

**Floodplain Statement of Findings
for the
New Mexico State Road 4 and East Jemez Road Intersection
at
Los Alamos National Laboratory
Santa Fe County, New Mexico**

AGENCY: U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA),
Los Alamos Field Office

ACTION: Floodplain Statement of Findings

DESCRIPTION OF THE PROPOSED ACTION: The NNSA, a semi-autonomous agency within the DOE, is proposing to modify and upgrade the intersection of New Mexico State Road 4 (NM 4) and East Jemez Road located in Santa Fe County, New Mexico (Figure 1). The purpose of the proposed modifications and upgrades is to improve transportation safety and increase the capacity and efficiency of the intersection (Proposed Action). Road and intersection upgrades will add extra lanes to both NM 4 and East Jemez Road in the vicinity of the intersection and will require widening both roads. Widening East Jemez Road will encroach on the 100-year (100-yr) lower Sandia Canyon floodplain. Work within the Sandia Canyon 100-yr floodplain will impact the Sandia Canyon Area of Concern (AOC) C-00-007, which has the same footprint as the 100-yr floodplain. The 100-yr floodplain represents the extent to which post-Los Alamos National Laboratory (LANL) aged sediments (and contaminants) could have been deposited, and therefore, is used to delineate the extent of the AOC.

LOCATION WITHIN A FLOODPLAIN EXPLANATION: Given the need to modify the intersection to improve transportation safety and increase the capacity and efficiency of the intersection there are no practical alternatives that would avoid an action within the floodplain.

ALTERNATIVES: In addition to the Proposed Action, the following five options were evaluated, none of which would avoid action within the floodplain:

1. Maintain the current intersection alignment with short acceleration lanes;
2. Intersection realignment with short acceleration lanes;
3. Intersection realignment with short acceleration lanes, and dedicated dual left turn lanes on East Jemez Road for northbound traffic turning onto NM 4;
4. Same as Option 3, with reduced speed limit to 45 mph on northbound NM 4 and eastbound East Jemez Road; and
5. No Action alternative that would not address the long-standing intersection issues of traffic safety and traffic flow.

