



WELCOME

**Public Meeting for TerraPower's Proposed
Test and Fill Facility (TFF) Project
Lincoln County, Wyoming
Draft Environmental Assessment (DOE/EA-2217)**



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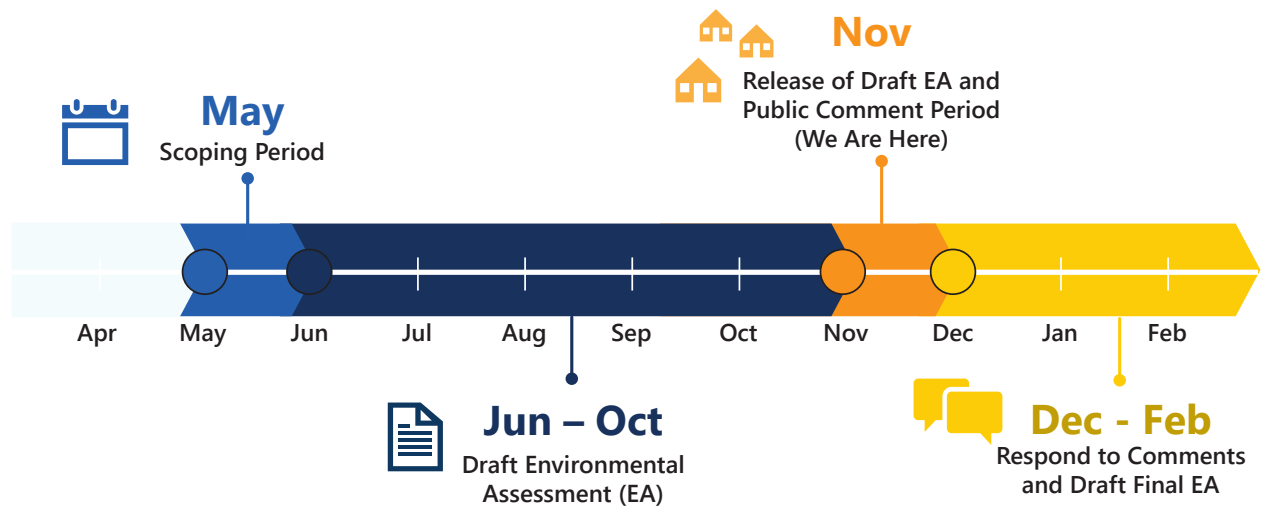


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SCHEDULE



2023

2024



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CULTURAL RESOURCES

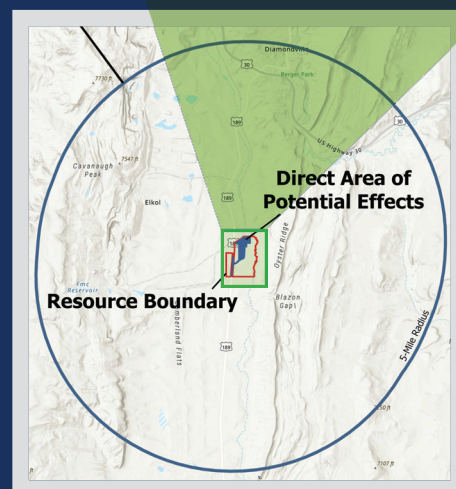
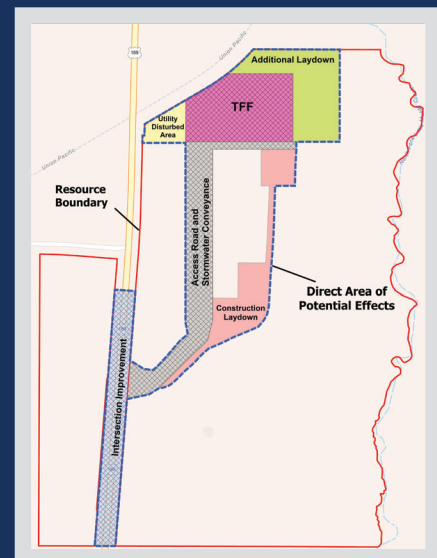
Historic properties are historically or archaeologically significant buildings, structures, objects, sites, and districts. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of federally funded projects on historic properties. DOE is consulting with the Wyoming State Historic Preservation Office (SHPO) and interested tribes to address potential adverse effects that may result from the proposed action.

