

[Draft] Compatibility Determination for Right-of-Way Permit for the
Flatirons Campus Water System Project Utility Corridor, Rocky Flats
National Wildlife Refuge.

Refuge Use Category
Rights--of--Way and Rights to Access

Refuge Use Type(s)

Rights-of-way (utility). The right to use and possibly alter the landscape through construction, maintenance, and operation of water or fuel pipeline, power line, telecommunications line or tower, or other utility.

Associated facilities: Raw Water Transfer Pumping Station.

Refuge
Rocky Flats National Wildlife Refuge

Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

The refuge was established by the Rocky Flats National Wildlife Refuge Act of 2001 (Pub. L. No. 107-107). Section 3177(e) of this Act outlined the following purposes for the refuge:

“(e) ADMINISTRATION AND PURPOSES.—

(1) IN GENERAL.—The Secretary of the Interior shall manage the refuge in accordance with applicable law, including this subtitle, the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.), and the purposes specified in that Act.

(2) REFUGE PURPOSES.—The refuge shall be managed for the purposes of—

(A) restoring and preserving native ecosystems;

(B) providing habitat for, and population management of, native plants and migratory and resident wildlife;

(C) conserving threatened and endangered species (including species that are candidates for listing under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)); and

(D) providing opportunities for compatible scientific research.

(3) MANAGEMENT.—In managing the refuge, the Secretary of the Interior shall—

(A) ensure that wildlife-dependent recreation and environmental education and interpretation are the priority public uses of the refuge; and

(B) comply with all response actions.”

In addition, Section 3174 of this Act recognized the need to support future needs of the NWTC:

“(f) WIND TECHNOLOGY EXPANSION AREA- The Secretary shall retain, for the use of the National Renewable Energy Laboratory, the approximately 25 acres identified on the map referred to in section 3173(8)(A) as the ‘Wind Technology Expansion Area’.”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (Refuge System) is to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57, 111 Stat. 1252).

Description of Use

Is this an existing use?

Yes

- The use is consistent with the July 2019 NWTC ROW permit and associated CD. In this prior CD a ROW was granted over a portion of the currently proposed corridor for the installation and maintenance of an electrical line. Activities listed in the July 2019 CD include “Maintenance of a ROW to allow for future construction of a potable water line at some time in the future”.
- The use of this corridor for the construction of a potable water line and associated structures, including a pump house and electrical line to the pump house, are covered in the Final Environmental Assessment and Wetlands Assessment, Flatirons Campus Water System Project (DOE 2022a) and the Finding of No Significant Impact and Wetland Statement of Findings (DOE 2022b).

What is the use?

Consistent with Title 50, Part 29 of the Code of Federal Regulations, the U.S. Fish and Wildlife Service (“Service”) would issue a utility corridor right-of-way (“ROW”) permit to the U.S. Department of Energy (“DOE”) to construct, operate, and maintain a 2-mile underground water pipeline and associated structures. This ROW would extend an existing Service ROW Permit, which was originally issued July 2019 for the installation and maintenance of a high voltage electrical utility line.

The waterline would be installed, operated, and maintained by National Renewable Energy Laboratory (NREL) and owned by the DOE. DOE will

continue to improve the existing boundary perimeter road and treat invasive vegetation within the ROW corridor. This waterline will be used to supply water to NREL and will serve as an emergency water source for the area, which will provide much needed resources to the surrounding facilities in emergency situations, such as wildfires. DOE will also be providing an electrical line extension to a USFWS building located on the west entrance road to support the storage of a wildland fire truck for wildfire preparedness.

Is the use a priority public use?

No

Where would the use be conducted?

The waterline would run approximately 2 miles from the NREL Flatirons Campus property boundary south along the western side of the Rocky Flats National Wildlife Refuge boundary (following the railroad grade and current electrical line ROW) and continue south to the Francis Smart Reservoir (also referred to as Rocky Flats Lake). The waterline corridor would be 150' in width, along the 2-mile stretch.

According to DOE: "At the reservoir, a pumphouse would be installed. The pumphouse would use a low-profile "vault-design" that would be approximately 160 square feet in size and would be located on the northwest edge of the reservoir. The pumphouse would contain two electric pumps, and an overhead power line would be installed that would be up to approximately 2,461 feet in length to provide power from an existing power source to the pumphouse. The new power line would require up to 10 utility poles" (DOE 2022a).

When would the use be conducted?

