

**WETLAND STATEMENT OF FINDINGS
FOR THE
OAK RIDGE ENHANCED TECHNOLOGY
AND TRAINING CENTER**



November 2020

Approved for Public Release

I. INTRODUCTION

The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the United States (U.S.) Department of Energy (DOE), has prepared this wetland statement of findings¹ for the Oak Ridge Enhanced Technology and Training Center (ORETTTC). The ORETTTC is proposed to be located on property currently owned by NNSA in Oak Ridge, Tennessee. The ORETTTC would be used to train first responders and other experts in nuclear operations, safeguards, and emergency response to support the National Security Enterprise.

Previously, NNSA prepared a Wetlands Assessment concurrently with the *Environmental Assessment for the Oak Ridge Enhanced Technology and Training Center* (DOE/EA-2144, see Appendix B) in accordance with 10 Code of Federal Regulations (CFR) Part 1022, "Compliance with Floodplain and Wetlands Environmental Review Requirements." That assessment fulfills the NNSA's responsibilities under 10 CFR Part 1022 and Executive Order 11990, "Protection of Wetlands," which requires Federal agencies to minimize the destruction or degradation of wetlands, and to avoid undertaking new construction located in wetlands unless they find there is no practicable alternative to such construction. Specifically, NNSA announced the availability of the Draft EA (which included the Draft Wetlands Assessment) in local newspapers and provided an email address and postal address where comments could be submitted. NNSA provided an approximately 30-day comment period. In preparing the Final EA (which included the Final Wetlands Assessment), DOE reevaluated the practicability of alternatives to the proposed wetland action and the mitigating measures, taking into account all substantive comments received. Comments received and NNSA's responses are included in Appendix C of the Final EA.

This wetland statement of findings contains: (1) A brief description of the proposed action, including a location map; (2) An explanation indicating why the action is proposed to be located in the wetland; (3) A list of alternatives considered; (4) A statement indicating whether the action conforms to applicable wetland protection standards; and (5) A brief description of steps to be taken to minimize potential harm to or within the wetland.

II. PROPOSED ACTION

NNSA's Proposed Action is to construct and operate the ORETTTC on property currently owned by NNSA on the Oak Ridge Reservation (ORR), approximately five miles west of the main facilities at the Y-12 National Security Complex (Y-12) (see Figure 1). The Proposed Action also includes the proposed transfer of land (approximately 24 acres) from NNSA to the Roane County Industrial Development Board (RCIDB) for development of the State-funded Emergency Response Training Facility (which is a facility at the ORETTTC that would be developed by the RCIDB). None of the property that would be transferred to the RCIDB would contain wetlands that could be affected by the Proposed Action. A detailed description of the Proposed Action is presented in Section 2.1 of DOE/EA-2144.

¹ Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency do not identify any floodplains at the proposed ORETTTC site. Therefore, implementation of the Proposed Action would not impact floodplains. Consequently, this Statement of Findings only applies to wetlands.

The Proposed Action would require two stream crossings (i.e., the construction of a 36-foot wide roadway and 10-foot wide pedestrian walkway across a perennial stream) (see Figure 2). A single stream would be crossed, and the two crossings would be nearby such that both crossings would be considered a single and complete project for purposes of permit authorization. The width of the stream bed and ordinary high-water marks at the crossings is approximately six feet. Use of bottomless culvert arches would span the stream crossings, thereby avoiding stream impacts, and allow the stream to flow freely. The design of the roadway and walkway would avoid wetland impacts to the greatest extent practicable, while still providing a safe and functional route for ORETTTC operations.

