

**FINDING OF NO SIGNIFICANT IMPACT
AIR FORCE RESEARCH LABORATORY DISTRICT PLAN
EDWARDS AIR FORCE BASE, CALIFORNIA**

The 412th Civil Engineer Group (412 CEG) completed an environmental assessment (EA) analyzing the effects associated with implementing the Air Force Research Laboratory (AFRL) District Plan at Edwards Air Force Base (AFB), California. This EA was prepared in compliance with the National Environmental Policy Act (NEPA) as amended by Public Law 118-5, the Fiscal Responsibility Act of 2023 (42 United States Code (USC) Section (§) 4321 et seq.), and in accordance with the Department of Defense (DoD) NEPA Implementing Procedures effective July 1, 2025. The EA, incorporated by reference in this Finding of No Significant Impact (FONSI), presents the potential environmental consequences associated with this action.

Purpose and Need (EA § 1.3, pages 1-2 to 1-3): The purpose of the Proposed Action is to support the AFRL test mission at Edwards AFB by allowing a full spectrum of DoD testing and evaluation for the foreseeable future in accordance with DoD Directive 3200.11, *Major Range and Test Facility Base*. The Proposed Action is needed to support future space/rocket propulsion research, development, and testing, especially since new missions are becoming more technologically advanced with requirements that differ greatly from past missions. Current facilities within the AFRL District are aging / degrading and will not be able to support future AFRL mission needs and DoD at large.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Proposed Action (EA § 2.1, pages 2-1 to 2-2): The 412 CEG proposes implementing ten projects to update and enhance AFRL's test facilities, making optimum use (e.g., utilities and facility structures) in a manner consistent with the installation's priorities. Activities include construction of new facilities; upgrade, renovation, and demolition of existing buildings; reactivation of test stands/pads; construction of new test pads; addition of new utility and communications systems; addition of new access roads/parking lots; and replacement of both underground and aboveground fuel tanks. Individual project components and design would be finalized upon development of the Edwards AFRL District Plan. For analysis within this EA, the 412 CEG and AFRL developed laydown areas for each project location. These laydown areas represent the maximum footprint for each project in which construction, renovation, and demolition would have the potential to occur. The ten projects require up to 7,707,578 square feet (ft²) of laydown area. All projects are anticipated to be completed over multiple years (approximately 2026–2034). Project 1 is anticipated to start in 2028 with Projects 2, 3, 7, and 9 beginning between 2030 and 2034; and Projects 4–6, 8, and 10 between 2026 and 2029. Reference Table 2-1 on page 2-2 of the EA for a complete list of actions taken under each project phase.

No Action Alternative (EA § 2.3.2, page 2-3): Under the No Action, current operations at the AFRL District would continue using existing facilities with maintenance and repairs occurring as needed. Because majority of the structures are 40 years or older, AFRL's research capabilities would continue to diminish. No new construction would occur for incoming programs. AFRL would not be able to achieve the full spectrum of research testing in accordance with DoD Directive 3200.11. While the No Action does not satisfy the purpose and need, it is retained to provide a comparative

baseline against which to analyze the effects of the Proposed Action.

ENVIRONMENTAL CONSEQUENCES

Affected environmental resources were identified through communications with federal and state agencies as well as reviewing past environmental documentation. These resources include air quality/greenhouse gas; soil/geological resources; biological resources; water resources; cultural resources; noise; hazardous materials/waste, toxic substances/contaminated sites; safety/occupational health; infrastructure including transportation/utilities; and socioeconomics.