Construction activities would be expected to begin in late summer/early fall of 2022 and would be completed by the summer of 2024. The ROW would be good for 50 years from the date of signature. Operations and maintenance of the ROW area would begin immediately following construction. The water pipeline would be located underground, and habitat would be restored after construction is complete. The pipeline would provide approximately 3.3 million gallons of water to the Flat Irons Campus annually. Daily operation of the waterline would not impact the ground and restored habitat located above the pipeline.

How would the use be conducted?

NREL's project management team/DOE would construct a new pump station at the Smart Reservoir to pump water from the reservoir north to the Flatirons Campus on the northwest corner of the refuge. This pump station would be constructed based on a low-profile "vault design", to maintain the current view-scape of the site, and would be approximately 160 square feet in size.

An overhead powerline would be installed to provide power from the current existing power sources to the pump station. This powerline would be up to approximately 2,500 feet in length and use up to 10 utility poles to tie into the existing power line adjacent to the site.

A new underground water pipeline would be installed from the pumphouse up to the Flatirons Campus. This pipeline would run approximately two miles along a railroad

embankment on the western most side of the refuge. This area has been highly disturbed in the past and the DOE will take on maintenance and restoration responsibilities for the ROW corridor. The new pipeline will be approximately 6-inches in diameter. An abandoned 10-inch pipeline is currently located in the southern 1-mile segment of the proposed ROW. This abandoned pipeline would be used for this project to reduce any environmental impacts that would be caused from the installation of a new pipeline. The new pipeline will be “sleeved” inside of this existing pipeline. The new pipeline would continue to follow the perimeter dirt roads of the refuge/railroad embankment, using horizontal drilling techniques where necessary to reduce impacts to resources, for approximately another mile up to the Flatirons Campus.

Why is this use being proposed or reevaluated?

Currently DOE has limited options for supplying water to its NREL Flatirons Campus. The current method of supplying potable water to the site is to truck it into a storage tank on-site. This is an expensive, time-consuming, and inefficient method for supplying the site with water, and the lack of available water leaves the NREL facility and the refuge exposed to wildfire danger.

As wildfires have increased over the years in this area and residential development has expanded toward the boundaries of the refuge, it has become more important to prepare for fire related emergencies in this area. Due to the topography and high winds in this region, a wildfire can quickly lead to an emergency situation. Increasing access to emergency water supplies on the western edge of the refuge will provide an important resource to firefighters in this area.

This proposed ROW is making use of a current electrical ROW corridor and an abandoned waterline that is already in place. The current electrical utility ROW permit, dated July 2019, mentioned the future use of this corridor for the development of a waterline that would provide the refuge with an emergency water resource. In unison with this project, the DOE will also be providing an electrical connection to the USFWS storage building located on the west entrance road. This electrical connection will allow refuge staff to station a wildland fire truck on-site, to decrease response time for a fire related emergency event.

Availability of Resources

Service personnel would be required to review and approve a new ROW. It is estimated that this will require approximately 100 hours for staff to review documents, meet with the applicant, prepare and issue real estate documents, and provide periodic inspection during construction. Once the waterline is constructed, no additional resources or costs will be needed.

Anticipated Impacts of the Use

Consistent with 50 CFR § 29.21-2(a)(4), the applicant provided a detailed environmental analysis sufficient to support an environmental assessment (“EA”) (DOE 2022a) and FONSI (DOE 2022b) indicating that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this project.

Anticipated impacts of issuing the ROW permit include temporary disturbance to soils and vegetation in a previously disturbed aggregate mining site and mining haul

road that will be restored. There will also be temporary displacement of wildlife and the potential of increased risk to certain raptor species that will be properly mitigated. The project will include installation of two miles of waterline in an area where there is already significant industrial development, and this will have no effect on Refuge visitation.

Based on intra-Service Section 7 consultation, the proposed action will have no effect on federally threatened or endangered species and there will be no adverse modification of existing designated critical habitat.

Wetland and drainage features are located along the proposed ROW corridor. These features were addressed in the Wetlands Assessment completed by DOE (DOE 2022a). Construction of the waterline may temporarily impact wetlands. Due to this, topsoil from these areas will be saved to use as top-fill to preserve the native seedstock for restoration. Great care will be taken to ensure that equipment does not damage wetland areas along the corridor. Mats will be used to protect soils and vegetation, erosion control structures will be used to prevent sediment from entering wetlands and waterbodies, and preconstruction hydrology and contours will be re-established during the final restoration process. The proposed action is not expected to alter wetland type, function, or value.