Direct Area of Potential Effects

- The Direct Area of Potential Effects covers 101 acres encompassing the Test and Fill Facility (TFF) and supporting infrastructure, which includes:
 - one previously recorded cultural resource site;
 - one newly recorded segment of a previously recorded site; and,
 - four newly identified sites.

Indirect Area of Potential Effects

- The Indirect Area of Potential Effects extends for a radius of 5 miles around the project.
- It was used to assess the potential visual effects of the project on the sites, develop photo simulations depicting appearance from key observation points, and analyze how much the project would stand out from its surroundings.
- DOE concluded that the indirect effects of the project on historic properties would be minor.



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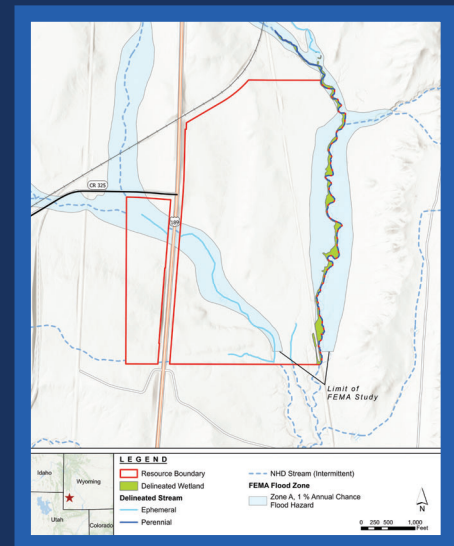
HYDROLOGY

Groundwater

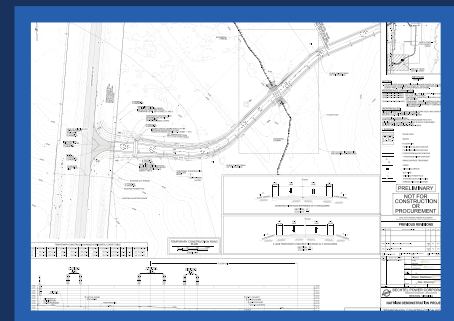
- The Test and Fill Facility (TFF) would be located within a major aquitard – or an area where the geological formation restricts the flow of groundwater. This aquitard is not a source of drinking water and is more than 5 miles from a sole source aquifer.
- Construction of the TFF would include drilling up to 8 shafts between 56 feet – 86 feet deep.
 - The dewatering rate would be 43 gallons per minute (GPM). GPM is a unit of the flow rate of liquids used to specify how fast water moves through pumps, showerheads, and pipes.
 - During construction, this groundwater would be pumped into holding tanks and recycled onsite for dust suppression.

Surface Water

- The proposed access road would cross the 100-year floodplain (see shaded blue area on the Floodplain Map) and an ephemeral stream (i.e., a stream that has flowing water only after precipitation) that is connected to North Fork Little Muddy Creek (see dashed blue line on the Floodplain Map).
 - The road's construction could alter the natural flow of water and sediment transport leading to increased erosion upstream and decreased sediment deposition downstream.
 - To accommodate, the road design would include a drainage system.
 - A culvert would be installed as a part of the new entrance road to maintain water flow for the ephemeral stream.
- A sediment basin turned into a water detention basin would be used for the TFF.
- Operations water for dust suppression would be trucked in and stored in an onsite 20,000-gallon water storage tank.
- Bottled water would be used for drinking water needs.
- Wastewater would be stored onsite until removal by an outside vendor.



