

Questions and Answers **August 21, 2013**

Critical habitat for the endangered diamond darter (*Crystallaria cincotta*)

On July 26, 2013, the Service listed the diamond darter as endangered under the Endangered Species Act. The ESA requires the Service to consider whether there are areas of habitat essential to the species' conservation, called critical habitat. After extensive evaluation, the Service has designated a total of 123 river miles as critical habitat in West Virginia and Kentucky. The critical habitat includes areas in Kanawha and Clay counties, West Virginia, and in Edmonson, Hart and Green counties, Kentucky.

The diamond darter, a small member of the perch family named for its sparkling reflections, could once be found along the southern Appalachians from Ohio to Tennessee, but years of changes from dams and water quality degradation restricted this native fish to one stream along the Elk River in West Virginia. Fewer than 125 diamond darters have been collected in the river during the last 30 years.

1. What is the U.S. Fish and Wildlife Service announcing?

The Service has finalized the rule to designate critical habitat under the Endangered Species Act for the diamond darter. The final rule will take effect September 23, 2013, and can be found through the Regulations.gov (<http://www.regulations.gov>); search for Docket No. FWS-R5-ES-2013-0019.

The Service determined that a total of 123 river miles are essential to the diamond darters' conservation. This critical habitat includes 28 miles of occupied habitat in Kanawha and Clay counties, West Virginia, and 95 miles of unoccupied habitat in Edmonson, Hart and Green counties, Kentucky. In West Virginia, these areas are portions of the river that are publicly owned. In Kentucky, these areas are portions of the river that are mostly privately owned, with a large amount under conservation programs.

2. What is critical habitat, and whom does it affect?

Critical habitat designation does not set up a preserve, and it does not allow government or public access to private land. Critical habitat is a term in the Endangered Species Act that refers to specific geographic areas that contain features essential for the conservation of a threatened or endangered species. For the diamond darter, these features include large, warm water streams with pools and riffles, clean sand and gravel substrates, insects for food, and other elements. Designating critical habitat under the ESA is for the purposes of consulting with federal agencies, which have to make special efforts to protect aspects of these areas. It applies only to federal actions – activities carried out, funded or authorized by a federal agency.

Critical habitat provides for the conservation of threatened and endangered species in several ways. Specifying these essential areas helps federal agencies

determine where to use their authorities to benefit the species, as directed by the ESA. Critical habitat also helps other conservation partners, such as state and local governments, non-governmental organizations, and individuals, focus their conservation efforts. When the designation of critical habitat occurs near the time of listing, it provides early conservation planning guidance to bridge the gap until the Service can complete more thorough recovery planning.

Critical habitat can also provide significant regulatory protection for threatened and endangered species: the ESA requires that federal agencies consult with the Service to ensure actions they carry out, fund, or authorize are not likely to destroy or adversely modify critical habitat. The designation of critical habitat ensures that the federal government considers the effects of its actions on protected species and avoids or modifies those actions that are likely to destroy or adversely modify critical habitat.

3. What activities might be affected by the designation of critical habitat?

The darter's habitat is threatened by siltation, alteration of stream banks and bottoms, nutrient enrichment, and other water quality concerns.

These threats could be linked to the following categories of activities:

- (1) resource extraction (coal, gravel and rock mining, and oil and natural gas exploration) and utilities;
- (2) timber management, agriculture, and grazing;
- (3) other in-stream work (meaning work related to pipeline crossings, dams, culverts, etc.);
- (4) transportation (roads, highways, bridges); and
- (5) water quality/sewage management.

4. Does critical habitat provide more protection for listed species?

Listed species and their habitat are protected by the ESA whether or not they are in an area designated as critical habitat. The ESA provides protection for the darter and its habitat simply by listing it as endangered. Designating critical habitat adds further emphasis on protecting the elements that make that habitat essential to conserving the darter, such as very good water quality and extensive sand and gravel bars free of mud and silt. To understand the additional protection that critical habitat provides to an area, it is first necessary to understand the protection afforded to any endangered or threatened species, even if critical habitat is not designated for it.

The ESA forbids anyone to import, export, or engage in interstate or foreign sale of endangered and threatened animals and plants without a special permit. It also makes "take" illegal -- forbidding the killing, harming, harassing, pursuing, or removing the species from the wild. Harm includes habitat degradation that results in death or injury to individuals of the species.

The ESA requires that federal agencies conduct their activities in such a way as to conserve species. It also requires federal agencies to consult with the Service to

conserve listed species on their lands and to ensure that any activity they carry out, fund or authorize will not jeopardize the survival of a threatened or endangered species. This is known as consultation under section 7 of the ESA.

In consultations for species with critical habitat, federal agencies are required to ensure that their activities do not destroy or adversely modify critical habitat to the point that it can no longer serve its conservation role in the species' recovery. The greatest benefit of critical habitat occurs in areas that are currently unoccupied by the species, but are needed for its recovery. With critical habitat designations, these unoccupied areas are protected by the prohibition against destruction and adverse modification of critical habitat.

5. Could critical habitat keep a transportation, agriculture, mining or utility project from acquiring the necessary permits?

