

# United States Department of Agriculture

## Agriculture Research Service

### Plains Area Office

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## ***Draft Finding of No Significant Impact (FONSI)*** **Proposed Land Exchange of Federal and Private Lands** **Big Spring and Lubbock Texas Project**

### **INTRODUCTION**

The U.S. Department of Agriculture (USDA), Agriculture Research Service (ARS), Plains Area Office is proposing a land exchange of ARS land in Big Spring, Howard County, TX with privately-owned land in Hale County, near Lubbock, TX. The ARS Cropping Systems Research Laboratory has been conducting research on the Big Spring site since 1915, with the research focused primarily on soil composition and moisture, wind erosion, crop cultivation, and limited livestock production. One of the current primary research focuses of the ARS Cropping Systems Research Laboratory is farm cultivation research as it involves modern irrigation and other farming practices. The ARS Cropping Systems Research Laboratory needs land suitable to conduct farm cultivation research as it involves modern irrigation and other farming practices. The Big Spring site is only suitable for rain-fed or dryland crop production research, which does not meet the lab's research needs and mission priorities for farm cultivation research. The land exchange for privately-owned land would provide land suitable for farm cultivation research, allowing the ARS Cropping Systems Research Laboratory to meet their current research needs and mission priorities.

### **PROPOSED ACTION**

The ARS land in Big Spring, TX would be exchanged for privately-owned land in Abernathy, TX, allowing the ARS Cropping Systems Research Laboratory to meet their research needs and mission priorities for farm cultivation research as it pertains to modern irrigation and other farming practices. The Big Spring site would be acquired by a third-party oil and gas company that would construct and install a wellsite and associated flow pipelines. The proposed wellsite would be approximately 400 feet by 400 feet in size and contain wells to transport oil pursuant to the Mineral Interest Pooling Act for the Bauer/Goliad Unit. The wellsite would be cleared of vegetation. Clearing vegetation is typically accomplished by cutting, mowing, or grading. The wells would be drilled vertically with the depth dependent on the target formation depth.

The flow pipelines would be constructed using the open trench method, which includes clearing of vegetation, removal of topsoil, and open trenching. The topsoil would be stockpiled separate and covered from general excavation material to be utilized to bury the trenches. The excavation to create the trench may be done using bulldozers, scrapers track hoes, or trenchers. The pipeline trench would typically average a depth of 5 feet deep, with trench width of 4 feet. The right-of-way (ROW) to construct a pipeline is typically 50 feet centered on the centerline of the pipeline. The 50-foot ROW would provide for construction and future maintenance activities to be conducted safely and efficiently. The pipelines would tie into existing facilities located east of the Big Spring site. Once the pipelines were installed, the

disturbed areas would be returned to their approximate original contours and reseeded. These areas would be monitored and remediated for erosion, weed control, and reseeded.

There are three, privately-owned sites that would be exchanged for the ARS Big Spring site—Rankin Farm (320 acres), Mitchell Farm (320 acres), and Church Farm (204 acres)—located in Abernathy, Hale County, TX. All three sites are active agricultural fields that have corn, cotton, and wheat planted. Each site uses a center pivot irrigation system and has three, active water wells. The Church Farm site also has a drip irrigation system in place. The Rankin Farm site is the only one with existing structures, an abandoned brick house and barn.

The USDA ARS, Cropping Systems Research Laboratory would continue to use the sites as agricultural fields to grow cotton, sorghum, peanuts, and corn, but may need to reconfigure some of the field layouts for their agricultural research needs. A building may be constructed to house farming equipment, a breakroom/kitchenette area, and bathroom facilities for employees.

### **FINDING OF NO SIGNIFICANT IMPACT**

There is no potential for significant adverse impacts to resources as a result of implementing land exchange of the ARS Big Spring site for privately-owned sites in Hale County, TX. The USDA ARS Plains Area Office's deliberation as to whether a FONSI is appropriate, or, whether an Environmental Impact Statement (EIS) should be prepared, took into consideration, the following issues, which are addressed in the EA.