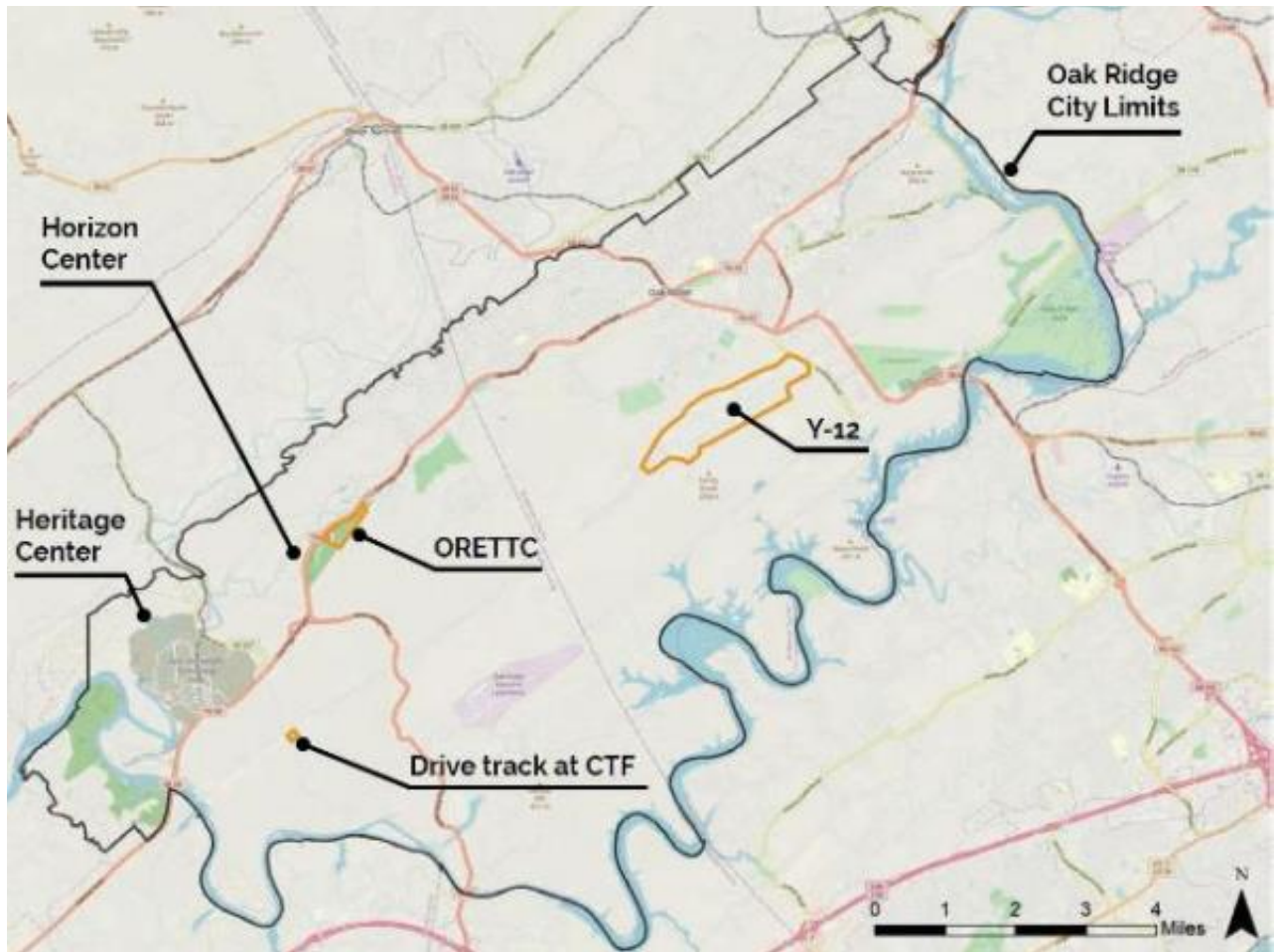
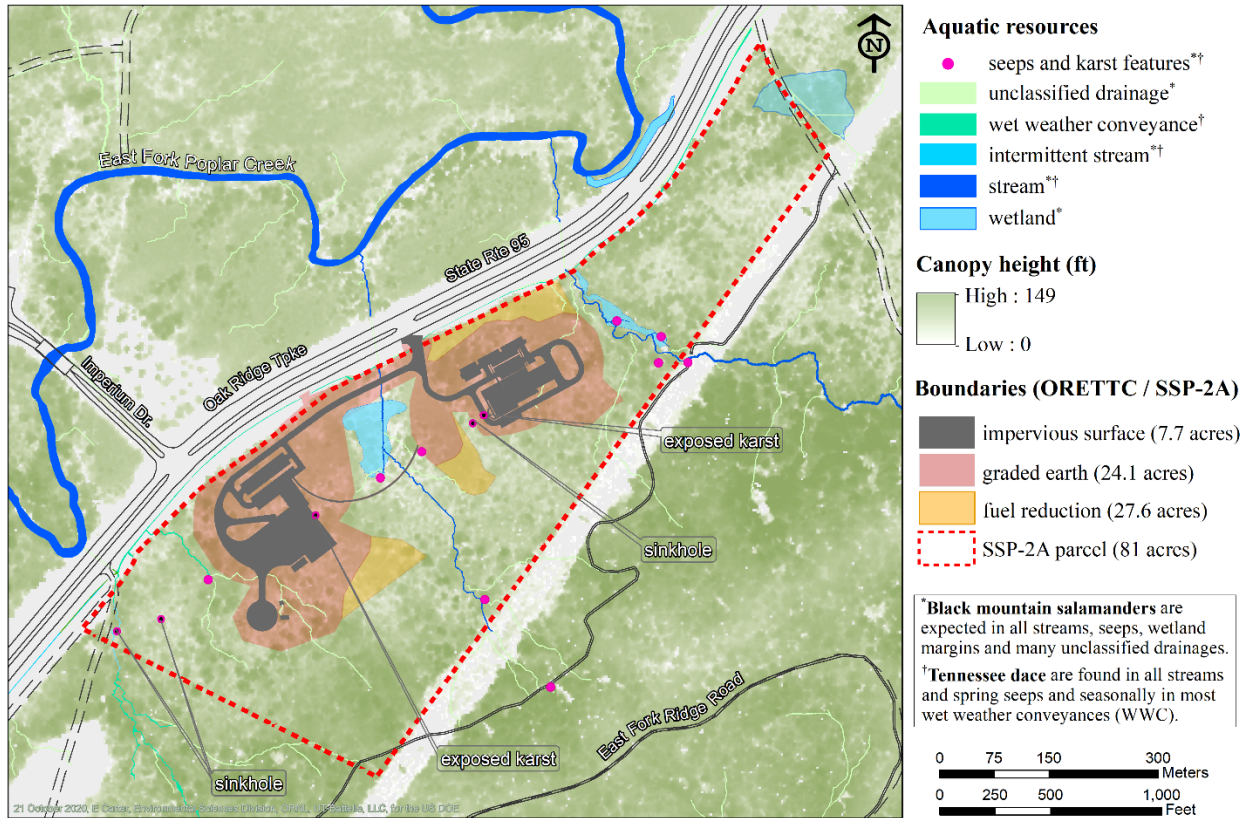


