

FINDING OF NO SIGNIFICANT IMPACT
U.S. DEPARTMENT OF AGRICULTURE – AGRICULTURAL RESEARCH SERVICE
CONSTRUCTION OF THE AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER
FACILITY AT 3031 2ND STREET, DAVIS, CALIFORNIA

Introduction

The U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) has prepared an Environmental Assessment (EA) pursuant to the National Environmental Policy Act in order that it may assess and consider the environmental impacts of constructing an approximately 66,000 square foot (SF) Laboratory and Office Facility (the Project or the Facility). The Project would support various USDA-ARS research unit operations and the Location Administrative Office Support Staff. The Project would be located at 3031 Second Street in Davis, California.

The National Environmental Policy Act (NEPA) of 1969, as amended, requires all Federal agencies to give appropriate consideration to potential environmental effects of proposed major actions in planning and decision-making. The Council on Environmental Quality (CEQ) is responsible for issuing regulations (40 Code of Federal Regulations [CFR] 1500 et seq.) and implementing the provisions of NEPA. CEQ regulations in turn are supplemented by procedures adopted on an agency-specific basis. The USDA-ARS regulations are 7 CFR 520-Procedures for Implementing National Environmental Policy Act and 7 CFR 1b-National Environmental Policy Act. The ARS Facilities Design Standards in ARS-242.1 Section 1.3 - Compliance with NEPA was also followed. The EA was developed pursuant to these regulations and standards. The EA dated 1/25/2022 is incorporated herein by reference.

Description of the Proposed Action and Alternatives

Proposed Action.

Only one Action Alternative was considered in the EA, which is referred to as the Proposed Action. The Proposed Action is to construct a Facility in Davis, CA, that consists of an approximately 66,000 SF Laboratory and Office Facility to support various research unit operations and the Location Administration Office Support Staff. The purpose of the Proposed Action is to better serve the expanding research and development needs of the USDA-ARS by providing modern and spacious facilities. The Proposed Action is needed by the USDA-ARS as the occupied facilities at University of California, Davis (UC Davis) campus are outdated and confining. The lack of space and appropriate technology limits the research potential for multi-disciplinary endeavors. New facilities would effectively unify and expand the collaborative effort between Federal, State, and local researchers.

The Proposed Action would address the Project purpose and need by providing USDA-ARS additional and modernized laboratory, office, administrative, and technical support space to better support research and development needs.

Alternatives Considered.

In addition to the Proposed Action, the USDA-ARS considered the No Action Alternative. Existing, outdated facilities would continue to be leased from UC Davis. USDA-ARS would be subject to potential lease conditions and termination should UC Davis move forward with plans to reacquire their laboratory and office space currently occupied by USDA-ARS research units co-located on campus. Staffing would need to be maintained at current levels, preventing future growth. The Crops Pathology and Genetics Research Unit and National Clonal Germplasm Repository are imbedded in seven different university buildings. The Sustainable Agricultural Water System Research Unit is located on 1.5 acres of leased land. The Invasive Species and Pollinator Health Research Unit occupy offices on campus, and eight acres of leased land on the Agriculture Experiment Station. The No Action Alternative would prevent the expansion of the USDA-ARS research and development capabilities, as well as hinder the collaborative scientific process due to the scattered arrangement of currently leased buildings.

The renovation and/or rehabilitation of existing facilities was considered but eliminated because it did not fully meet the needs of the Project. Existing laboratories no longer meet research requirements and require renovation for highly specific scientific protocols and procedures. Most occupied buildings cannot be expanded due to restrictive locations surrounded by existing campus facilities. Even if all seven individual buildings and multiple off-campus worksites were renovated, the fragmented arrangement of USDA-ARS facilities scattered around the UC Davis Campus would continue to hinder the scientific process. Therefore, renovation/rehabilitation of existing facilities would not meet the Project purpose and need, and the alternative was not carried forward.

During conceptual design, an alternate floor plan was considered for the Facility, referred to as Option 1. Option 1 provided a two-story, U-shaped footprint with private and open offices on the extreme north and south facades, and centralized support lab spaces and open lab spaces facing a central courtyard. The double-wing approach would provide a shallower building depth but a less efficient configuration resulting in longer travel times throughout the building. The USDA research leaders disapproved of the configuration primarily due to the lack of natural light in individual offices. The floorplan did not meet the requirements of the users. For these reasons, the alternative was eliminated and not carried forward in this EA.

Environmental Assessment

The evaluation of environmental aspects and consequences associated with the Proposed Action are fully described in the EA. The EA identified environmental resources that could be affected by the Proposed Action, and evaluated the significance of the impacts, if any, to each of the resources (Table 1). The EA evaluated possible effects related to air quality, water resources, cultural resources, threatened and endangered species, sole source aquifers, hazardous material and waste activities, soils and subsurface conditions, wetlands, utility use, noise, transportation, public health and safety, socioeconomic conditions and environmental justice.

