

WILDEARTH GUARDIANS

March 4, 2008

Public Comments Processing
Attn: RIN 1018-AV25
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, Suite 222
Arlington, VA 22203

VIA Federal eRulemaking Portal & Certified Mail

**Re: Comments on Critical Habitat Proposal & Draft Economic Analysis for
the Devils River Minnow**

Dear U.S. Fish and Wildlife Service staff:

We are writing in response to the U.S. Fish and Wildlife Service's ("Service") reopening of the comment period and release of a Draft Economic Analysis ("DEA") pertaining to the proposal to designate critical habitat for the Devils River minnow (*Dionda diaboli*).¹

Estimates of the cost from a critical habitat designation for the Devils River minnow are very low: those costs accruing solely from the designation are \$57,100 undiscounted dollars over the next 20 years. See DEA at p. ES-3. With low projected costs and the severe imperilment of this fish, it is important that the Service not exclude any areas from designation, either on the basis that 1) the economic costs outweigh the benefits of inclusion (under ESA Section 4(b)(2), 16 U.S.C. § 1533(b)(2)); or 2) special management or protection is not required (under ESA Section 3(5)(A), 16 U.S.C. § 1532(5)(A)).

Include all suitable habitat in the final critical habitat designation

As we noted in our previous comments on this proposal, Las Moras and Sycamore creeks should be included in the final critical habitat designation.² The Service indicated in its February 7, 2008 notice that peer reviewers also advocated inclusion of these areas. 73 Fed. Reg. 7237, 7239. We therefore again urge the Service to include Las Moras and Sycamore creeks in the final designation to protect these unoccupied but suitable areas.

¹Forest Guardians, the Center for Biological Diversity, and Save Our Springs Alliance previously submitted timely comments, dated October 1, 2007, to the U.S. Fish and Wildlife Service regarding the Devils River minnow critical habitat proposal. We incorporate those comments in their entirety, by reference. Forest Guardians merged with Sinapu to become WildEarth Guardians in January 2008.

²*Id.* at p. 3.

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We are concerned that the Service is not committed to recovering the Devils River minnow in these areas. The DEA states, “Despite threats to water quality in Las Moras Creek, no actions have occurred or are forecast to occur to preserve or restore water quality in the creek to benefit the DRM [Devils River minnow].” See DEA at p. 2-2. It further states that reintroduction of the minnow into Sycamore and Las Moras creeks would not occur until an agreement is reached between the Service and local communities. *Id.* at p. 5-3. However, the Service is obligated to recover this species and that requires restoration of the species to these unoccupied areas given the narrowness of its current range and its vulnerability within that range.

The conservation value of critical habitat designation

Throughout the DEA, the Service erroneously maintains that ESA Section 7 consultations under the jeopardy standard (with no critical habitat) and the adverse modification standard (with critical habitat) are not likely to have significantly different outcomes. The analysis states that, “no additional conservation measures are expected in the next 20 years due to the designation of critical habitat.” See DEA at p. ES-3.³ This is not accurate, as the jeopardy standard does not protect unoccupied habitat. Moreover, destruction of occupied habitat may not meet the jeopardy standard if the Service determines that the destruction of a single population (or portion of a population) will not cause the species to go extinct or thwart its recovery. Alternatively, within critical habitat, the destruction of a single population or a portion thereof would certainly violate the ESA’s prohibition on adverse modification. 16 U.S.C. § 1536(a)(2).

The Service has separated baseline economic costs that have and will occur regardless of critical habitat designation from those costs solely attributable to critical habitat (which are called “incremental impacts”). The costs that are solely attributable to critical habitat designation total only \$57,100 (in undiscounted dollars over the next 20 years). *Id.* at pp. ES-3 to ES-4. However, we are concerned that the reason this estimate is so low is because the Service is dismissing the conservation value of critical habitat designation for the Devils River minnow.