Figure 1. Location of Proposed ORETTTC Facilities



Note: Grading plans for the ORETTTC estimate that approximately 24.1 acres of land could be disturbed.

Figure 2. ORETTTC Roadway and Walkway Project Area

III. WHY ACTION IS PROPOSED TO BE LOCATED IN WETLAND

As discussed in Section 2.1 of DOE/EA-2144, the proposed site was identified through a detailed site-evaluation process which considered the following factors: land, infrastructure, constraints, developable areas, and alternatives. The proposed site was rated to be the most cost-effective and operationally efficient location for the ORETTTC. NNSA’s proposed configuration of the ORETTTC is designed to avoid and minimize impacts to wetlands to the extent practicable.

Section 2.4 of DOE/EA-2144 discusses other sites that were considered by NNSA for the ORETTTC and explains why those sites were eliminated from consideration. Section IV of this wetland statement of findings explains why there is no practicable alternative to the Proposed Action with regard to potential wetland avoidance/disturbance.

IV. ALTERNATIVES CONSIDERED

As explained in Section 2.4 of the ORETTTC Final EA, NNSA considered alternatives that would have sited the ORETTTC: (1) outside of the Oak Ridge area; (2) at another ORR location; (3) at locations offsite ORR; and (4) onsite at Y-12. Those locations were eliminated from detailed analysis for the reasons described in Section 2.4. In addition, within the 950 acres of undeveloped land at ORR that was considered for the ORETTTC, NNSA developed and considered four alternative configurations of the ORETTTC (see Figures 2-7 through 2-10 of the ORETTTC Final EA). NNSA evaluated the four alternative configurations of the ORETTTC against 20 criteria (including contiguous developable area, site access, proximity to utilities, and environmental considerations, such as the potential to impact cultural resources, endangered species, and wetlands). Of the four alternative configurations of the ORETTTC, the proposed site had the highest net advantages compared to disadvantages, and scored the highest in the comparative analysis. Relative to the proposed site, the other three alternatives were considered to be impracticable.

In addition to the Proposed Action, in response to public comments received on the ORETTTC Draft EA, NNSA also included the East Tennessee Technology Park (ETTP) as a site alternative in the ORETTTC Final EA (*see* Section 2.2 of DOE/EA-2144). NNSA also evaluated a No-Action Alternative (*see* Section 2.3 of DOE/EA-2144). NNSA determined that the ETTP Alternative, while included in the EA, is not a practicable alternative to the Proposed Action due to: (1) the potential for significant schedule delays associated with the transfer of land from NNSA to the RCIDB as a result of past contamination at the ETTP²; (2) liability concerns related to the ETTP that could jeopardize State funding of the ERTF; (3) the potential for significant additional costs related to buildability at the ETTP (implementation concerns); and (4) the potential for wetland impacts at the ETTP that could be of similar magnitude (or greater) as the proposed site.

