KENK'S AMPHIPOD (*Stygobromus kenki*)

SPOTLIGHT SPECIES ACTION PLAN

Prepared by:

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for:

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Approved:

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Date

Action Plan
KENK'S AMPHIPOD
A U.S. Fish and Wildlife Service Spotlight Species

Common Name: Kenk's amphipod
Scientific Name: *Stygobromus kenki*
Lead Region: Region 5
Lead Field Office: Chesapeake Bay Field Office (CBFO)

Species Information:
Status: Candidate
Listing Priority Number: 8
Candidate Assessment Form: October 22, 2010
Most Recent 5-year Review: NA
Other: None

Background:

The U.S. Fish and Wildlife Service (FWS) funded a status survey in Maryland for the Kenk's amphipod in December 2005. Also, the National Park Service (NPS) funded several surveys in Washington, DC, and northern Virginia. The species is currently known only from five spring/seep sites in Washington, DC, and Montgomery County, Maryland. Four of these sites are within the Rock Creek drainage: three are in Rock Creek Park in Washington, DC, and the fourth is in Montgomery County, Maryland, close to the District line. The fifth site is within the Northwest Branch drainage in Montgomery County, Maryland, approximately 3 miles from the District line. In terms of land ownership, the current known range of the amphipod is limited to NPS land and private property (one site) along approximately 4 linear miles of Rock Creek and to a single eastward site on county parkland adjacent to Northwest Branch.

With only five small sites within a relatively small geographic area, this species is highly vulnerable to threats to the hydrology and water quality of its spring/seep habitats.

Population Objective Goal:

The 5-year goal of this Spotlight Species Action Plan is to reduce the risk of extinction due to habitat-based threats and maintain persistence of the Kenk's amphipod at all five population sites.

There is recent evidence of survival of the species at each of the five sites referred to under "Current Range/Distribution" (Feller 2005, pp. 5-7, and Culver and Sereg 2004,

p.18). However, there are no reliable population numbers for these sites because of the difficulty of sampling them and the uncertainty concerning what portion of the population remains out of reach in the groundwater supplying the seep/springs at these sites (Feller 2005, p.10). The species is typically found in small numbers and then only when groundwater levels are high and springs are flowing freely. Given the small size of the shallow groundwater aquifers occupied by this species and the known characteristics of subterranean invertebrates, it is probable that each of the five populations is small (Hutchins and Culver 2008, pp. 3-6).

Measures:

Within the 5-year planning horizon, the FWS will use the following measures to gauge progress toward reaching the goal of this action plan:

- The Kenk's amphipod's long-term conservation needs will be ascertained either in terms of listing or in terms of candidate conservation measures that may offset the need for listing.

- In cooperation with the NPS, the three known Kenk's amphipod sites on NPS land will be protected from acute threats to water quality and hydrology within the Rock Creek watershed. A buffer will be maintained around each of the springs/seeps and associated spring runs where recreational activities, construction activities including new trails, and other harmful activities are prohibited or discouraged.

The actions listed below will help protect Kenk's amphipod habitat on NPS land. Similar protective measures may be possible in the future for the site on Montgomery County parkland, where the threats appear somewhat less serious.

Urgent Actions:

1) Finalize the candidate assessment. (*Completed: Designated a candidate with publication of the CNOR in November 2010*)

2) In cooperation with the NPS, identify the catchment basin for each of the springs/seeps supporting this species.

3) With the cooperation of NPS, limit pesticide use (to chemicals not toxic to crustaceans) and recreation and avoid/prohibit forest clearing and new construction, new trails, road salting, and other harmful activities within these catchment areas. This may involve development of a Kenk's amphipod management plan for Rock Creek Park.

Role of FWS programs:

The actions listed above will be primarily conducted through the Candidate Conservation and Listing programs at the CBFO with the support of the FWS's regional and

Washington offices. The CBFO will engage in Section 7 consultations and implement recovery actions should the species become listed as threatened or endangered.

Role of other agencies:

The NPS is the agency responsible for managing natural resources within Rock Creek Park in Washington, DC. The NPS uses proactive and research-based approaches to protect the natural resources in Rock Creek Park, including, among other areas of emphasis, habitat restoration, mitigating human impacts, and wildlife management. The support and cooperation of NPS will be critical in working to reduce habitat-based threats.