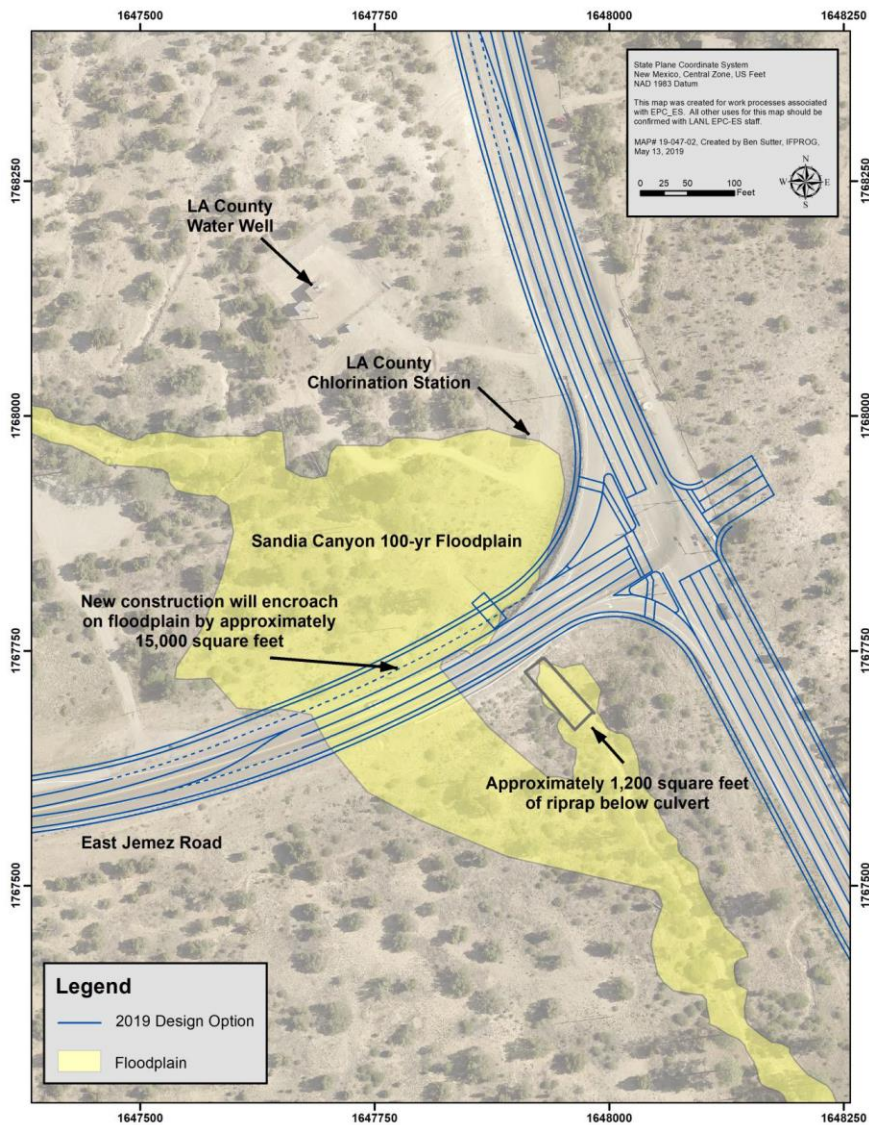


Figure 1. Aerial photo showing current intersection configuration with new configuration overlay and 100-yr floodplain.

FLOODPLAIN PROTECTION STANDARDS: The Proposed Action will not result in a significant change, if any, to the floodplain values or functions. Short-term impacts will be avoided or minimized by adherence to permits and other requirements. Post construction, the floodplain would retain the same preconstruction floodplain values and functions as present prior to intersection modification. No impacts to human safety, health and welfare, or private property are anticipated as the natural and beneficial floodplain values will be preserved. The Proposed Action, with implementation of project mitigation measures, conforms to applicable floodplain protection standards.

STEPS TO BE TAKEN TO MINIMIZE POTENTIAL HARM TO OR WITHIN THE FLOODPLAIN:

Engineering and administrative controls to limit soil erosion, sediment loss, and spills and leaks will be in place during and after construction. Specific mitigations include the following:

- A retaining wall would be constructed along the north side of East Jemez Road, which will prevent a 100-yr flood from overtopping the road and should expand the upstream extent of the floodplain, thereby mitigating floodplain losses due to road expansion.

- The culvert under East Jemez Road was designed to NMDOT specifications to pass a 50-yr flood event. LANL Roads and Grounds personnel periodically inspect the culvert and conduct maintenance as needed. Additionally, the addition of the 42" concrete wall along the north side of NM 4 would increase the intersection capacity to a 100-yr event. Rip rap outlet protection will be placed below the culvert to reduce in-channel flow velocity and protect against possible erosion at the outlet.
- Stormwater runoff will be conveyed from the new road surface to the associated drainage by a series of riprap-lined swales, rundowns and energy dissipation structures designed to meet predevelopment runoff velocities and runoff.
- Excavated material within the boundary of AOC C-00-007 would be returned to the point and depth of the excavation, or within the AOC site boundary. If the project is unable to manage excavated material within the boundary of the AOC C-00-007, then the material will be managed, characterized, and disposed of in accordance with federal and state environmental compliance requirements.
- Hazardous materials, chemicals, fuels, and oils will not be stored within the floodplain.
- Heavy equipment will not be used if conditions are too wet to prevent damage to the soil structure.
- Equipment will be refueled at least 100ft. from any drainage, including dry arroyos.
- Project disturbed areas will be stabilized and revegetated post construction in accordance with the LANL Seeding Specification.

SUPPLEMENTARY INFORMATION: This Floodplain Statement of Findings was prepared in accordance with Executive Order 11988, *Floodplain Management* and DOE implementing regulations 10 Code of Federal Regulations 1022 *Compliance with Floodplain and Wetland Environmental Review Requirements* and provides a summary of the *Floodplain Assessment for the New Mexico State Road 4 and East Jemez Road Intersection at Los Alamos National Laboratory* (Floodplain Assessment) analysis and determination.

The notification for the availability of the Floodplain Assessment and request for comments was sent to appropriate government agencies, tribes, organizations, and persons known to be interested in or potentially affected by the proposed floodplain action via the GovDelivery system and published online on June 23, 2020, for a 15-day public review and comment period on the DOE National Environmental Policy Act (NEPA) website at <https://www.energy.gov/nnsa/other-environmental-documents>. In response to a public request, NNSA extended the public comment period for an additional seven (7) days. One organization provided a set of comments. After review and evaluation of the comments no change to the Proposed Action or Floodplain Assessment was found to be necessary as the floodplain, post construction, will retain the same values and functions as present prior to intersection modification. However, many of the comments address issues beyond the scope of a floodplain assessment but are within the scope of NEPA. These comments will be evaluated during the required New Mexico State Road 4 and East Jemez Road Intersection Project NEPA analysis. No construction would occur, if appropriate, until the NEPA analysis is completed.

FOR FURTHER INFORMATION CONTACT: For further information or questions regarding this Floodplain Statement of Findings contact Ms. Kristen Dors via email at Kristen.Dors@nnsa.doe.gov; fax (505) 667-5948 or mail to:

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