternatives would result in significant environmental impacts, Alternative C has been identified as the preferred alternative because it meets the purpose of and need for

the Proposed Action while capitalizing on established ROWs and infrastructure, which minimizes the potential for adverse environmental impacts to result.

Under both Alternative B and Alternative C, the ROW requested by the IDWR to enable construction of the new sustainable water supply project passes through the Morley Nelson Snake River Birds of Prey National Conservation Area (NCA). The NCA is under the management purview of the BLM. Therefore, the USAF and the BLM entered into a memorandum of understanding to jointly undertake this environmental analysis. Accordingly, the EA was prepared in accordance with the BLM NEPA Handbook.

The USAF distributed the Draft EA on May 22, 2017, and announced its availability for a 30-day public review period in the *Idaho Statesman* and *Mountain Home News* on May 24, 2017 (this review period was subsequently extended to June 30, 2017). After identifying and resolving internal agency comments requiring resolution – and in order to facilitate a review of the Draft FONSI – a second 30-day review period was initiated on July 12, 2017. Digital copies of the Draft EA were provided at eight (8) public libraries in the region and the document was available on websites hosted by both the USAF and the BLM.

## **ALTERNATIVES CONSIDERED**

### *No Action Alternative (Alternative A)*

If this alternative were selected, a ROW grant would not be authorized and Mountain Home AFB would continue to rely on groundwater sources; declines in groundwater levels would continue, and contamination concerns would likely force closure of additional water wells on base.

### *Eastern Alignment Alternative (Alternative B)*

Under this alternative, water drawn from the CJ Strike Reservoir would be conveyed a total of approximately 7.8 miles (approximately 6.54 miles less than under Alternative C). In an effort to identify a route that would require a less invasive scenario, approximately 93% of this route would be along an existing road (e.g., associated with Nielson Road and a two-track dirt road). Further, there is a “notch” at the top of the canyon within the Eastern Alignment – where the existing road crests the rim – and power is readily available at the site, via an existing north/south distribution line that crosses the reservoir. However, the location of the proposed intake valve and pump station, at the shoreline of CJ Strike Reservoir, is undeveloped.

Under the Eastern alignment alternative, there would be a total of approximately 36 acres of surface disturbance, based on a pipeline length of 7.8 miles, an average depth of 6.5 feet, and an average disturbed area width of 30 feet. Similar to Alternative C (Western Alignment), much of the affected area of the Eastern Alignment has been previously disturbed (i.e., trenching would be within or immediately adjacent to established roads). However, portions of the existing roads would need to be widened, resulting in an

additional 80 acres of disturbance. Surface-disturbing activities could include grading, excavating, and blasting to be used for the purposes of transporting, staging, and installing the pipeline and its ancillary support features.

On-site power would be needed to support construction. Power is currently expected to be aboveground and would originate from a distribution line near the canyon rim and/or via the existing north/south distribution line that crosses the reservoir. (Aboveground lines were chosen based on reduced environmental disturbance and simplified logistics.) It would be necessary to install poles that would support the power line and the line would terminate in a junction box until it is needed. This power source would serve as both temporary and permanent power supplies for construction and operation of the pump station.

#### *Western Alignment Alternative (Alternative C)*

Under this alternative, water drawn from the CJ Strike Reservoir would be conveyed a total distance of approximately 14.34 miles. The entire route would be aligned along existing roads (e.g., Highway 167 and CJ Strike Cutoff Roadway) and no segments of these roads would require widening or improvement. Further, the proposed intake valve and pump station would be collocated with an existing intake valve, pump station, and power source at the shore of the reservoir that is owned, operated, and maintained by Simplot, and where electricity is readily available. This power source would serve as both temporary and permanent power supplies for the construction and operations of the pump station.

Under Alternative C, there would be a total of approximately 52.15 acres of surface disturbance, based on a pipeline length of 14.34 miles, an average depth of 6.5 feet, and an average disturbed area width of 30 feet. Much of the affected area under this alternative has been previously disturbed during development of existing infrastructure (i.e., trenching would be within or immediately adjacent to the established CJ Strike Cutoff Roadway).