With the implementation of following mitigating actions, best management practices (BMPs), and regulatory requirements, applied during and after the project development, there will be no significant environmental impacts related to the Proposed Action.

Table 1: Summary of Potential Effects of Proposed Action

	Resource	Resource unaffected by action	Insignificant effects due to mitigation
A	Wind or water caused soil erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B	Soil surface stability	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C	Sole source aquifer quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D	Aquifer yield or water rights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E	Aquatic life	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F	Flow variation in stream or spring	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G	Aesthetic properties of ground or surface waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H	Chemical quality of ground or surface waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I	Physical quality of ground or surface waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>
J	Odors released to air or water	<input type="checkbox"/>	<input checked="" type="checkbox"/>
K	Toxic substance release to the air	<input checked="" type="checkbox"/>	<input type="checkbox"/>
L	Release particulate matter to the air	<input type="checkbox"/>	<input checked="" type="checkbox"/>
M	Meteorological conditions or air movement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
N	Release substances for which a NAAQS ¹ exists	<input type="checkbox"/>	<input checked="" type="checkbox"/>
O	Natural areas or wild and scenic river	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P	Game animals or fish	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q	Rare, threatened or endangered species	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R	Species balance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
S	Special hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
T	Wetland, floodplain or coastal zone	<input checked="" type="checkbox"/>	<input type="checkbox"/>
U	Cultural, historical or archaeological site	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V	Local or regional systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>
W	Local land use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X	Socioeconomic	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Y	Noise levels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Z	Public health and safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AA	Public controversy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BB	Climate change	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CC	Energy usage	<input type="checkbox"/>	<input checked="" type="checkbox"/>

¹ NAAQS* National Ambient Air Quality Standard

Mitigating Actions Enacted or Planned

The following is a summary of mitigation commitments.

(A) Soil Erosion and (B) Soil Surface Stability

A Project-specific Stormwater Pollution Prevention Plan (SWPPP) to describe the BMPs to be implemented during construction would be prepared for the Project as part of the submittals for the Construction General Permit (CGP) from the State Water Resources Control Board. The SWPPP would include appropriate BMPs to properly manage and minimize soil erosion by

temporarily stabilizing exposed soils and controlling sedimentation. No discharge of pollutants from vehicle and equipment cleaning would be allowed into any storm drains or watercourses. Spill containment kits would be maintained onsite at all times during construction operations.

Disturbance will be limited to that necessary for the construction of the Facility. Once Project construction is completed, all disturbed ground surfaces that have not been converted to impervious surface (i.e. building, parking areas, sidewalks, pavement), would be revegetated to stabilize the parcel. Permanent erosion control measures such as bio-filtration strips and swales to receive storm water discharges from paved or impervious surfaces would be incorporated into the design and construction of the Project. The site drainage design at a minimum will meet Federal, State of California, and City of Davis stormwater quantity and quality requirements.

(H) Chemical Quality of Ground or Surface Waters

A Project-specific SWPPP to describe the BMPs to be implemented during construction would be prepared for the Project. A spill response plan would be prepared for construction activities as part of the SWPPP. BMPs outlined in the SWPPP would prevent, to the extent practicable, minor spills or releases of hazardous materials to stormwater, the ground, or local drains that could contribute to degraded water quality. If a spill were to occur, it would be cleaned promptly by trained personnel, reported to the appropriate agencies, and disposed of in accordance with local, State, and Federal policies. The design for the Facility includes stormwater detention basins that would provide stormwater control during construction and operations.

Phase I and Phase II Environmental Site Assessments were performed from 2019-2021 and concluded there was no potential for exposure of contaminants during construction. The active construction site will have restricted access and regular monitoring to ensure compliance with the SWPPP and prevent accidental spills which could affect ground water quality. During operations, the Facility would participate in the Hazardous Materials Business Plan program, which includes spill response planning, to prevent or minimize harm to public health and the environment from a release or threatened release of a hazardous material.

(I) Physical Quality of Ground or Surface Waters

A Project-specific SWPPP to describe the BMPs to be implemented during construction would be prepared for the Project. The SWPPP would include approved components to reduce erosion, suspended solids, turbidity, and downstream sedimentation that may degrade water quality and adversely impact aquatic life. Graded areas would be protected from erosion using a combination of silt fences, fiber rolls, etc. along toes of slopes or along edges of designated staging areas, and erosion control netting (such as jute or coir) on sloped areas. Refueling and equipment maintenance would occur at a minimum of 50 feet from any aquatic habitat, culvert, or drainage feature.

