Endangered Species Act Protections Finalized for
Two Appalachian Crayfishes in Kentucky, Virginia and West Virginia

Biologists seek partners to conserve Guyandotte River, Big Sandy crayfishes

Just months after the U.S. Fish and Wildlife Service’s April 2015 proposal to protect the Big Sandy crayfish and Guyandotte River crayfish as endangered, the agency sent a crayfish expert into the central Appalachians to look for more.

The goal: to determine if the outlook for the two creatures was better than previous data indicated.

After combing hundreds of likely sites in the Big Sandy and Guyandotte River watersheds in Virginia, West Virginia, and Kentucky, the survey team from West Liberty University had mixed results. Based on analysis of these results, as well as peer review, public comment and other new information, the Service has determined that the Guyandotte River crayfish will be listed as endangered, and the Big Sandy crayfish as threatened under the Endangered Species Act.

“We are committed to working collaboratively with everyone, including other agencies, industry leaders, and conservation and recreation organizations, to conserve the Guyandotte River crayfish and the Big Sandy crayfish,” said John Schmidt, the Service’s West Virginia Field Office supervisor. “Actions that benefit these crayfishes ensure healthy streams for people, with cascading benefits to water quality and many other native wildlife, including sport fish.”

The team surveyed 71 likely sites in the Guyandotte River crayfish’s historical range in Wyoming County, West Virginia, confirming the crayfish in its last known location in Pinnacle Creek and discovering a new population in a separate stream, the Clear Fork. However, with only two known, isolated populations, and no new information indicating less pressing threats, Service biologists reaffirmed their conclusion that the species is in danger of extinction.

While still uncertain, the future looks less dire for the Big Sandy crayfish in the upper Big Sandy River watershed in Virginia, West Virginia and Kentucky. The researchers visited 154 likely sites in the watershed, confirmed the crayfish at most previously known locations, and discovered low numbers of the species in a new site. Additional new reports from Virginia suggest that the crayfish is better
distributed in some streams with high quality habitat. While the crayfish has reduced populations and range, the best available information on threats indicates the species’ status is threatened, rather than endangered.

The Big Sandy crayfish’s status as threatened allows the Service to consider tailoring Endangered Species Act (ESA) protections to those that are most important for the species’ conservation. The agency plans to draft another rule under section 4(d) of the ESA that would incentivize proactive conservation efforts such as habitat restoration and the use of best management practices for forestry. Streamlining ESA compliance for activities that implement recovery actions or reduce impacts can accelerate recovery while lessening restrictions for landowners. A proposed 4(d) rule would be made available for public comment.

The Guyandotte River and Big Sandy crayfishes, as well as other crayfish species, play an important role in healthy streams by recycling animal and plant matter and serving as food for other wildlife. Both species shelter beneath large, loose boulders in streams and rivers that typically have good water quality and low siltation. Ongoing erosion and sedimentation have made many streams within the crayfishes’ historical ranges unsuitable for their survival.

For the past 40 years, the ESA has been successful in preventing the extinction of more than 99 percent of listed species. In addition to providing regulatory protections, listing under the ESA supports improved coordination of conservation efforts, enhanced research programs and actions designed to recover listed species.

The ESA requires the Service to review the species’ range and identify areas that are essential for its conservation and may need special management or protection. These critical habitat designations have no impact on landowner activities that do not involve federal funding or require federal permits. The Service expects to propose critical habitat for both crayfishes for public review and comment later in 2016 after completing the required review of economic considerations.