Floodplain Map



Proposed Access Road Map



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TRANSPORTATION

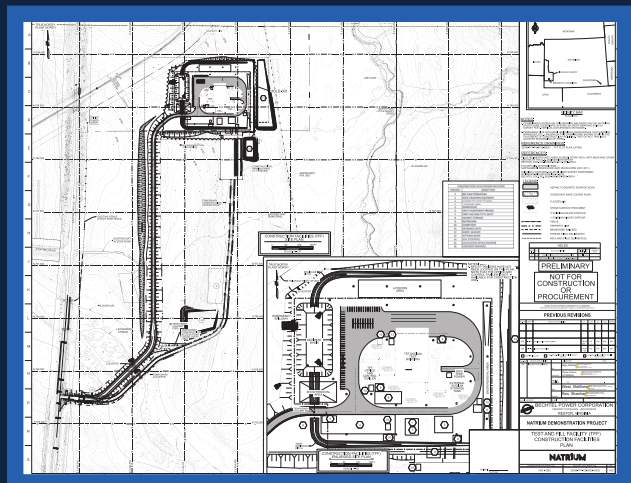
As with any construction project, traffic could be impacted by project-related commuter traffic, as well as the transportation of materials and equipment.

A proposed temporary intersection and access road would provide immediate access for site preparation. This temporary intersection would be improved to develop a permanent intersection and the permanent access road.

The site access to the Natrium Demonstration Project would be located on Highway 189, which is owned and operated by the Wyoming Department of Transportation (WYDOT).

When proposing a new access onto the highway, an access permit and a traffic impact study (dependent on the size of the project) would be required. The intersection's design will meet the WYDOT's requirements. Any design exceptions would require WYDOT authorization.

Design exceptions would be used to minimize or avoid potential impacts to environmental sensitive areas and/or safety.