1. **Beneficial and adverse environmental impacts:** The EA demonstrates that there will be no significant adverse or beneficial impacts on the quality of the human environment including land use, soils, water resources, vegetation, prime farmland, wildlife, threatened and endangered species, cultural resources, and hazardous and solid waste materials resources. The proposed action does not include any significant beneficial or adverse impacts as described in Chapter 3 of the EA (pages 5 to 19).
2. **Public health and safety:** The activities in the proposed action would not significantly affect public health or safety. Per 40 CFR §1501.9(e) and §1502.1, the EA concentrated on issues identified as truly significant to the proposed action in question, and public health and safety and air quality were not identified as such. Impacts to groundwater quality are highly unlikely with the TRS oil and gas well drilling requirements and implementation of best management practices (EA page 11). Specifically, the TRC Groundwater Advisory Unit requires all oil and gas wells to have a surface casing at least 25 feet below the base of usable quality water to protect groundwater.
3. **Unique characteristics of the geographic area:** The soils identified as prime farmland on the ARS Big Spring site have not been used for research crops by the USDA ARS since 2012 when the experiments ended. The proposed actions would remove four acres of prime farmland but would leave most of the site as it exists, idle agricultural fields with scattered honey mesquite and grasses along the edges of the site. As disclosed in the EA, the proposed actions would have negligible impacts on prime farmland (EA page 10).

The area of potential effect for direct physical effects on historic properties includes both federal and privately-owned sites that could be part of the land exchange. All four sites were surveyed for cultural resources by BRIC, LLC archeologists. There was one cultural resource site recommended as eligible for listing on the National Register of Historic Places on the privately-owned Church Farm site (EA page 15). It is recommended that ground-disturbing activities and vehicular and heavy equipment restricted within 50-feet from the boundary of the site. BRIC LLC recommends a determination of *no adverse effect* on cultural resources within the area of potential effect if all parties involved adhere to the recommendations listed above (EA page 16).

4. **Degree to which the effects on the quality of the human environment are likely to be highly controversial:** No highly uncertain or controversial impacts, unique or unknown risks are anticipated to occur with implementation of the land exchange and subsequent proposed actions; best management practices will be used to avoid or minimize risks.
5. **Degree to which the effects are highly uncertain or involve unique or unknown risks:** There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks. The activities described in the EA for the proposed action do not involve effects that are highly uncertain or involve unique or unknown risks.
6. **Degree to which the effects may establish a precedent for future actions with significant effects:** Implementing the proposed action would not trigger other actions, nor will it affect any future considerations involving land exchanges. The land exchange of the ARS Big Spring site for privately-owned lands and the subsequent uses will not set a precedent for similar projects that may be implemented by the USDA-ARS or other agencies nor would it trigger future actions.
7. **Relationship to other actions with cumulatively significant impacts:** No significant cumulative impacts were identified within the EA (pages 18–20). The proposed action will negligibly contribute to adverse cumulative impacts to soils, prime farmland, vegetation, wildlife, and hazardous and solid waste materials.
8. **Degree to which the action may affect districts, sites, objects, or structures listed on, or eligible for, the National Register of Historic Places, or may cause loss of significant cultural resources:** As analyzed in the EA (pages 16–17) the proposed action will not have significant effects to cultural resources. All lands within the APE (i.e., all 4 sites) for the proposed land exchange were surveyed for cultural resources by BRIC, LLC archeologists. One site recommended as eligible for listing on the NRHP was found within the APE of the Church Farm site. Potential adverse effects identified would be resolved by restricting ground-disturbing activities and vehicular and heavy equipment within 50 feet of the site boundary. The USDA ARS will provide the cultural resource survey to the Texas Historical Commission review and concurrence of the recommendations as part of the Section 106 compliance process.
9. **Degree to which the action may affect threatened, endangered, or sensitive species or their habitat:** The proposed actions will have no effect on any federally listed species because there are no federally listed species or designated critical habitat with potential to occur in the project area (EA page 15).
10. **Whether the action violates Federal or local laws or requirements imposed for the protection of the environment:** Implementation of the land exchange will not violate any Federal, Tribal, or State environmental protection laws or requirements.

## **PUBLIC INVOLVEMENT**

The Draft EA and Finding of No Significant Impact were made available for a 30-day public review period from December 18, 2020, via the USDA website (<https://www.ars.usda.gov/plains-area/lubbock-tx/cropping-systems-research-laboratory/docs/lubbock-land-swap/>), with hard copies available upon request. A Notice of Availability of the Draft EA were mailed to interested agencies and parties and was published in the Big Spring Herald and the Lubbock Avalanche-Journal.

**CONCLUSION**

As described above, the selected alternative, proposed action, does not constitute an action meeting the criteria that normally requires preparation of an EIS. The selected alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of NEPA.

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

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Director, USDA ARS Plains Area Office

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Date