

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 their 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, or 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

- DeIDOT has performed and will perform additional extensive field studies to identify whether RTE species or their potential habitat exist in the project area.
- DeIDOT 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 listed species within the project area, listed in the table below.
- ▶ None of these species have been observed in the project area during wetland delineations and field views. Two additional species, the very rare fern *Dryopteris cristata* and the rare sedge *Carex typhina* have been located during field views. While the state rare species listed occur within the project area on at least one alternative, not all are on all the alternatives and DeIDOT 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>Atilides 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

RTEs That May be 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. Bog turtles and their habitat are identified through a two-step process:
- ▶ Phase I surveys identify potential bog turtle habitat areas within existing wetland systems. These surveys describe soils, hydrology, and vegetation. Phase I investigations of 133 wetlands were conducted from April through October 2005. Potential habitat has been identified on all alternatives. A Phase I survey does not determine the presence of bog turtles.
- ▶ A Phase II survey will determine if bog turtles exist in the project area. The Phase II survey involves an intense presence/absence search conducted by a state-approved bog turtle surveyor. The survey must be conducted between April 15 and June 15 on optimal weather days. The survey team of three people spends 2 hours per acre of wetland during four survey visits.



- ▶ The US 301 Project's effects on the bog turtle can only be assessed following positive identification of their presence through a Phase II survey.

RTEs May Affect the US 301 Project Schedule

- Bog turtle surveys and impact analysis may affect the US 301 Project schedule and possibly design elements of the recommended Preferred Alternative. Bog turtles could also affect the choice of a Selected Alternative.
- A commitment to the public to recommend a Preferred Alternative in 2006 is very important to the Department. However, the decision on a Selected Alternative and circulating a Final Environmental Impact Statement (FEIS) cannot be finalized until after the Phase II bog turtle survey is completed in the Summer of 2006.
- Phase II surveys will be conducted between April 15 and June 15, 2006 for each of the Retained Alternatives. Should the Phase II survey confirm the presence of bog turtles in the project area, one or more of the following actions may be necessary beginning in the Summer of 2006:
 - ▶ Conduct studies necessary for the preparation of a Biological Assessment with the US Fish and Wildlife Service to determine project risk to bog turtles
 - ▶ Circulate a Supplemental Draft Environmental Impact Statement (DEIS)
 - ▶ Conduct additional Public Workshops and/or Hearings
 - ▶ Refine the Preferred Alternative to avoid impacts to bog turtle habitat before it is carried forward as a Selected Alternative
 - ▶ Drop the Preferred Alternative in favor of another alternative, if destruction or adverse modification to bog turtle habitat cannot be avoided.