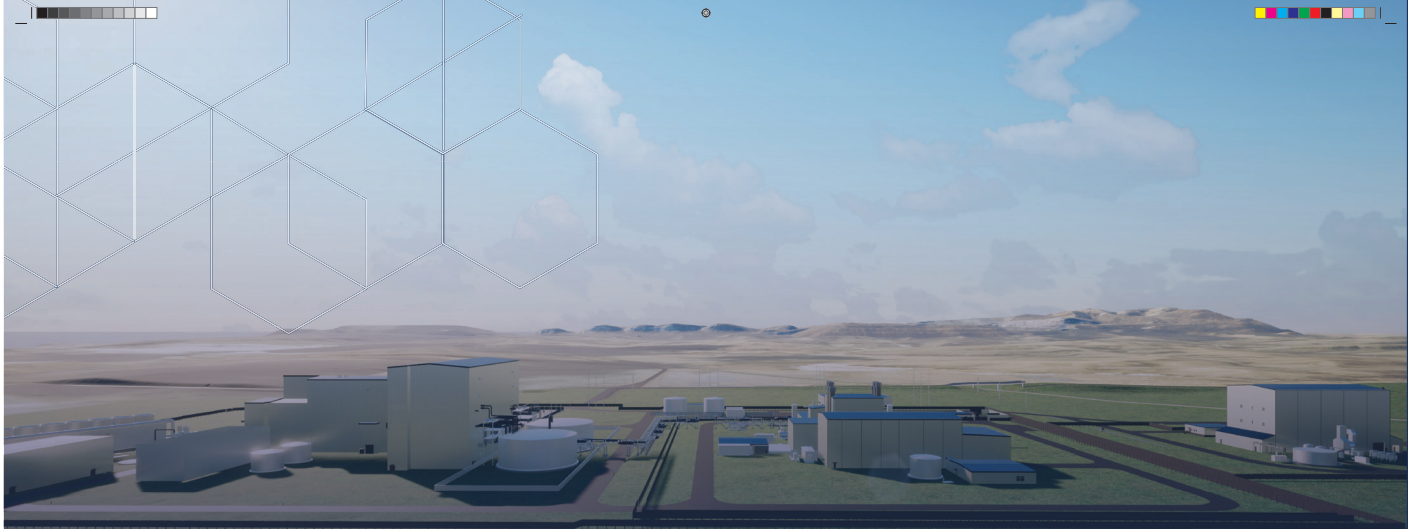
Temporary & Permanent Access Road



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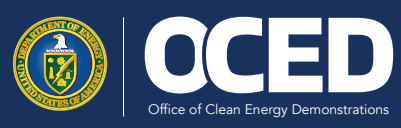
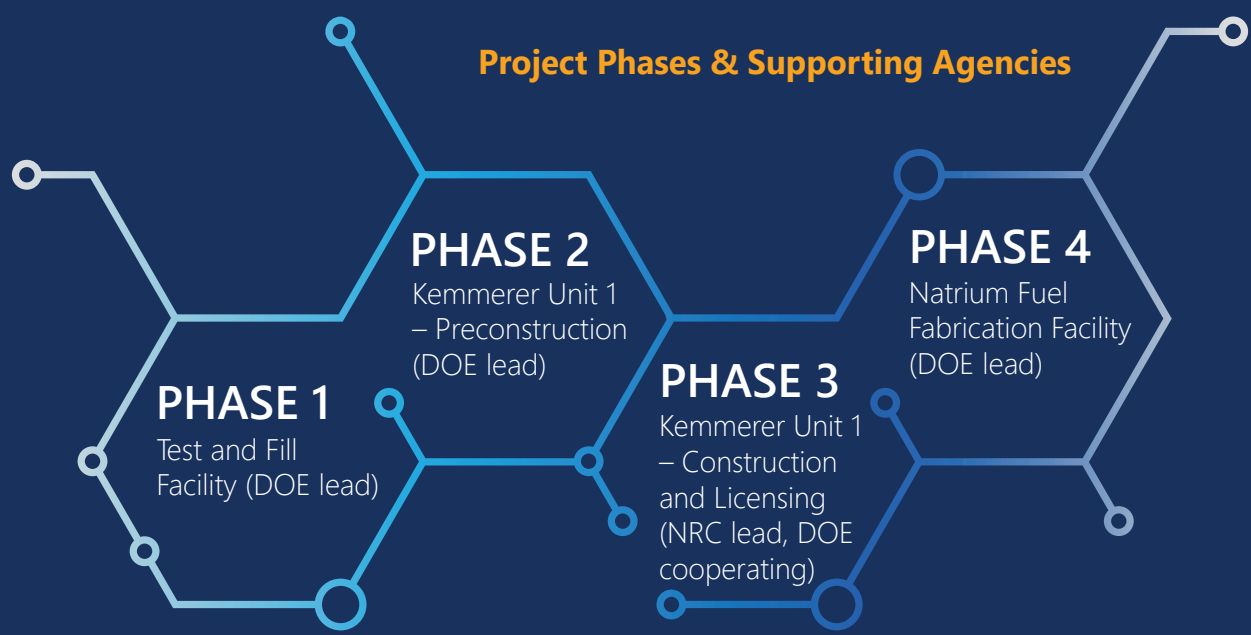
PROJECT PHASES

NEPA (40 CFR Parts 1500-1508) requires federal agencies to assess the environmental impact of federal actions and to inform and involve the public in the decision-making process.

DOE's decision whether to authorize the expenditure of federal funds is subject to NEPA review.

The Nuclear Regulatory Commission's (NRC) decision whether to issue a construction permit and operating license for a domestic nuclear plant would be made pursuant to the Atomic Energy Act of 1954, as amended, and the NRC's regulations at Title 10, Code of Federal Regulations.

To ensure that all components of TerraPower's Sodium Demonstration Project — including the Test and Fill Facility, Kemmerer Unit 1, and the Fuel Fabrication Facility — are appropriately evaluated under NEPA, DOE and NRC have agreed to conduct the review of the Project in four phases.





HOW TO COMMENT

DOE invites you to submit official written comments through one of the following methods. All written, official comments will become part of the official project record. Written comments must be submitted on or before **December 1, 2023 at 11:59 P.M. MDT.**

Submit electronically:

E-mail comments to OCED.ESH@hq.doe.gov

Mail:

U.S. Department of Energy
ATTN: Jessica Buckley
12011 Sunset Hills Rd
Reston, VA 20190

Comment Form:

Fill out a comment form and place it in the designated comment box.

Protecting Personally Identifiable Information (PII):

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment — including your personal identifying information — may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personally identifying information, we cannot guarantee that we will be able to do so.



