

June 1, 2011

**DECISION MEMORANDUM FOR THE DIRECTOR**

**FROM:** Benjamin N. Tuggle, Regional Director, Southwest Region  
/s/ Acting Joy E. Nicholopoulos  
**CC:** Michelle Shaughnessy, Assistant Regional Director, Region 2  
**SUBJECT:** Recovery Planning for the Sinaloan Jaguarundi

**I. STATEMENT OF THE ISSUE**

This memorandum constitutes compliance with the September 17, 2010, settlement agreement with WildEarth Guardians (WEG) in WildEarth Guardians v. Salazar, No. H-09-1893 (S.D. Tex.). The U.S. Fish and Wildlife Service (Service) agreed to make a determination within nine months as to whether recovery planning would provide conservation benefit to the Sinaloan jaguarundi (*Herpailurus (=Felis) yagouarundi tolteca*). If the Service elects not to undertake recovery planning for a species, the species must be exempted through a determination by the Director. We have reviewed all the relevant information available and recommend that the Service formally exempt the Sinaloan jaguarundi from recovery planning.

**II. BACKGROUND**

Listing Status and History: The current entry for the Sinaloan jaguarundi in the October 1, 2010, re-publication of the List of Endangered and Threatened Wildlife and Plants (List) (50 CFR 17.1 5-83) states the following: scientific name as *Herpailurus (=Felis) yagouarundi tolteca*; historic range U.S.A. (AZ), Mexico; vertebrate population where endangered or threatened as "Entire." The Sinaloan jaguarundi was proposed for endangered status with three other subspecies of jaguarundi as the result of a request by the Fund for Animals that the Service recognize those species on the CITES appendices as endangered (September 26, 1975; 40 FR 44329-44333). The 1975 entry for *Felis yagouarundi tolteca* indicated that it was proposed to be endangered throughout its entire range, and its range was identified simply as "Mexico." The final listing was published June 14, 1976 (41 FR 24062-24067) and the entry remained the same. In the December 11, 1978 (43 FR 58030-58048), re-publication of the List, the entry for *Felis yagouarundi tolteca* indicated "entire" for "Portion of range where threatened or endangered," and "USA (Arizona), Mexico" for "Known Distribution." No explanation was provided in the FR document for this addition of Arizona.

On April 21, 1992, the Service made a negative 90-day finding (57 FR 14556-14557) on a petition submitted by Seymour Levy that requested delisting of the Sinaloan jaguarundi and removal of Arizona from historic range. Mr. Levy asserted that all reports of this subspecies in Arizona could be traced to one erroneous record (Little 1938). The Service responded that although no confirmed evidence of the subspecies' presence in Arizona existed, several other sight records by "reliable sources do provide reasonable evidence

that the jaguarundi may occur in Arizona.” The petition also referred to literature that suggested jaguarundi may be extremely difficult to detect and may occur in a variety of habitats.

Recent (post 1992) Information: Brown and Gonzalez (1999) analyzed sighting records, fossil and archeological records, and historical information and discussed their own field research on wild cat species in Sonora, which included interviews with 176 ranchers, vaqueros, hunters, trappers, and local residents. The authors concluded that the jaguarundi does not occur in Arizona, or in the neighboring state of Sonora in Mexico. They cite Armstrong et al. (1972) in noting the northernmost documented jaguarundi record for the Pacific slope of the Mexican cordillera is 15 miles NE of Choix, Sinaloa, more than 300 miles south of the United States/Sonora border. Subsequently, the Service contracted with Arizona Game and Fish Department (AGFD) scientists to evaluate all available sighting reports in Arizona and Sonora (Johnson 2011 – Attachment 1). Evaluations were based on a standardized protocol which adopted criteria developed by Tewes and Evert (1986) for ocelot (*Leopardus pardalis*) and jaguarundi sightings, and were modified by the AGFD for use in evaluating jaguar (*Panthera onca*) sightings. The report evaluates previous reports by Girmendonk (1994), Pruss (1999), and Grigione et al. (2007) as well as 3 additional records in AGFD files for a total of 71 records, and concludes that no occurrence records exist for Arizona or Sonora that can be assigned, objectively and with reasonable certainty, to the Sinaloan jaguarundi.