Under Alternative C, it is anticipated that no blasting would be required, primarily because existing infrastructure (i.e., associated with Simplot) is in place and the necessary crossing of the canyon rim was previously accomplished. Based on visual observations during a site visit, the “notch” in the canyon wall would be sufficient to accommodate a second water conveyance line. Where geological barriers are present elsewhere in the project alignment, the ROW would be cleared using up to three excavation techniques: 1) conventional excavation with a bucket; 2) rotary excavation; and/or 3) jack hammering (techniques will be dependent on subsurface geological conditions).

## **SUMMARY OF FINDINGS**

Implementation of the Proposed Action would impact resources as described in the EA. Best management practices (BMPs) to reduce impacts to paleontological resources, cultural resources, vegetation, wildlife, livestock grazing, soil, public health and safety,

and air resources were incorporated in the design of the action alternatives. None of the environmental effects discussed in detail in the EA and associated appendices would be significant. Findings and/or BMPs specific to evaluated resources are summarized below.

**Wildlife.** Potential impacts to species known to occur in the region were evaluated, with a focus on the golden eagle, prairie falcon, ferruginous hawk, yellow-billed cuckoo, burrowing owl, long-billed curlew, and the habitat of the Piute ground squirrel (an important prey species). To avoid potential impacts, seasonal restrictions on all construction activities would be implemented from January 15 through July 31 to avoid nesting raptors and migratory bird species during their breeding season. No federally protected wildlife species – and no suitable habitat for those species – were determined to be present in the project area, under both Alternative B and Alternative C; therefore, no formal consultation with the US Fish and Wildlife Service (USFWS) was conducted per Section 7 of the Federal Endangered Species Act (ESA).

**Vegetation and Soils.** This analysis focused on anticipated levels of disturbance to vegetation and soils, including the Davis peppergrass, a BLM Type 3 sensitive plant species. Field surveys were conducted on 22 March 2017 to verify plant community, soil, rare plant, and invasive / noxious weed information gathered from geographic information system (GIS) data sources. These surveys confirmed that no protected plant species or associated habitat would be directly impacted by either Alternative B or Alternative C, and reclamation efforts would include restoration (e.g., re-contouring and reseeding) with an emphasis on native plant species. Topsoil and sub-surface soils will be replaced in the proper order, prior to final seedbed preparation, and spreading shall not be done when the ground or topsoil is wet. Vehicle / equipment traffic will not be allowed to cross topsoil stockpiles, and if topsoil is stored such that nutrients are depleted from the topsoil, amendments will be added to the topsoil. A monitoring program would be in place for 3 years to ensure success

**Special Status Plants.** Slickspot peppergrass is a small annual or biennial species with small white flowers. While known to occur in the region, field surveys conducted on March 22, 2017, determined that neither specimens nor suitable habitat for this species occurs within the alignment of either of the action alternatives. Slickspot peppergrass is discussed in Section 1.6.5 of the EA. The project alignment also does not include any playas containing Davis peppergrass; therefore, there would be no direct or indirect impacts to sensitive plant species under either Alternative B or Alternative C.

**Noxious Weeds.** No noxious weeds were identified during field surveys of the project area conducted on March 22, 2017; however, historical data indicate that diffuse knapweed, perennial pepperweed, and Russian knapweed have been found in the vicinity of the action alternatives. Prior to initiating construction activities, all construction-related vehicles and heavy equipment would be inspected for noxious weeds and cleaned (off-site), as necessary. Further, the reclamation plan will emphasize native plant species and its implementation will be monitored to ensure noxious weeds are not readily established in the project area.