Air Quality and Greenhouse Gas (EA § 3.3.2, pages 3-6 to 3-9): The AFRL District falls within Eastern Kern Air Pollution Control District (EKAPCD) and Mojave Desert Air Quality Management District (MDAQMD), which are in a serious nonattainment for the 2008 and 2015 ozone standards. EKAPCD and MDAQMD also restrict emissions from particulate matter, nitrogen oxides, sulfur dioxide, and volatile organic compounds. Under the Proposed Action, construction, renovation, and demolition activities, such as the use of diesel-powered equipment, vehicle transportation to and from the work sites, and installation of new fuel tanks, would contribute to air emissions. Approximately 314,512 ft² of new construction, 240,401 ft² of demolition, 480,827 ft² of grading, 206,689 ft² of paving, and up to 132,000 ft² of trenching would occur over a multi-year period. The Air Force Air Conformity Applicability Model was used to evaluate effects on air quality (EA Tables 3-4 and 3-5, pages 3-7 to 3-8). Results indicate emissions from all projects would not exceed any Clean Air Act General Conformity de minimis thresholds; therefore, a General Conformity Determination is not applicable. Edwards AFB will be required to obtain fugitive dust emission control plans (FDECP) pursuant to EKAPCD Rule 402 for actions disturbing ten or more acres (i.e., Projects 1-8 and 10). For Project 9, Edwards will submit a FDECP to MDAQMD as the action involves non-residential construction and demolition (C&D) activities disturbing five or more acres pursuant to Rule 403. During operations at the Test Development Facility (Bldg. 8620), AFRL will monitor emissions generated during the testing of rockets and submit an approved plan to EKAPCD in accordance with District Rule 431. By adhering to each County's permitting requirements, there would be no significant effects to air quality with implementation of the Proposed Action.

Soils and Geological Resources (EA § 3.4.2, pages 3-12 to 3-14): All soils within the Proposed Action are rated "very limited" for their suitability to support small commercial buildings, and local roads. Because these soils pose substantial challenges for building foundations and structural integrity, Edwards AFB will incorporate design strategies and structural techniques to address these issues. Approximately 177 acres (7,707,578 ft²) of soil in the AFRL District would be disturbed during C&D activities. This is further compounded with the dry, arid climate of Edwards AFB. Surface dust is easily transported over long distances from wind erosion. To control fugitive dust releases, Edwards AFB will submit appropriate FDECPs to EKAPCD and MDAQMD as well as implement one or more appropriate best management practices (BMPs) such as use of wind breaks, water trucks, and/or the application of dust suppressant. With the adherence to FDECPs, use of proper BMPs, and post-construction maintenance, the Proposed Action will not have a significant effect on soils and geology.

Biological Resources (EA § 3.5.2, pages 3-19 to 3-23): Projects 2, 4, 5, 7, 8, and 10 occur in

creosote bush vegetation habitat; however, most of the projects will occur within developed areas with minimal disturbance around the perimeter of the project sites. Project 1 would disturb up to 65 acres of Joshua tree woodland vegetation during C&D activities. Project 3 would disturb up to 43 acres of both creosote bush and Joshua tree woodland vegetation during utility repairs and upgrades. Project 9 would disturb a maximum of 8.6 acres of creosote bush vegetation during the paving of North Arrow Road and construction of a cement pad. While 117 acres of vegetative habitat will be disturbed, this amount falls within the limits allowed by the Edwards *Biological Opinion (BO) for Operations and Activities at Edwards AFB, California (8-8-14-F-14)* (United States Fish and Wildlife Service [USFWS] 2014) and unlikely to jeopardize biological species on the base. One federally threatened species, the Mojave Desert tortoise, occurs within the Proposed Action. California species of concern include the Mohave ground squirrel, burrowing owl, desert cymopterus (stemless perennial herb), desert monardella (flowering perennial), and crowned onion have the potential to occur within the Proposed Action. In January 2025, the Mohave ground squirrel was petitioned for federal listing, which is currently under review, until a determination is made, the Mohave ground squirrel maintains the same protection as a listed species. Effects on common mammals and reptiles are expected to be negligible as similar habitats are available in the surrounding area. Scheduling land clearing activities for non-breeding and nesting seasons and utilizing pre-construction land surveys for nesting birds and bats would avoid impacts to protected species. Projects 1, 3, and 9 will potentially disturb up to 65 acres of Mojave Desert tortoise critical habitat during upgrades to existing dirt roads/infrastructure and construction of a concrete pad. Edwards AFB has determined Projects 2–8, and 10 would fall within existing disturbed/developed areas outside of tortoise critical habitat and would not be likely to adversely affect this species. To mitigate effects to this species, Edwards AFB will adhere to the BO No.8-8-14-F-14. If observations of any California species of concern are made throughout any of the project laydown areas, Edwards AFB would implement appropriate measures such as avoiding the Mohave ground squirrel or burrowing owl areas and avoiding desert cymopterus, desert monardella, and crowned onion plants as identified within the *Edwards Integrated Natural Resources Management Plan*. Once site specific details are known for each project, the 412 CEG will subsequently review to determine if additional site-specific NEPA analysis and/or Section 7 review by USFWS and the California Department of Fish and Wildlife is required. By adhering to the BO and the Edwards INRMP as well as conducting follow-on environmental reviews, there would be no significant effect on biological resources.