The design for the Facility includes stormwater detention basins that would provide stormwater control during construction and operations. The Facility design may also include features, such as permeable pavers and rain gardens, which would allow water to permeate the soil onsite. The site drainage design at a minimum will meet Federal requirements defined by the Energy Independence Security Act of 2007 (EISA), State law, and City of Davis stormwater quantity and quality requirements. Section 438 of the EISA requires the Project to maintain predevelopment hydrology and prevent net increase in stormwater runoff for the design storm event. The design storm event

is the 95th percentile rainfall depth and is based on 24-hour rainfall depth. Post-construction rate, volume, duration, and temperature of runoff must not exceed pre-development rates.

(J) Odors or Release of Odoriferous Substances

Contractors will be required to turn off vehicles and equipment when not in use to reduce emissions odors from idling. Substances used during construction of the Project that may create odors, such as paints, solvents, adhesives, etc., will be used according to the manufacturer's guidelines.

(L) (N) Particulate Matter / National Ambient Air Quality Standards

Contractors will be required to comply with Yolo Solano Air Quality Management District mitigation measures for construction dust as outlined in the Handbook for Assessing and Mitigation Air Quality Impacts (2007). All driveways, sidewalks, and parking lots shall be paved as soon as possible during construction to prevent fugitive dust.

The following fugitive dust mitigation measures will be implemented during construction:

- Water the construction site daily based on type of operation, soil, and wind exposure.
- Cover trucks hauling soil or other loose materials.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.
- Treat accesses to a distance of 100 feet from the paved road with a 6- to 12-inch layer of wood chips, gravel or mulch.
- Suspend excavation and grading activities if wind speeds exceed 25 mph.
- Display notices including contact information for any dust complaints in a conspicuous manner, such as on construction site fences.

The following mitigation measures will be implemented by contractors regarding construction equipment exhaust mitigation and other emission sources:

- Construction vehicles and/or equipment will comply with the California Air Resources Board's (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation. Construction vehicles will use a CARB Tier 3 engine when feasible.
- Maintain vehicles in good working order and turn off vehicles and equipment when inactive. Limit idling of vehicles to no more than five minutes.
- Employ equipment and power tools that are powered by electric or natural gas engines.
- Use reformulated and emulsified fuels, if feasible.
- Use diesel oxidation catalysts and/or catalyzed diesel particulate traps on diesel equipment.
- Limit vehicle speeds to 15 miles per hour onsite.
- Recommend carpooling to the Project to reduce number of vehicles onsite.

(V) Local or Regional Systems

(1) Transportation

Construction activities will primarily be scheduled during daytime hours. Contractors will coordinate proper construction signage near the Project as necessary to make drivers aware of the potential for increased hazards associated with construction vehicles. Appropriate changes to signaling, signage, and parking will be instituted once the Facility begins operations.

(2) Local or Regional Water Supply

Contractors will coordinate with the City of Davis to minimize any impacts to local water systems. USDA-ARS will obtain the proper permits to connect to existing municipal water infrastructure in the area. The Facility is being designed to Leadership in Energy and Environmental Design (LEED) V4 Silver standards to help minimize its carbon footprint. As such, it will have the following water-saving features incorporated into its design: low flow restroom lavatories, urinals, water closets, and showers (if included in the final design).

(3) Local or Regional Power and Heating

Contractors will coordinate with PG&E when working at the service entrance to minimize risk of damage and/or injury to construction workers. USDA-ARS will coordinate with PG&E and the City of Davis to obtain the proper permits required to connect to the existing electric infrastructure.

The Facility is being designed to LEED V4 Silver standards to increase energy efficiency, therefore minimizing the Facility's load on the system. Overall, the LEED framework provides for healthy, highly efficient, and cost saving green buildings. Buildings designed to LEED standards, have been found to consume 25 percent less energy on average (Fowler et al., 2011). The Facility will evaluate enrolling in Valley Clean Energy's (VCE's) program to utilize more renewable energy sources for its power needs. This will assist the USDA-ARS in meeting the requirements of the 2021 Executive Order 14057 *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* of net-zero emissions building portfolio by 2045 and net-zero emissions from overall federal operations by 2050.

(4) Local or Regional Solid Waste Management

All solid waste, including recycling, will be disposed of properly according to Federal, state, and local regulations.

(5) Local or Regional Sewer or Storm Drainage

Debris from the construction site will be properly disposed of so that they do not interfere with runoff to storm drains. USDA-ARS will coordinate with the City of Davis to obtain the proper permits required to connect to the existing sewer infrastructure. Stormwater onsite would be directed to stormwater detention basins where water would infiltrate soil. The Facility design may also include features, such as also includes permeable pavers and rain gardens, which would allow water to permeate the soil onsite.