**Water Resources.** The Proposed Action is driven by issues related to water availability and water quality. Declining water levels and water quality in the Mountain Home Aquifer resulted in the establishment of the Mountain Home Groundwater Management Area and has led to the decommissioning of several wells on Mountain Home AFB. The transition to a sustainable water supply drawn from the CJ Strike Reservoir would improve both the water quality and groundwater levels in the local aquifer, as the base would no longer be extracting subsurface resources at historical rates; as water levels are replenished (e.g., via surface water infiltration and other natural recharge sources), it is anticipated that conditions in the aquifer would improve. Further, Mountain Home AFB maintains a *Federal Facilities Agreement* with the Idaho Department of Environmental Quality (DEQ) and will continue to monitor local wells as it has historically done under that agreement. With regard to water quality and water levels in the CJ Strike Reservoir and the Snake River, Total Maximum Daily Loads (TMDLs) are regulated and monitored by the Idaho DEQ. Given the volume of water currently flowing through the affected watershed and these waterbodies, the extraction of water associated with the Proposed Action (neither Alternative B nor Alternative C) would not measurably change TMDLs. Further, Idaho Power – the owner and operator of the CJ Strike Dam – maintains water levels in order to ensure compliance with TMDL standards established by the Idaho DEQ and approved by the US Environmental Protection Agency (USEPA). Finally, neither Alternative B nor Alternative C is located within or affected by floodplains or wetlands.

**Cultural Resources.** Cultural resource record searches were conducted in February 2016 and March 2017, and field surveys of the project area were completed in March 2017. No cultural resources eligible for listing in the National Register of Historic Properties (NRHP) were identified in the Area of Potential Effect for either Alternative B or Alternative C. Consultation with the Idaho State Historic Preservation Office (SHPO) was conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA), and on July 6, 2017 the SHPO concurred that review by their office was complete and that no further consultation would be required. Consultation with the Shoshone-Paiute Tribes and the Shoshone-Bannock Tribes was initiated in the Spring of 2017. Additional information regarding these consultations can be found in Section 4.1.1 of the EA.

**Visual Resources.** Viewsheds in the vicinity of the Proposed Action (e.g., the Snake River Canyon) and the visual character of the area were evaluated. Applying BLM-developed methodology, impacts were determined to be not significant for either project alternative, with only moderate, short-term impacts resulting from removal of vegetation during construction. Further, under the preferred alternative (Alternative C), the placement of the new pump and pipe adjacent to similar existing visual elements would reduce the overall visual impacts by consolidating structures and disturbance. With the burial of the majority of the pipeline and a comprehensive revegetation and monitoring plan, long-term impacts to visual resources would be further reduced.

**Livestock Grazing.** All affected grazing permittees will be notified when construction is scheduled to begin. All potential hazards to livestock will be fenced or contained, and all existing improvements (e.g., fences, gates, and bar ditches) in the Project area – for both Alternative B and Alternative C – will be repaired to pre-construction conditions. Any

fence lines needing to be cut will first be tied to H-braces and openings will be protected as necessary during construction in order to prevent the escape of livestock. A temporary closure will be installed the same day the fence is cut. Following reclamation, the fence will be reconstructed to BLM specifications.

**Transportation and Travel.** The area affected by the Alternatives B and C is predominantly rural, with no major highways located in the project area. Most roadways in the vicinity of the proposed ROWs are unimproved, two-track roadways used by agricultural operators or off-highway vehicle (OHV) enthusiasts. Implementation of the Alternatives B or C would result in short-term increases in the volume of both heavy and light traffic during the construction, and operations and management phases of the project. The action area is rural, but travelers of the area could be impacted in the short-term during pipeline construction. These impacts would end after project completion.

**Land Use Authorizations.** The Proposed Action was evaluated to determine its potential to be incompatible with other ROWs or ongoing land use activities in the project area under both Alternative B and Alternative C. There are currently several existing ROWs in place within or adjacent to the Project area, including roads and utilities. The issuance by BLM of a ROW grant to facilitate implementation of the Alternatives B or C would result in construction and maintenance activities that could potentially impact compatibility with existing ROWs, as a result of either needing to temporarily redirect traffic around construction zones, disturbing existing utilities alignments, or otherwise interrupting established linear and non-linear land use activities and functions. Direct impacts to existing ROWs would be short-term and temporary (e.g., redirecting vehicular traffic to avoid conflicts with construction crews and heavy equipment). Based on the construction phases proposed by IWRB, there would be no long-term impacts to existing ROWs. Impacts during construction would be addressed by the development and implementation of a transportation management plan that would ensure disruptions are minimized and limited to non-peak-hour travel periods, to the extent practicable. BLM cannot be in conflict with existing land use plans (i.e., if a conflict were to be identified, the proposed project would either be modified, a Land Use Plan Amendment would be required, or the ROW would be denied); therefore, neither direct nor indirect impacts would result following completion of construction of either Alternative B or Alternative C.

