

# Permitting and Environmental Studies



## Raptor Migration Survey

Documents species composition and flight patterns of migrating raptors passing through or in the vicinity of the Project area. Surveys typically are performed in the spring and fall.



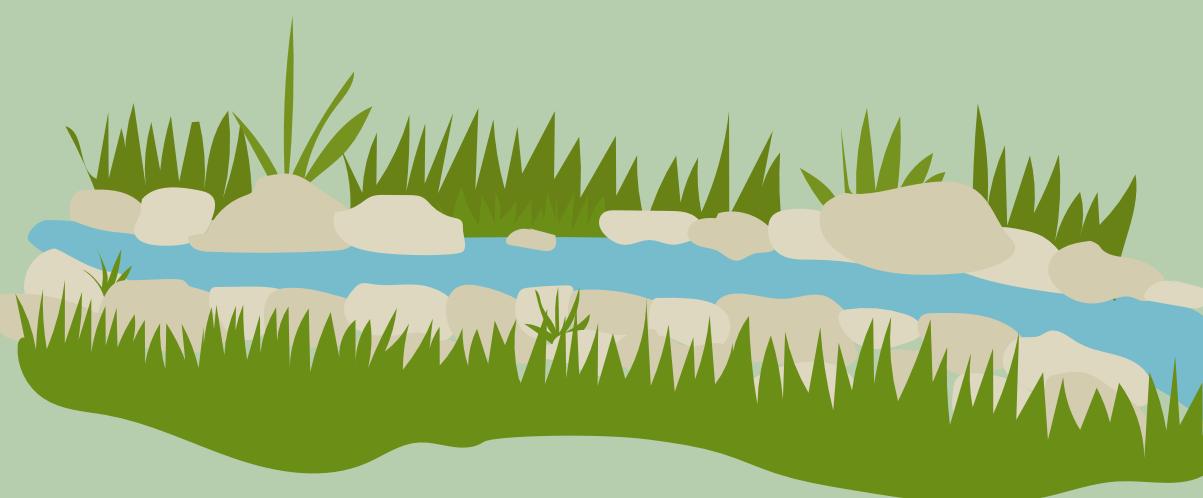
## Breeding Bird Survey

Documents species composition and use of the Project area by breeding birds. Surveys typically are performed at locations throughout the project area over multiple days in the spring and summer.



## Rare/Threatened/Endangered Plants Survey

Documents the presence or absence of rare, threatened, endangered plants potentially occurring within the anticipated limits of disturbance and immediate vicinity. Surveys are seasonally specific, depending on types of plants that are being surveyed.



## Wetland/Waterbody Delineation

Wetlands and waterbodies will be mapped within the estimated limits of disturbance of the project. A detailed streams assessment also will be performed to document stream characteristics.



## Bat Survey

Documents site specific information on bat use of the project area. These surveys document bat presence and activity within the Project site and record and identify the potential use of the site by protected bat species.



## Engineering Design

Utilizing site specific information and collected data, the project will be designed in accordance with applicable stormwater management guidelines. The Stormwater Management Program provides oversight and technical assistance to ensure proper design and construction of the project to minimize the adverse impacts of stormwater runoff and flooding.



## Archaeological Survey

Survey to document any archaeological or similar sensitive resources located within the limits of disturbance of the project.



## Visual Assessment

Assess the visibility of the project elements within the local communities. Typically includes a detailed analysis of the resources within the project vicinity, mapping of where the project would be visible and not visible, and computer generated simulations of what the project would look like from various locations throughout the project vicinity.



## Architectural/Historic Structures Survey

Documents architectural resources of significance within close proximity to the project. Survey would identify any/all structures 50 years of age or older and structures listed or eligible for listing on the National Register of Historic Places.

## Sound Assessment

Analysis of sound anticipated from the project.

## Shadow Assessment

Predicts locations and timing of shadows being cast from turbines on surrounding resources.