Water Resources (EA § 3.6.2, pages 3-25 to 3-29): There are no permanent natural streams, rivers, and/or wetlands located within the Proposed Action. One unnamed ephemeral stream transects in the Project 1 laydown area and would be approximately 450 ft where construction would occur (estimate five acres or 220,000 ft²). Planned paving and grading as part of the Proposed Action will have long-term, minor impacts to surface waters and stormwater due to an increase in impervious surfaces. Impacts from sedimentation and erosion would be minimized through the implementation of the *Edwards AFB Stormwater Management Plan (SWMP)* identifying appropriate erosion control BMPs (e.g., maintaining grading and topography at project locations, utilizing stormwater drainage through existing, unlined channels and ephemeral streams, and adhering to construction and post-construction stormwater management). A National Pollutant Discharge Elimination System General (NPDES) Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities and stormwater pollution prevention plan will be required per the Clean Water Act. Contaminated groundwater plumes surround Projects 1, 2, 4, 5, and 6 laydown areas

and encompass the southern end of the Project 3 laydown area and northeastern side of the Project 10 laydown area. Due to the depth of the solvent plumes, exposure in the laydown areas would not be anticipated. However, monitoring wells will require a direct access path, or they will have to be relocated if follow-on site-specific design cannot avoid. Project 1 would occur within a 100-year floodplain, which cannot be avoided due to AFRL mission restriction by Edwards AFB at this location. Mitigations such as developing structures above the base-flood elevation, using dry- or wet-proofing of foundations, and/or incorporating permanent tie-downs of non-structural equipment such as propane tanks or wash racks could be implemented. Edwards AFB will consult current floodplain regulations to ensure project-specific designs do not result in adverse effects on floodplains. The 412 CEG will subsequently review to determine if additional site-specific NEPA analysis and/or environmental compliance review is required. By adhering to the Edwards SWMP, NPDES permitting requirements and erosion control BMPs, there would be no significant effect to water resources.

Cultural Resources (EA § 3.7.2, pages 3-31 to 3-33): The area of potential effects (APE) for Projects 1–10 have been previously surveyed or are located within areas of prior disturbance. Section 106 consultation for Projects 1–10 was initiated with the California State Historic Preservation Officer (SHPO) on September 11, 2025. Without site-specific details, SHPO requested consultation be initiated later as each project progresses to the status of an undertaking as defined at 36 CFR § 800.16(y); therefore, Section 106 consultation will be re-initiated on a project-by-project basis. Based on current information, adverse impacts to known cultural resources are not anticipated. To date, no traditional cultural properties have been identified on Edwards AFB. Consultation with federally recognized tribes affiliated with Edwards AFB will also occur on a project-by-project basis. Should any previously unidentified cultural resources or human remains be encountered during ground-disturbing activities within the APE, the DAF will act in accordance with the inadvertent discovery of cultural resources procedures outlined in the *Edward's Integrated Cultural Resources Management Plan*. Prior to construction, the 412 CEG will initiate subsequent Section 106 Consultations with SHPO, and tribes once site-specific information is known to determine any effects to cultural resources.

Noise (EA § 3.8.2, pages 3-34 to 3-36): Sound generated from C&D equipment and from associated traffic would occur entirely on base within the AFRL District. This noise would be short-term and limited to daylight hours during the construction, renovation, and/or demolition phase spanning over a period of several years. There are no noise-sensitive receptors within 1-mile of the proposed project laydown areas. Overall, implementation of the Proposed Action will have minimal effect to the existing noise environment.