Critical habitat could help protect occupied and unoccupied minnow habitat in various ways. Examples of ESA consultation that have already occurred for the minnow include informal consultation regarding the San Felipe Spring Water Treatment Plant Project (See DEA at p. 2-3) and formal consultation over the Texas Department of Transportation’s Bedell Street Bridge Replacement Project (*Id.* at p. 2-6). Several federal agencies will be involved in activities or permitting processes within the range of the Devils River minnow, and ESA consultation may therefore be required. Examples include the Department of Defense (Laughlin Air Force Base is a major water user within the minnow’s range), the Army Corps of Engineers (for Clean Water Act permits), and the Federal Emergency Management Agency (for floodplain emergencies and floodplain alterations). In addition, if state agencies, private landowners, or The Nature

³Likewise, the analysis states, “additional conservation efforts to avoid adverse modification of critical habitat, over and above efforts to limit take or jeopardy of the DRM [Devils River minnow] are not expected in occupied stream habitat.” See DEA at p. 2-8.

Conservancy (TNC) pursue federal funding in ways which may affect the minnow or if they seek incidental take permits, ESA consultation would be required. The stronger standard of no adverse modification would be applied where critical habitat is designated.

We discussed in our previous comments the many threats that the minnow faces and how conservation plans cannot substitute for critical habitat designation: most important are serious threats to sufficient water quantity, impairment of water quality, and non-native vegetation. See Forest Guardians et al. 2007 at pp. 5-10. We add to our concerns the occurrence of oil and gas drilling within TNC's conservation easements along the Devils River. See DEA at p. 5-2. Given the failure of these easements to prohibit oil and gas drilling, the Service should not exclude these areas nor can it justify exclusion under ESA Section 3(5)(A).

Economic benefits from critical habitat designation

While the DEA notes that benefits can accrue from critical habitat designation, it states that, "Rather than rely on economic measures, the Service believes that the direct benefits of the Proposed Rule are best expressed in biological terms that can be weighed against the expected cost impacts of the rulemaking." See DEA at p. 1-16, emphasis in the original. It further states that the economic analysis attempts to estimate net economic costs. *Id.* at 1-17. However, given the Service's stated inability to estimate economic benefits and consequent inability to determine net economic costs, the Service cannot invoke ESA Section 4(b)(2) to exclude any areas from its final critical habitat designation for the Devils River minnow. This is underscored by the Service's admission that the DEA "may have overestimated the potential economic impacts of the critical habitat designation." 73 Fed. Reg. 7237, 7240.

Benefits that should be considered in the DEA include the value of protecting rivers and streams to neighboring communities and the value of ecosystem services. For example, improving water quality and eliminating non-native species are necessary to conserve the minnow and will also greatly benefit human communities. While the estimated costs of these activities are only \$206,000 and \$63,300, respectively (in undiscounted dollars over the next 20 years) (See DEA a p. ES-3), the economic benefits to neighboring communities will likely be quite large. We note that the Service did not include the costs of these activities in its estimate of those costs solely attributable to critical habitat designation.

Another benefit from species protection, which has been quantified by economists, derives from ecosystem services provided by intact natural systems. Ecosystem services include maintenance of the atmosphere's gaseous composition. The globe's forests and other ecosystems regulate these gases and the climate by recycling rainfall. As forests shrink, a subsequent drying of the climate harms agricultural production. In other regions, modifications of climate occur when semi-arid regions are desertified. Other benefits provided by healthy natural systems and their components include maintaining and generating soils; nourishing agricultural plants and trees by microorganisms; decomposing organic matter; waste disposal; nitrogen fixation and nutrient cycling;

bioremediation of chemicals; biocontrol of species that attack crops, forests and domesticated animals; pollination by birds, bees, butterflies, bats and others; perennial cereal grains; and biotechnology.⁴

Benefits provided from biodiversity and ecosystem services in the US are estimated at \$300 billion annually⁵ and global ecosystem services are valued at \$33 trillion annually.⁶ Moreover, most of these services are so intricate and are provided on such a massive scale that it is not feasible to replicate them, even where scientists possess the knowledge to do so.⁷ The tremendous value of ecosystem services will decline if the erosion of biodiversity continues.⁸ Further, there may be a global explosion of pests and pathogens, as they can be released by degraded natural controls.⁹ The environmental and economic costs of exotic species in the U.S. is estimated at \$137 billion per year,¹⁰ a figure that does not include ecological degradation caused by livestock ranching.

In 1978, the US Supreme Court indicated that the value of an endangered species is “incalculable.” There is no way to put a pricetag on the importance of preserving threads in the tapestry of life. The Supreme Court’s decision enjoined to completion of the \$100 million Tellico dam to protect a three-inch species of perch, the snail darter, and its critical habitat. That decision has never been overturned. While Congress responded by amending the ESA to provide for an Endangered Species Committee, which would review such impasses, when this committee subsequently considered the Tellico Dam project, they rejected an exemption from the ESA to allow for the completion of the dam, on the basis that it was economically non-beneficial.