Benefits to the Refuge include increased access to electricity to support future maintenance activities and wildfire preparedness; emergency access to water to support wildfire management; and long-term maintenance and invasive species control along the Service's boundary road (FWS Route 477).

The proposed action would pose no known risk to public health or safety. Based on the Section 106 consultation and review, the proposed action will not affect sites, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would it likely cause any loss or destruction of significant scientific, cultural, or historic resources.

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

Short-term impacts

Short-term impacts on the Refuge's purpose include temporary disturbance to soils and vegetation, equipment noise, and a modified viewscape due to construction equipment in the area. These impacts will only be present during the construction phase and will not impact most visitors, due to the construction taking place away from public trails.

Long-term impacts

The proposed project should not have any long-term negative impacts to the mission or purpose of the Refuge.

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 14 days from (insert date) to (insert date). The public will be made

aware of this opportunity to comment through the refuge website and the electronic documents will also be made available on the website. Concerns expressed during the public comment period will be addressed in the final Compatibility Determination and will be retained in the administrative record.

Determination

Using sound professional judgment (603 FW 2.6U and 2.11A), I have determined that issuance of the proposed DOE utility corridor ROW permit is a compatible use of the Rocky Flats National Wildlife Refuge. This use will not materially interfere or detract from or interfere from the purposes of the Rocky Flats National Wildlife Refuge and/or the mission of the National Wildlife Refuge System.

Stipulations Necessary to Ensure Compatibility

1. Consistent with Title 50, Part 29 of the Code of Federal Regulations, the Service's Division of Realty will issue the ROW Permit. This permit includes the legal description and required terms and conditions for the permit. Conditions outlined in the right-of-way agreement must be adhered to, in order to ensure compatibility. Any ROW associated activity will require issuance of a special use permit which will address the scope and limitations of activity. DOE shall provide funding to support review and issuance of the right-of-way permit;
2. Access to the ROW by DOE and its agents will be limited to existing roadways. DOE and its agents will notify USFWS 24 hours prior to accessing the pumphouse for general maintenance and operations;
3. DOE will maintain the utility corridor. This includes maintenance of the Service's current boundary road (FWS Route 477), access road to pumphouse (FWS Route 416), and includes management of any noxious weeds in this corridor;
4. The permittee will not store anything in the ROW;
5. DOE agrees to use its best efforts, in good faith, to provide the Service access to this water supply in emergency situations;
6. A stormwater management plan will be prepared and implemented during periods of construction;
7. Any activity that will require removal or disruption of surface vegetation to include digging or tree removal will require approval and proper permitting;
8. The permittee will be required to restore construction impacts using native grass and wetland seed and will be required to monitor and treat invasive plant species for a period of five (5) years;
9. Following the ROW permit term, the permittee will remove all infrastructure (including powerlines and pumphouse) and restore construction impacts using native grass and wetland seed, and will be required to monitor and treat invasive plant species for a period of five (5) years;
10. The permittee will be required to utilize best management practices, including Avian Power Line Interaction Committee guidelines (APLIC 2006, 2012) to reduce and mitigate these risks;
11. The permittee will report any bird fatality/injury resulting from the new transmission lines into the Service's Bird Fatality/Injury Reporting Program;
12. Refuge regulations will be enforced. The U.S. Department of Energy, and its designated agents, shall be responsible for all actions associated with the operation and maintenance of the ROW.

Justification

The proposed ROW is located on the extreme western boundary of the Refuge where industrial activities are taking place on adjacent private land. Lands on the Refuge where the ROW is located are disturbed by previous mining activities. Approximately one mile of this corridor is already in use by the NWTC as a utility ROW for an electrical line. The ongoing partnership with the NWTC will benefit the Refuge and is consistent with the Refuge's purposes to provide opportunities for compatible scientific research and managing public safety.

Signature of Determination

Approved by:

David Lucas, Refuge Manager
U.S. Fish and Wildlife Service
Colorado Front Range National Wildlife Refuge Complex

Date

Signature of Concurrence

Concurrence:

Stacy Armitage, Assistant Regional Director Refuges
U.S. Fish and Wildlife Service
National Wildlife Refuge System

Date

Mandatory Reevaluation Date

Mandatory 10-year reevaluation date: Not applicable (47-year permit)

Literature Cited/References

- [APLIC] Avian Power Line Interaction Committee. 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA.
- _____. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC. Washington, D.C.
- [DOE] U.S. Department of Energy. 2022. Final Environmental Assessment and Wetlands Assessment: Flatirons Campus Water System Project, Jefferson County, Colorado. DOE/EA-2171.
- _____. 2022. Finding of No Significant Impact and Wetland Statement Findings: Environmental Assessment for the Flatirons Campus Water System Project, Jefferson County, Colorado. DOE/EA-2171.
- ERO Resources, Inc. 2018. Cultural Resource Survey National Renewable Energy Laboratory National Wind Technology Center 115kV Transmission Line and Switching Station Jefferson County, Colorado. Prepared for: The Alliance for Sustainable Energy and under the supervision of Sean Larmore (Permit No. 18-73810). September 2018.
- [FWS] U.S. Fish and Wildlife Service. 2004. Final Comprehensive Conservation Plan and Environmental Impact Statement. Division of Refuge Planning. Lakewood, CO.
- _____. 2005. Comprehensive Conservation Plan for the Rocky Flats National Wildlife Refuge. Division of Refuge Planning. Lakewood, CO.
- _____. 2019. Environmental Assessment: Utility Corridor Right-of-Way Application, Jefferson County, Colorado. U.S. Department of the Interior, Fish and Wildlife Service, Rocky Flats National Wildlife Refuge. ii, 124 p.
- Pinyon Environmental, Inc. 2018. Environmental Review: National Wind Technology Center Transmission Line Southeast of the State Highway 93 and 128 Intersection Jefferson County, CO. Prepared for U.S. Department of Energy (Pinyon Project No. I 682601 Task 8006). October 4, 2018.

Figure(s)

