

Environmental Impact Assessment

High Voltage Transmission Line Project

Project Description

The proposed 345 kV transmission line will span 85 miles from the Johnson Substation to the Anderson Switching Station, enhancing grid reliability and supporting renewable energy integration. The project includes 187 transmission structures, two switching stations, and associated access roads.

Environmental Impact Summary

Environmental Factor	Impact Level	Mitigation Measures
Wildlife Habitat	Low-Moderate	Seasonal construction restrictions
Wetlands	Minimal	Avoid/minimize disturbance
Cultural Resources	Low	Archaeological surveys completed
Air Quality	Temporary	Dust control during construction
Noise	Low	Equipment noise limits enforced
Visual Impact	Moderate	Structure design minimization
Agricultural Land	Temporary	Restoration after construction
Water Resources	Minimal	Erosion and sedimentation controls

Environmental Monitoring Program

A comprehensive environmental monitoring program will be implemented throughout construction and operation phases:

Pre-Construction Phase:

- Biological surveys during spring and fall migration periods
- Soil and groundwater quality baseline establishment
- Cultural resource field investigations
- Public consultation and stakeholder engagement

Construction Phase:

- Daily environmental compliance inspections
- Erosion and sediment control monitoring
- Noise level measurements at sensitive receptors
- Wildlife mortality reporting and adaptive management

Operational Phase:

- Annual vegetation monitoring for ROW maintenance
- Bird and bat collision monitoring (first 3 years)
- Structure inspection and maintenance scheduling
- Long-term visual impact assessment