**Public Health and Safety.** The hauling of equipment and materials on public roads would comply with all Department of Transportation regulations. Further, no toxic substances would be stored or used within the proposed project area under either Alternative B or Alternative C. IWRB would have monitors present during construction, and any accidents involving persons or property would immediately be reported to the BLM and the USAF. IWRB would notify the public of potential hazards by posting signage, as necessary.

**Social and Economic Conditions.** Potential changes to regional economic activity (e.g., incomes, direct and indirect spending, and employment) were evaluated. There would be no substantial direct changes to social and economic conditions under either Alternative B or Alternative C; however, there would be short-term benefits associated with spending on construction materials, creation of temporary jobs, and secondary

spending during project implementation. Long-term indirect impacts related to Alternative B or Alternative C would be beneficial, as project implementation would enhance the viability of Mountain Home AFB, a significant contributor to the health of the regional economy.

**Air Resources.** An air quality impact analysis was performed in accordance with AFI 32-7040, *Air Quality Management Program*, and guidance from the Air Force Air Quality EIAP Guide. The analysis was conducted with USAF's Air Conformity Applicability Model (ACAM) which provided a Net Change Emissions Assessment which compares all net direct and indirect emissions associated with each project alternative. The net change in emissions associated with the alternative were compared against General Conformity *de minimis* values as an indicator of significance. The net change in emissions associated with both Alternative A and Alternative B were well below the General Conformity *de minimis* values; therefore, no significant impact to air quality would result from project implementation. Additionally, this project falls within Elmore County which is currently in attainment for all NAAQSs; therefore, General Conformity (40 CFR 93 Subpart B) is not applicable. An assessment of greenhouse gases (GHG) and climate change was also performed using guidance from the USAF Air Quality EIAP Guide and the CEQ. While neither the CEQ nor the EPA have established a significance threshold, the USAF has adopted the EPA's proposed established "Significant Emissions Rate" (SER) of 75,000 tons per year (tpy) of carbon monoxide equivalent (CO<sub>2e</sub>). GHG emissions as CO<sub>2e</sub> for each alternative were estimated as part of the Net Change Emissions Assessment using the USAF's ACAM model and results indicate that total annual GHG emissions for both project alternatives are well below the 75,000 tpy CO<sub>2e</sub> *de minimis* indicator; therefore, neither Alternative B nor Alternative C would have a significant impact on climate change.

**Cumulative Impacts.** Past (e.g., development of roads), ongoing (e.g., livestock grazing), and RFFAs (e.g., new ROWs sought by the Idaho Army National Guard ([ARNG]) were evaluated in order to ascertain the potential for cumulative impacts to result from implementation of the Proposed Action (i.e., Alternative B or C) in concert with other activities in the region. Possible future water development by the City of Mountain Home was also considered. The EA concluded that no significant cumulative environmental impacts would result from implementation of either Alternative B or Alternative C.

In summary, the Proposed Action – both Alternative B and Alternative C – would not violate any known Federal, state, local, or tribal law or requirement established or imposed for the protection of the environment. The project would also be consistent with applicable land management plans, policies, and programs (e.g., those established by the BLM). State, local, and tribal interests were provided the opportunity to participate in the environmental impact analysis process.

## MITIGATION

Because no significant impacts were identified under either Alternative B or Alternative C, no mitigation measures are required. However, BMPs listed in Section 2.3 of the EA will be implemented to further reduce and/or offset any impacts that might occur.

## **FINDINGS**

Based on my review of the facts and analyses contained in the attached EA, conducted under the provisions of NEPA, CEQ Regulations, and 32 CFR Part 989, I conclude that the establishment and operation of a sustainable water supply as outlined in the EA summarized herein would not have a significant environmental impact, either by itself or cumulatively with other projects in the region, under either Alternative B or Alternative C. Accordingly, an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the Air Force's Environmental Impact Analysis Process.

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JEFFERSON J. O'DONNELL, Colonel, USAF

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Date