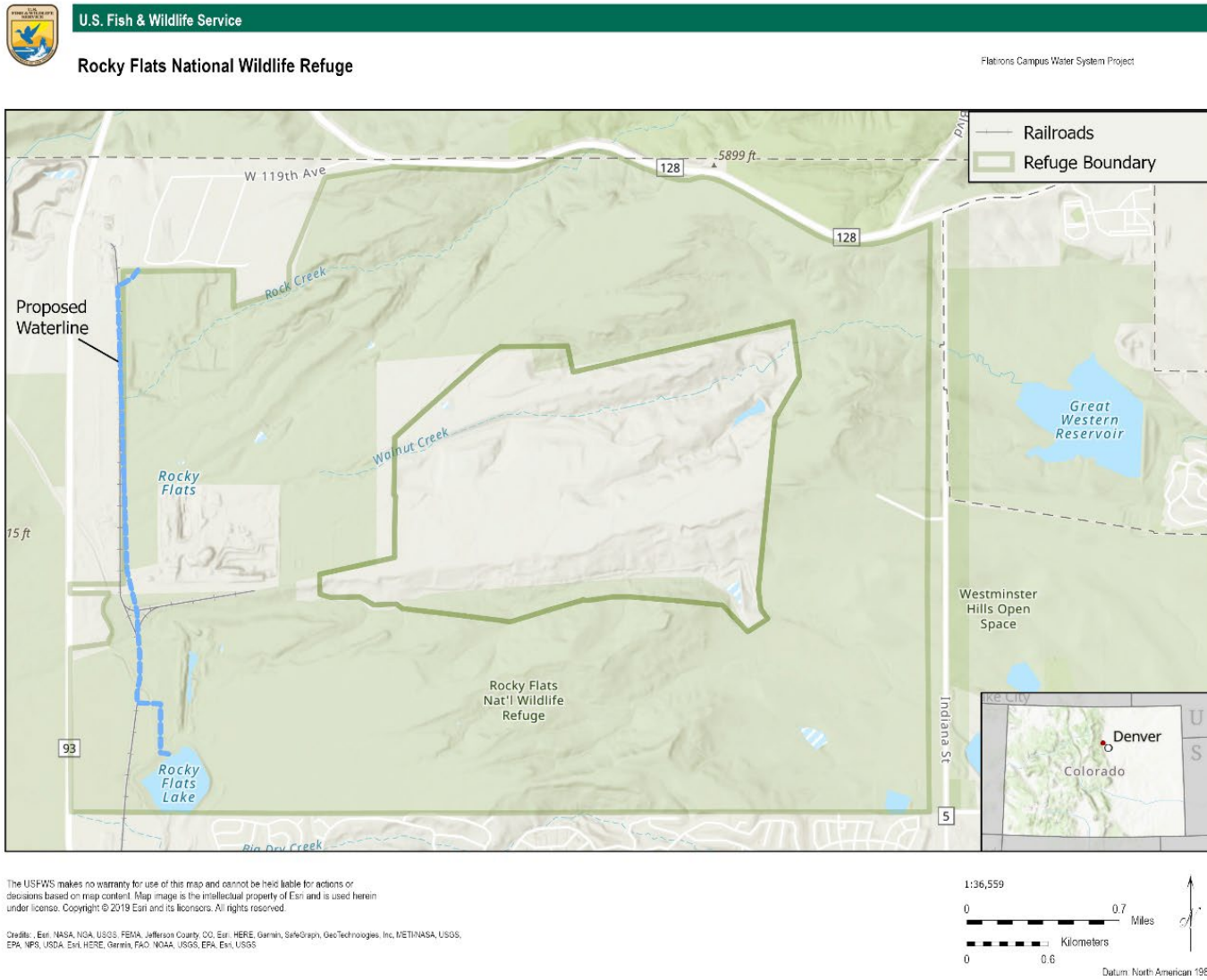
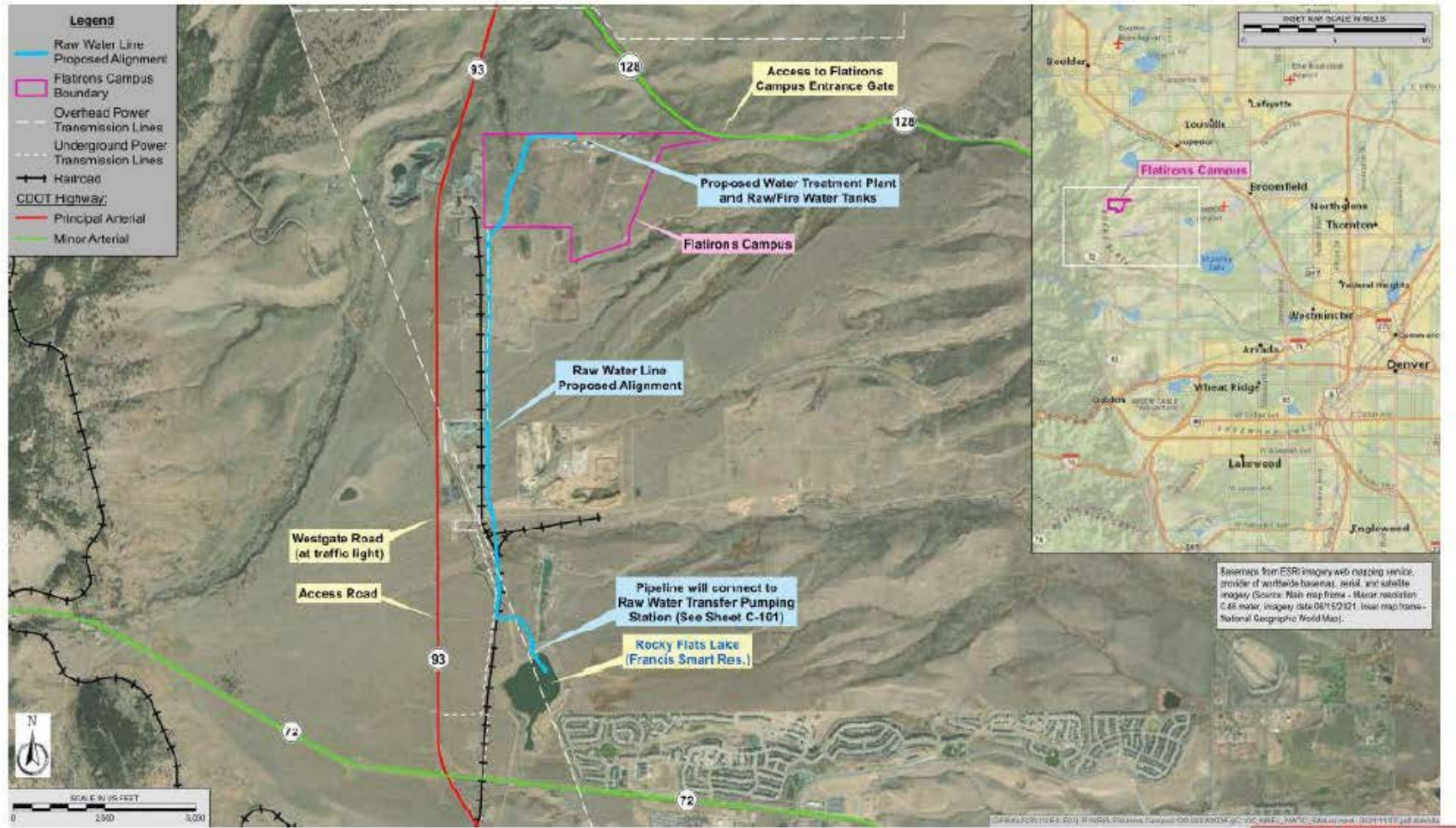


Figure 1. Location of the proposed project within the Rocky Flats National Wildlife Refuge.