The lessons Tellico teach us are not only that endangered species possess incalculable value, as we cannot get them back once they are gone, but that endangered species can redflag economic actions that, under a more careful analysis, are found to be economically as well as ecologically unsound. To bring our inquiry back to the case at hand, throughout the economic analysis, economic efficiency is equated with social welfare. This is orthodox economist parlance. However, scholars are questioning this assumption that social welfare and the public interest is served by a continued economic growth trajectory. This “growth is good” mentality results in negative externalities to the environment, which will result in degraded ecosystems, which then cannot bestow ecosystem services which benefit humans; perverse subsidies to industries such as oil and gas and livestock grazing, which amount to the government contributing to ecological

⁴Ehrlich, Paul R., and E.O. Wilson. 1991. “Biodiversity studies: science and policy.” *Science* 253:758-62; and Pimentel, David, Christa Wilson, Christine McCullum, Rachel Huang, Paulette Dwen, Jessica Flack, Quynh Tran, Tamara Saltman, and Barbara Cliff. 1997. “Economic and environmental benefits of biodiversity.” *BioScience* 47(11):747-757.

⁵Pimentel et al. 1997.

⁶Costanza, R., R. d’Arge, R. de Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R. V. O’Neill, J. Paruelo, R.G. Gaskin, P. Sutton, and M. van den Belt. 1997. “The value of the world’s ecosystem services and natural capital.” *Nature* 387:253-260.

⁷Ehrlich and Wilson 1991.

⁸*Id.*

⁹Morris, D.W. and L. Heidinga. 1997. “Balancing the books on biodiversity.” *Conservation Biology* 11:287-289.

¹⁰Pimentel et al. 1997.

degradation by financial support of economic activities which harm the natural environment, harm the human quality of life, and incur clean-up costs which must be shouldered by taxpayers.¹¹


Climate change impacts

The critical habitat proposal and DEA fail to fully address the threat of climate change to the Devils River minnow, despite the fact that its southwestern aquatic habitat is in extreme peril from the climate crisis. Climate change predictions of decreased snowpack, erratic weather, and prolonged droughts will cause significant problems to aquatic species, including the Devils River minnow.¹² Critical habitat designation would provide an increased ability of the Service to adjust anthropogenic threats in order to maximize the Devils River minnow's chances of surviving the climate crisis.

Conclusion

We again urge you to designate critical habitat for the Devils River minnow that includes all suitable habitat, including both occupied and unoccupied habitat, and a broader lateral extent (beyond the normal wetted stream channel and immediate streamside vegetation). This action will not cause significant economic costs. But it will provide significant benefits – in the form of providing the Devils River minnow increased hope of survival and recovery – and also protecting the imperiled southwestern rivers, streams, and watersheds on which this imperiled fish depends.

Sincerely,



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¹¹Brian Czech, *Shoveling Fuel for a Runaway Train* (2000), E.O. Wilson, *The Future of Life* (2001), and James Howard Kunstler, *The Geography of Nowhere* (1993).

¹²Discussion of climate change impacts in the southwest can be found at: Intergovernmental Panel on Climate Change. 2001. IPCC Special Report on The Regional Impacts of Climate Change An Assessment of Vulnerability. See <http://www.grida.no/climate/ipcc/regional/index.htm>; U.S. Global Change Research Program. 2000. US National Assessment of the Potential Consequences of Climate Variability and Change. See Sector: Water Resources at <http://www.usgcrp.gov/usgcrp/nacc/water/default.htm>; Seager, R., M. Ting, I. Held, Y. Kushnir, J. Lu, G. Vecchi, H. Huang, N. Harnik, A. Leetmaa, N. Lau, C. Li, J. Velez, and N. Naik. 2007. Model projections of an imminent transition to a more arid climate in southwestern North America. *Science* 316: 1181-1184; Smith, S.J., A.M. Thomson, N.J. Rosenburf, R.C. Izaurrealde, R.A. Brown, and T.M.L. Wigley. 2005. Climate Change Impacts for the Conterminous USA: An Integrated Assessment - Part 1. Scenarios and Context. *Climatic Change* 69 (1): 7-25. Incorporated by reference.

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