Hazardous Materials and Wastes, Toxic Substances, and Contaminated Sites (EA § 3.9.2, pages 3-42 to 3-46): Under the Proposed Action, the renovation and demolition of existing facilities containing asbestos and lead-based paint would occur. The removal of these substances would eliminate the risk of exposure to personnel through accidental disturbance from debris; a long-term, moderate, beneficial effect. The use of certain hazardous materials (HAZMAT) and resultant hazardous waste would be required during C&D activities (i.e., petroleum fuel products used in heavy equipment and paints, solvents and welding gases). Construction contractors will be responsible for monitoring exposure to HAZMAT and hazardous waste. Adherence to the *Edwards Hazardous Waste Management Plan* will minimize impacts from the handling and disposal of

hazardous substances and ensure compliance with federal, state, and local regulations. Potential effects from the accidental release would be minimized by following response procedures specified in *Edwards AFB's Spill, Prevention, Countermeasures, and Control Plan*. Implementation of the Proposed Action may require changes to long-term monitoring and remedial plans of the three polyfluoroalkyl substances monitoring wells located in the Project 1 laydown area. Three environmental restoration program sites overlap with Projects 1, 2, 4, and 10. Final design will avoid these sites. All applicable permits for handling and disposal of contaminated soil and construction debris will be obtained prior to commencement of construction activities. The sites will continue to be monitored throughout construction and development of the Proposed Action. Overall, impacts to HAZMAT will not have a significant effect.

Safety and Occupational Health (EA § 3.10.2, pages 3-47 to 3-49): Implementation of the Proposed Action would result in no effects to flight or explosives safety. Under Project 7, installation of a shade structure at the fire department (Bldg. 8370), would have long-term, minor, beneficial effect on mitigating heat illness and improving incident response time. Construction contractors will be required to adhere to all applicable occupational safety policies and procedures throughout construction and post-construction activities in accordance with DAF Instruction 91-202 and DAF Manual 91-203, *Air Force Occupational Safety, Fire, and Health Standards*. Overall, there will be no significant effects to safety and occupational health with implementation of the Proposed Action

Infrastructure, Transportation, and Utilities (EA § 3.11.2, pages 3-52 to 3-55): Projects 8–10 would provide additional parking, pave dirt roadways, and establish new access roads. These improvements would result in long-term, beneficial effects on transportation. During C&D activities, temporary service interruptions to communications systems, electricity, natural gas, and sewer/wastewater utilities may occur from rerouting electrical lines, disconnecting buildings slated for demolition, or connecting newly constructed facilities. Under the Proposed Action, approximately 796,150 ft² of new construction and 418,741 ft² of demolition, would result in approximately 2,670 tons of solid waste. This increase would be limited to the timeframe of the proposed C&D activities, which would occur over the course of several years. Project 3 would replace or repair up to five miles of critical water infrastructure along Mercury and Mars Boulevards. Consolidation of facilities under Project 1 would also improve the efficiency of potable water distribution. This would result in long-term, moderate, beneficial effects on the potable water supply. Based on this analysis, there will be no significant effects to infrastructure with implementation of the Proposed Action.

Socioeconomics (EA § 3.12.2, pages 3-56 to 3-57): Implementation of the Proposed Action would result in no effects on population, housing, or education and short-term, negligible, beneficial effects to employment through the temporary demand of local building and construction personnel within the surrounding communities around Edwards AFB.

EARLY PUBLIC NOTICE

To meet the requirements of Executive Order (EO) 11988, *Floodplain Protection*, the DAF published an early notice stating the Proposed Action could occur a floodplain to encourage early and meaningful public involvement. This notice occurred on May 30, 2025, and June 4, 2025, for

30 days. No comments were received.

FINDING OF NO SIGNIFICANT IMPACT

Based on review of the analysis summarized above and contained within the attached EA, I find the Proposed Action to initiate the AFRL District Plan would not have a significant impact on the quality of the human or natural environment. An Environmental Impact Statement is not required. However, because much of the analysis within this EA is broad in scope, reflecting environmental effects across an eight-year period (2026 – 2034), projects listed in Table 2-1 on page 2-2 of the EA will have subsequent follow-on, site-specific NEPA analysis to be tiered from this EA especially surrounding biological, water, and cultural resources.

Considering the above information, I also find there is no practicable alternative for the Proposed Action to impact the floodplain area under Project 1. Edwards AFB and their construction contractor will take all necessary actions during C&D activities to minimize impacts, which could include full utilization of NPDES permit requirements, a stormwater pollution prevention plan, and other pre- and post-construction BMPs as part of site-specific project designs. Based on this analysis, the Proposed Action has taken all practicable measures to minimize harm to the floodplain. This fulfills the requirements of NEPA, the DoD NEPA Implementing Procedures, and EO 11988.

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