Source: DOE 2021a.

Figure 1-2. Proposed Water Pipeline Route from Smart Reservoir to the FC

Figure 2. Path of the proposed water pipeline relative to surrounding infrastructure. Figure taken from: DOE 2022a.

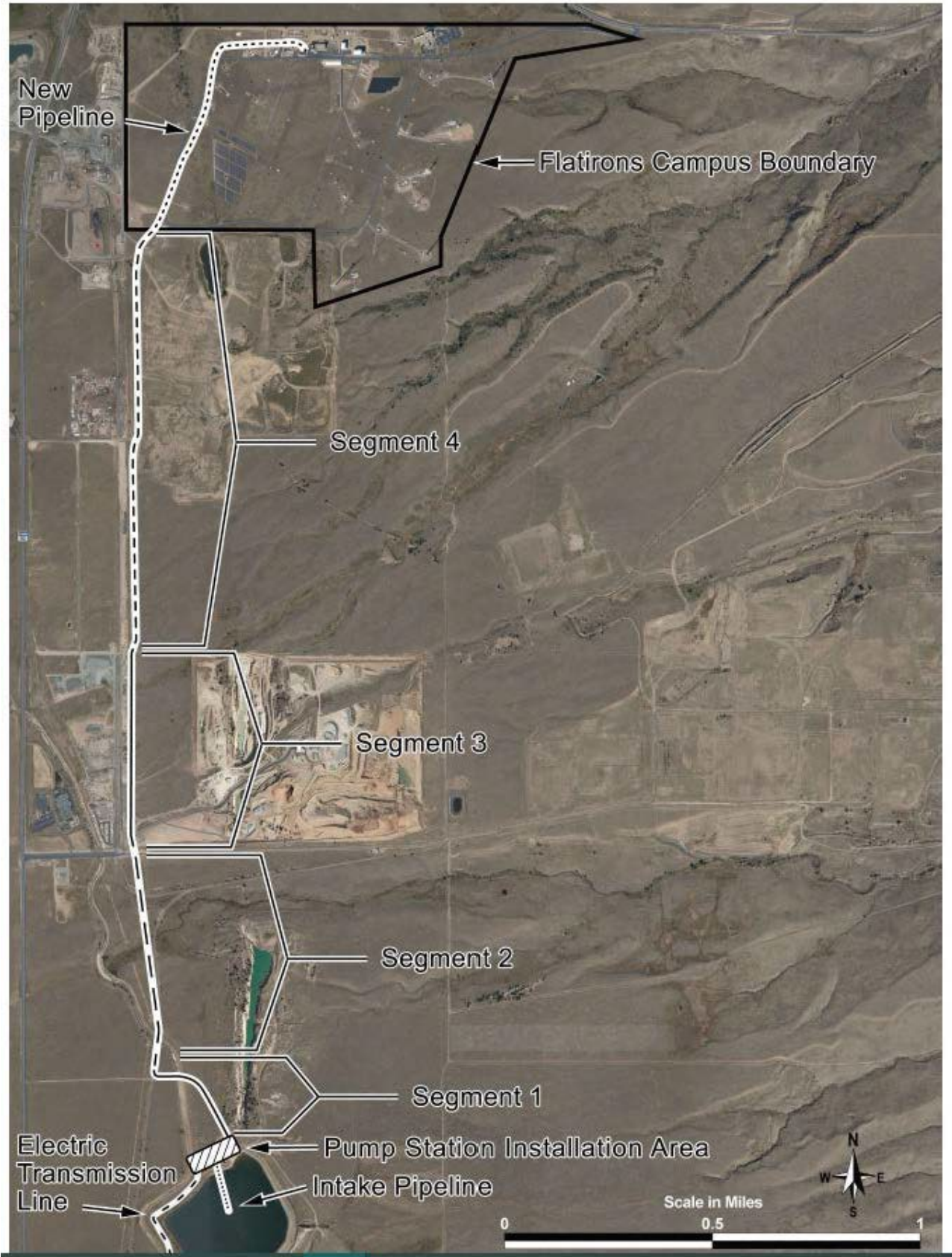


Figure 3. Proposed infrastructure for the water pipeline project. Figure taken from: DOE 2022a.