(W) Local Land Use (3) Aesthetics

USDA will direct its contractors to minimize disturbance to vegetation and soil during Project construction. During construction, work areas would be maintained in an orderly manner and trash and construction debris removed. Following construction activities, disturbed areas would be restored and revegetated. Native landscaping is planned for the areas surrounding the Facility and would complement the overall aesthetic of the Facility. The Facility is being designed for consistency with aesthetic qualities of the surrounding commercial/industrial areas.

(Y) Noise

Construction activities will be scheduled between 7:00 am and 7:00 pm on Mondays through Fridays, and between the hours of 8:00 am and 8:00 pm on Saturdays and Sundays, per Section

24.02.040 of the Davis Municipal Code. The following mitigation measure shall be implemented by contractors during construction, if applicable:

- Maintain vehicles in good working order and turn off vehicles and equipment when not in use. Limit idling of vehicles to no more than 5.0 minutes at any location.
- Use properly functioning mufflers on appropriate machinery.
- Provide written notice to residents and businesses within 1,000 feet of the construction zone, advising them of the estimated construction schedule. This notice will include school administrators at the Montessori Country Day II facility. This written notice will be provided at least one week prior to the start of construction at that location.
- A pre-construction meeting will be held for adjacent interested parties to attend to address any concerns, including noise.
- Display notices with contractor contact telephone number(s) and proposed construction dates and times in a conspicuous manner, such as on construction site fences.
- A noise disturbance coordinator will be identified who would promptly respond to noise complaint calls and monitor noise and construction activity.
- Per the Davis Municipal Code, no individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet.
- Per the Davis Municipal Code, the noise level at any point outside of the property plane of the project shall not exceed 86 dBA.
- Employ equipment that is powered by electric or natural gas engines.
- Locate generators and staging areas as far from the day school as possible to reduce both noise impacts.
- Limit the use of high impact equipment when children are present, if appropriate.
- Temporary noise barriers or fencing will be used to minimize noise impacts on adjacent properties, if appropriate.

(CC) Energy Usage / Alternative Energy

The Facility is being designed to LEED V4 Silver standards to help minimize its carbon footprint. As such, it will have the following energy-saving features incorporated into its design: high efficiency boilers, LED lighting, and unoccupied air change rate turn down. A high efficiency chiller, exhaust air heat recovery system, automated building controls, enhanced building envelope, and onsite photovoltaic and solar hot water heating will be evaluated for potential for use at the Facility. Additionally, the USDA-ARS will consider enrolling the Facility in the VCE program, which will allow the Facility to increase the amount of renewable energy (wind and solar) that is being used for their needs to levels above what is currently available from PG&E. To the extent practical, the Facility will be designed to meet the goals established in Executive Order 14057, subject to Federal appropriations.

Commitment to Implementation

The USDA-ARS affirms their commitment to implement the measures for the mitigations and BMPs listed above which are the same as those listed in Section 4.2 of the EA. Implementation is dependent on funding. The USDA-ARS will provide that adequate funds are requested in future years' budgets to achieve the goals and objectives set forth in the EA, and to fund the mitigation commitments described in the EA.

Public Review and Comment

The EA was available for a 10-day public review and comment period following publication of a public notice in the Davis Enterprise and the California Aggie on January 5, 2022. The public comment period began on January 5, 2022 and concluded on January 18, 2022. During this period, the EA was available for the public to download and review from the following U.S. Army Corps of Engineers (USACE) website:

<https://www.spk.usace.army.mil/media/usace-project-public-notices/>

The public was invited to submit written comments on the EA during the 10-day public review period to Ms. Keleigh Duey, U.S. Army Corps of Engineers, Sacramento District, Planning Division 10th floor, 1325 J Street, Sacramento, California, 95814, or via email to Keleigh.L.Duey@usace.army.mil, 916-557-5131. A total of one (1) Federal agency comment was received on the EA during the public comment period. Comments from the United States Environmental Protection Agency were addressed in Appendix D, Public Involvement of the EA. USDA-ARS has considered these comments in this Finding of No Significant Impact (FONSI).

FINDING OF NO SIGNIFICANT IMPACT

After careful review of the EA, I have concluded that implementation of the Proposed Action will not generate significant controversy or have a significant impact on the quality of the human or natural environment. Per 7 CFR § 520, the Draft EA and FONSI were made available for a 10-day public review and comment period. Therefore, as evidenced by my signature below, I determine that the Proposed Action will have no significant impacts and the action will be implemented. This analysis fulfills the requirements of NEPA and the CEQ regulations. An Environmental Impact Statement will not be prepared, and the USDA-ARS is issuing this FONSI.

John Dyer

Acting Director, Pacific West Area
USDA Agricultural Research Service

Signature:

Date: