

RARE, THREATENED AND ENDANGERED SPECIES

301 US 301 Project Development



What Are RTEs?

- Rare, threatened, and endangered (RTE) species are wildlife species that are in danger of extinction. Federal and State RTE species likely exist in the US 301 project area.
- RTE species are a critical part of the project natural resources analysis. Potential effects to species and their habitat must be considered in project decision making.

Important Regulations

Endangered Species Act

- ▶ The Endangered Species Act regulates actions that may result in an incidental "taking" of a listed species or adversely affect its habitat, but does not prohibit such actions unless they result in jeopardy to the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat.
- ▶ Currently, 632 endangered species and 190 threatened species are protected and include birds, insects, fish, reptiles, mammals, crustaceans, flowers, grasses, and trees.
- ▶ The law provides regulations for the conservation of threatened and endangered plants and animals and the habitats in which they are found.

Delaware Regulations

- ▶ Title 7 of the Annotated Code of Delaware prohibits the importation, transportation, possession, or sale of any part of an endangered species of fish or wildlife.
- ▶ In addition to federal species, DNREC maintains a list of state rare, threatened and endangered species and adverse impacts to these species are discouraged.

National Environmental Policy Act (NEPA)

- ▶ NEPA requires a fair and thorough evaluation of all project alternatives and their associated impacts during the planning process. Impacts to rare, threatened and endangered species and their habitats are part of this process.

Identification and Evaluations

- DelDOT has performed extensive field studies to identify whether RTE species or their potential habitat exist in the project area.
- DelDOT is working closely with DNREC and the US Fish and Wildlife Service and has identified RTE species that likely exist within the project area.

RTE Species Not Likely to be Affected by the US 301 Project

Bald Eagle (*Haliaeetus leucocephalus*)

- ▶ The federal protection strategy for the bald eagle protects active bald eagle nests from disturbance. DNREC conducts annual bald eagle nesting surveys and monitors the location of most nests. DNREC information indicates that the retained alternatives will not affect any known bald eagle nests.



State Species

- ▶ DNREC identified the potential presence of Delaware state rare species within the project area, listed in the table below.
- ▶ Surveys were not required or conducted to identify state listed species, however, the queen snake was identified during bog turtle surveys. While the species in the table all occur within the project area for at least one alternative, not all are within all the alternatives and DelDOT plans to do everything reasonably possible to avoid impacting these valuable natural resources.

Common Name	Scientific Name	Taxon	State Rank
Four-toed salamander	<i>Hemidactylium scutatum</i>	Amphibian	Extremely Rare
Queen snake	<i>Septemvittata regina</i>	Reptile	Extremely Rare
Great purple hairstreak	<i>Atlides halesus</i>	Insect	Extremely Rare
Blackbanded Sunfish	<i>Enneacanthus chaetodon</i>	Fish	Very Rare
Alewite floater	<i>Anodonta implicata</i>	Mussel	Extremely Rare
Mitchell's sedge	<i>Carex mitchelliana</i>	Plant	Very Rare
Yellow giant hyssop	<i>Agastache nepetoides</i>	Plant	Very Rare
Marsh marigold	<i>Caltha palustris</i>	Plant	Very Rare
Hairy woodrush	<i>Luzula acuminata</i>	Plant	Extremely Rare
Abruptly bent backed flatsedge	<i>Cyperus refractus</i>	Plant	Very Rare

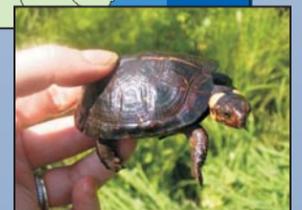
The Bog Turtle is Not Likely to be Adversely Affected by the US 301 Project

Bog Turtle (*Clemmys muhlenbergii*)

- ▶ The federally threatened bog turtle exists within New Castle County and potentially within the project area.
- ▶ Phase 1 investigations were conducted to identify bog turtle habitat in all the wetlands located within one half mile of the project area. Of the over 133 wetlands investigated 25 were determined to have habitat suitable for bog turtles.



- ▶ Phase II surveys consisting of intense visual presence/absence searching led by DNREC approved surveyors were conducted. 111 acres of habitat were searched following USFWS protocols. 2,831 person hours were spent searching for bog turtles. No bog turtles were found.
- ▶ Phase III, or trapping, surveys were conducted in addition to Phase II surveys on selected wetlands judged to have the highest probability to harbor bog turtles or where Phase II surveys might be compromised by dense vegetation. 66 acres of habitat were chosen for trapping by USFWS qualified trappers. 662 traps were deployed for over 20 days each. No bog turtles were captured.



- ▶ Historical records indicate bog turtles did exist in wetlands in the project area in the last 40 years. Since bog turtles can live to be over 40 year old and since negative Phase II/III results do not prove absence, certain wetlands within the project area are considered potentially occupied.
- ▶ A biological assessment will be conducted by the Project Team to determine the potential affects of the project on the bog turtle as part of the informal Section 7 consultation process. USFWS will review and must concur with the biological assessment to conclude the informal consultation. This assessment will be completed concurrently with the Final Environmental Impact Statement (FEIS). Initial consultation with USFWS indicates that the US 301 project can be designed in such a way that adverse effects on bog turtles are unlikely to occur.