Because the diamond darter is already listed as endangered, the Service will consult with other federal agencies on actions they implement, fund or authorize to ensure those actions will not jeopardize the species.

Now that critical habitat has been designated, federal agencies must also consult with the Service to determine whether those actions will adversely modify the diamond darter's critical habitat.

There is a close relationship between the health of the diamond darter and the health of its habitat. Actions that have the potential to result in adverse modification to its critical habitat would also likely reduce the diamond darter's population size and ability to reproduce to the extent that it would jeopardize the species' likelihood of survival and recovery in the wild. Due to the close ties between the survival of the diamond darter and the quality of its habitat, the Service will likely request similar conservation efforts to protect both the species and its critical habitat.

It is possible that a transportation, agriculture, mining, or utility project that may impact critical habitat could be delayed until the federal agencies can consult on the project and work together to revise the project so it does not destroy or adversely modify the diamond darter's critical habitat or appreciably reduce the species' likelihood of survival and recovery in the wild.

6. How will critical habitat influence conservation efforts?

Critical habitat influences how federal agencies carry out, fund or authorize activities in those areas. Especially in these areas, the Service will consult with other federal agencies under the ESA (section 7) to protect the diamond darter and its critical habitat. The Service's recommendations could include minimizing disturbances to lands near the river and conducting project activities away from the river. These requests would be similar to those already requested in these areas for threatened and endangered mussels.

Critical habitat also provides a context for conserving the diamond darter, through

specifying areas that are essential to the diamond darter's recovery. If the species' listing is finalized, the Service will later develop a recovery plan for the darter. The plan could include activities such as regular monitoring of populations, working with partners to reduce threats to its habitat, or developing a captive-held population in the case that an event eliminates the current population.

7. How would a critical habitat designation affect my private land?

In general, a critical habitat designation has no impact on private landowners taking actions on their land that do not require federal funding or permits.

Critical habitat designations apply only to federal lands and to activities on private lands that are carried out, funded or authorized by a federal agency. Activities on private or state lands that are carried out, funded, or authorized by a federal agency, such as an activity authorized by a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act or timber and agriculture improvement practices funded by the USDA-Natural Resources Conservation Service, will be subject to the section 7 consultation process with the Service if those actions may affect critical habitat or a listed species.

Through this consultation, the Service would advise agencies on whether the permitted actions would likely jeopardize the continued existence of the species or adversely modify critical habitat. Federal actions not affecting critical habitat or otherwise affecting listed species or their habitat (e.g., suitable habitat outside of critical habitat), and actions on non-federal lands that are not carried out, funded or authorized by a federal agency will not require section 7 consultation.

8. Will establishing critical habitat affect the local economy?

The Service is required to identify and analyze the potential economic impacts associated with designating critical habitat, which applies to federal lands or federally funded or permitted activities on private lands.

On March 29, 2013, the Service announced the availability of the draft economic analysis of the proposed critical habitat designation. The analysis looked at foreseeable costs over 20 years for the Service, other federal or state agencies, companies, organizations and small businesses, which for the diamond darter could include small-scale logging operations, farms or private landowners.

The analysis looked only at costs specifically related to critical habitat designation, meaning it does not analyze the baseline costs of protecting the diamond darter as endangered.

For the diamond darter, these costs are mostly the administrative costs of consulting with federal agencies to protect the diamond darter through avoiding destruction or adverse modification of its critical habitat. These costs may include, for example, the additional amount of staff time spent to further describe project effects on critical habitat. The costs stem from the requirement that federal agencies consult with the Service on the impacts to critical habitat from the

activities they carry out, fund or authorize.

Based on the best available information, including extensive discussions with stakeholders, the Service estimated that the designation would cost around \$800,000 over 20 years, or about \$70,000 annually, based on a 7 percent discount rate. Most of these costs are administrative and are borne by federal and state agencies, but some costs may be incurred by local governments and businesses.

Transportation activities are likely to be subject to the greatest incremental impacts at \$320,000 over the next 20 years, followed by timber management, agriculture, and grazing at \$260,000; resource extraction at \$150,000; other in-stream work at \$50,000; and water quality/sewage management at \$18,000 (present values over 20 years assuming a 7 percent discount rate).

More details on the methods used to generate these estimates, as well as the estimated impacts, are available in the economic analysis.

9. When an area is designated as critical habitat, are all human activities in the area prohibited?

No. The only activities prohibited in these areas are federal actions that are likely to result in destruction or adverse modification of the critical habitat. In these situations, the Service consults with federal agencies to support the recovery of species and their ecosystems. Consultations provide ways to implement recovery tasks by addressing threats to listed species that may result from federal agency programs and activities through a collaborative process.

For more information go to: <http://www.fws.gov/endangered/esa-library/pdf/consultations.pdf> and <http://www.fws.gov/endangered/what-we-do/critical-habitats-faq.html>.

10. Where I can find more information?

The final critical habitat rule publishes in the Federal Register on August 22, 2013, and will be available at www.regulations.gov, Docket # FWS–R5–ES–2013–0019, or on the Service's website at www.fws.gov/westvirginiafieldoffice/.