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TEST AND FILL FACILITY BUILDING RENDERING

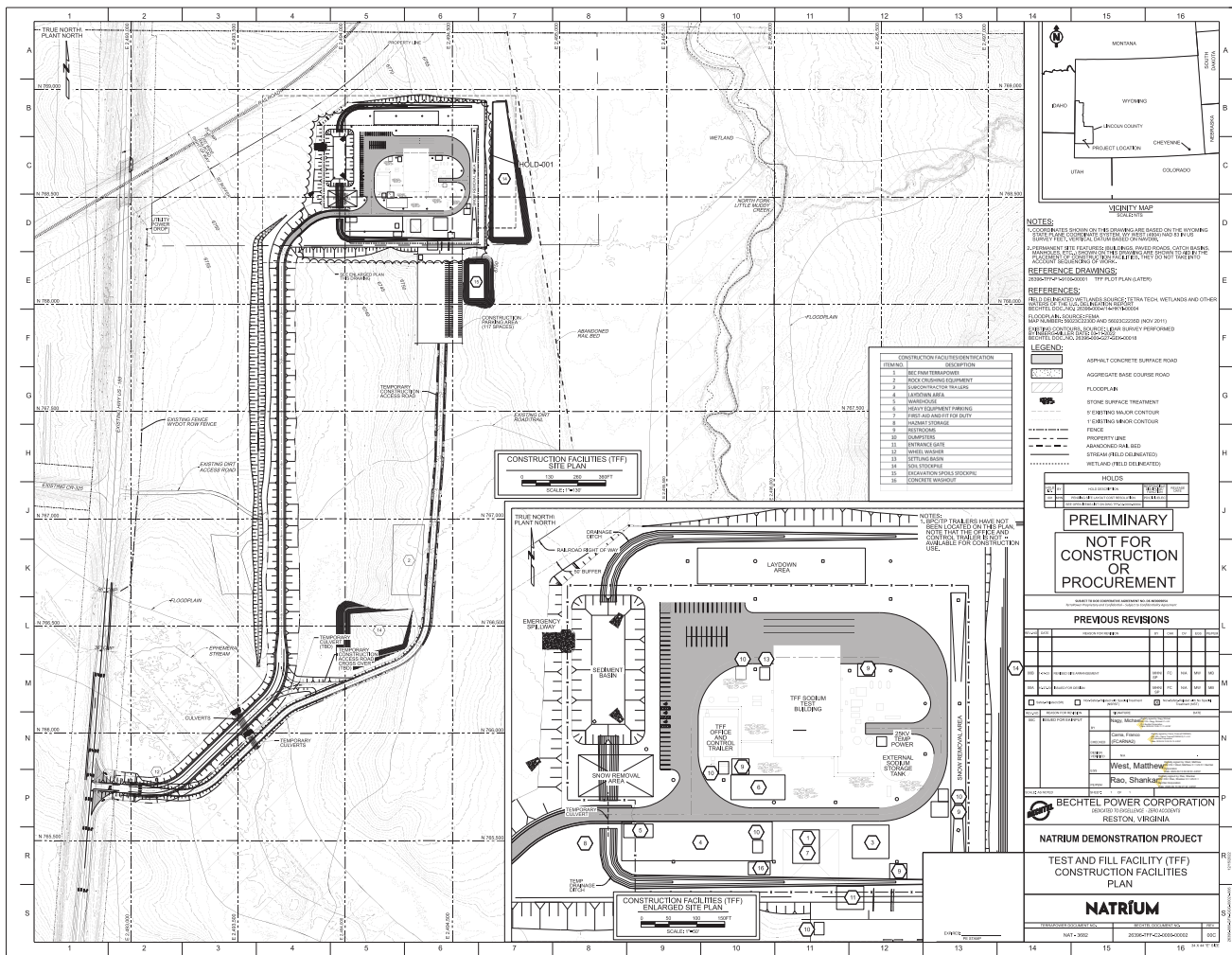


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TEST AND FILL FACILITY PROPOSED SITE NEW LOCATION



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