Numerous field studies have employed camera stations to detect wildlife, particularly feline species, in various areas throughout Arizona and Sonora, Mexico (Attachment 2). These studies have recorded ocelot and jaguar in Arizona and Mexico, and margay (*Leopardus wiedii*) in southern Sonora, but none of jaguarundi (C. López González 2011, pers. comm.). Likewise, images of cats or bears obtained through cameras or surveillance systems that are part of the Border Security mission are forwarded to the Service have not yielded images of jaguarundi (W. Lackner 2011, pers. comm.). In southeastern Arizona from 2001-2007, approximately 30,260 camera trap days yielded no records of jaguarundi (McCain and Childs 2008); nor did 9,400 trap days in 2010 in the same general area (J. McCallum 2011, pers. comm.). By comparison, in Chamela, Jalisco, from 1994-2001, 14,000 camera trap days yielded 3 photos of Jaguarundi (C. López González 2011, pers. comm.) and in Rancho Caracol, Tamaulipas, from 2009-2010, 15,874 camera trap days yielded 128 photos of jaguarundi (A. Caso 2011, pers. comm.).

The International Union for the Conservation of Nature’s red list of endangered species (Caso et al. 2008) classifies the jaguarundi as a Species of Least Concern, with a geographic range (for all subspecies) from Nuevo Leon, Mexico (northeastern limit) and western lowlands of Mexico, south through central Argentina. They have also adopted the taxonomic reclassification of the species as *Puma yaguarundi* per Johnson et al. (2006) and Eizirik (et al. 2008).

**III. ANALYSIS**

Evaluation of all available evidence suggests that the historic and current range of the jaguarundi is not only outside the United States, but outside of the adjoining state of Sonora in Mexico. The reason for the addition of Arizona to the historic range column in the List in 1978 has not been documented but was likely related to a few sighting reports that, while compelling, have never been substantiated. Anecdotal occurrence data for rare species are notoriously unreliable, and may lead to large errors that have unintended costs to the efficacy of conservation efforts (McKelvey et. al 2008).

According to the Interim Recovery Planning Guidance jointly developed by the Service and the National Marine Fisheries Service, acceptable justifications for an exemption from having a recovery plan include: (1) delisting is anticipated due to extinction or listing error; (2) the species historic and current ranges occur entirely under the jurisdiction of other countries; and, (3) "other circumstances not easily foreseen, but in which the species would not benefit from a recovery plan." (NMFS – FWS Interim Endangered and Threatened Species Recovery Planning Guidance, Section 2.2.1) We submit that the jaguarundi is exempt because its known historic and current range occurs entirely outside the United States. Generally, the United States has little authority to implement actions needed to recover species outside its borders. Consequently, the management and recovery of listed foreign species remain the responsibility of the countries in which the species occur, with the help of available technical and monetary assistance from the United States. Further, Section 4 of the Endangered Species Act (Act) requires the Secretary, when developing and implementing recovery plans, to give priority to those species that are most likely to benefit from such plans, particularly those species that are, or may be, in conflict with construction or other development projects or other forms of economic activity. Because the Sinaloan jaguarundi is not found in the United States, such conflict does not exist.

The listed range of the jaguarundi remains "entire", meaning that if individual jaguarundis are ever in fact documented in the United States, they would be protected by the Endangered Species Act, and the Service could reconsider the efficacy of recovery planning for the species. However, by the standards of our existing policy and guidance, and a reasonable standard of allocation of public resources for conservation, the Sinaloan jaguarundi should be exempted from recovery planning at this time.

**IV. RECOMMENDATION**

The Sinaloan jaguarundi should be exempted from recovery planning, and Arizona should be removed from the "historic range" column of the List, unless and until substantiated evidence of jaguarundi populations are found in Arizona.

**V. DIRECTOR'S DECISION**

CONCUR Rowan W. Gould  
DO NOT CONCUR \_\_\_\_\_

DATE: 6/7/2011  
DATE: \_\_\_\_\_

**ATTACHMENTS**

1. Johnson 2011. Contract report to the U.S. Fish and Wildlife Service: Evaluation of Reliability of Sinaloan jaguarundi occurrence records for Arizona (USA) and Sonora (Mexico)
2. Summary of known camera trap efforts in Arizona and Sonora, México

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#### Personal Communications

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