V. CONFORMANCE TO APPLICABLE WETLAND PROTECTION STANDARDS

NNSA, in accordance with 10 CFR 1022, seeks to identify, evaluate, and as appropriate, implement alternative actions that may avoid or mitigate adverse wetlands impacts, and provide early and adequate opportunities for public review of plans or proposals for actions that may affect wetlands. The Proposed Action conforms to applicable wetland protection standards.

An application for General Aquatic Resource Alteration Permit for Construction or Removal of Minor Road Crossings (form CN-1091), along with any other required information, would be submitted to Tennessee Department of Environment and Conservation (TDEC). Notice of coverage by TDEC of activities that qualify under general permits also serve as a section 401 Water Quality Certification pursuant to the Federal Clean Water Act (CWA). Work shall not commence until a written Notice of Coverage (NOC) from TDEC is received.

² The ETTP Alternative site is currently owned by the DOE Environmental Management (DOEEM) and is currently being leased to the Community Reuse Organization of East Tennessee, who subleases it to a private woodchip processing business. In order to use the property for the ORETTTC, the current long-term lease would have to be terminated and the property vacated (and remediated, if necessary).

Pursuant to the CWA, an application for Nationwide Permit 14, Linear Transportation Projects would be submitted to the U.S. Army Corps of Engineers (USACE). NNSA would submit a pre-construction notification to the USACE prior to commencing the activity for the loss of waters of the United States greater than 0.1 acres.

VI. MINIMIZING POTENTIAL HARM TO OR WITHIN THE WETLAND

Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency do not identify any floodplains at the proposed ORETTTC site. The site footprint is within an area identified as minimal flood hazard. Therefore, implementation of the Proposed Action would not impact floodplains.

A preliminary wetlands determination and delineation has been performed based on a July 2020 biological survey of the ORETTTC proposed site. NNSA has determined that disturbance in the stream riparian buffers would be limited to approximately 0.70 acres for the road corridor and a pedestrian crossing. Limiting the road corridor to 36 feet wide and the pedestrian corridor to 10 feet wide across the 100-foot riparian buffer on either side of the stream would minimize potential impacts to potential wetlands in the riparian buffer to approximately 0.05 acres.³ Impacts to wetlands would be minimized by crossing the stream at the narrowest point, spanning the stream, crossing at a right angle to the stream, and minimizing the width of the transportation corridor.

The proposed use of a clear span bottomless culvert arch for the sidewalk and road crossings would avoid impacts to the channel (i.e., the stream is untouched). Because the stream crossings would be to a single stream and the two crossings would be nearby, both crossings would be considered a single and complete project for permit authorization. Wetland loss due to road and pedestrian crossings could total approximately 0.05 acres within the watershed. During the permitting process, NNSA would work with USACE and TDEC to identify and develop expansion and/or creation of wetland acreage in areas near the ORETTTC.

The Proposed Action could involve the discharge of fill material into wetlands. All activities would be performed in compliance with associated permits and with the project Storm Water Pollution Prevention Plan and Best Management Practices (BMPs). The proposed use of BMPs such as biodegradable sediment control barriers to protect the stream from erosion would further reduce potential wetland impacts. No contaminated soil is anticipated to be encountered during the proposed activities.

³ NNSA considered reducing the widths of the road and sidewalk, but has proposed widths that are generally standard for those functions. The 36-foot-wide corridor for the road considers construction of a 24-foot-wide roadway with a 6-foot-wide road shoulder on either side as the limit of disturbance. The 10-foot-wide sidewalk considers constructing a 5-foot-wide sidewalk with 2.5-foot-wide buffer on either side for maintenance and the limit of disturbance. During the design process, NNSA will consider the use of permeable decking material for the pedestrian walkway that crosses the wetland and stream.

VII. SUMMARY

Based on the analysis in the ORETTTC Final EA and this Wetland Statement of Findings, NNSA has determined that there is no practicable alternative to the construction and operation of the ORETTTC at the proposed site. In accordance with 10 CFR 1022 and Executive Order 11990, NNSA has identified, evaluated, and minimized/mitigated adverse wetlands impacts associated with the construction and operation of the ORETTTC at the proposed site. Wetland loss due to road and pedestrian crossings could total approximately 0.05 acres within the watershed. During the permitting process, NNSA would work with USACE and TDEC to identify and develop expansion and/or creation of wetland acreage in areas near the ORETTTC.