Southwestern Willow Flycatcher Critical Habitat Revision Questions and Answers

Arizona Ecological Services Office http://www.fws.gov/southwest/es/arizona/

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Q: What action is the Service taking?

A: The U.S. Fish and Wildlife Service (Service) has revised the 2005 critical habitat designation for the southwestern willow flycatcher, an endangered migratory bird. An area of 1,227 stream miles within the 100-year floodplain of waters in California, Arizona, Nevada, Utah, Colorado, and New Mexico encompassing a total area of approximately 208,973 acres has been designated as critical habitat. Until the new designation becomes effective on February 4, the 2005 designation will remain in effect.

The Service also announces the availability of a final economic analysis of the critical habitat proposal and a final environmental assessment.

Q: Why is the southwestern willow flycatcher endangered?

A: Flycatcher populations have declined significantly throughout their range because of changes to riparian ecosystems (trees and shrubs near water) including reductions in water flow, alteration of flood flows, physical modifications to watersheds and streams, and removal of riparian vegetation. These changes have occurred as a result of dams and reservoirs, groundwater pumping, channelization of streams for flood control, historical livestock overgrazing, agriculture developments, urbanization and other modifications.

Modification and loss of wintering habitat and “stopover” habitat used by flycatchers to replenish energy reserves during migration, and the continued use of agri-chemicals and pesticides in Latin America are also believed to be contributing to the decline of flycatchers.

The southwestern willow flycatcher was listed as endangered on the Federal List of Endangered and Threatened Wildlife on February 27, 1995.

Q: Where and when are southwestern willow flycatchers found in the United States?

A: The historical breeding habitat of the southwestern willow flycatcher included riparian areas in California, southern Nevada, southern Utah, Arizona, New Mexico, western Texas, southwestern Colorado, and the extreme northwestern portion of Mexico.

Flycatchers migrate from Latin America to their breeding areas in North America, typically arriving in early May. Flycatchers build nests, breed, incubate and hatch eggs through June, then fledge their juveniles through mid-August. They depart for their wintering grounds by mid-September.

The flycatcher's current range is similar to its historical range, but the quality and quantity of habitat has been significantly reduced causing habitat to be less common and more isolated. Approximately 1,299 documented flycatcher territories occur from near sea-level to over 8,500 feet in elevation, but are usually found in lower elevation riparian habitats. A territory is a discrete area defended by a resident single flycatcher or pair of flycatchers during a breeding season. Throughout its range, the flycatcher's current distribution follows that of its riparian habitat; relatively small, isolated, widely dispersed locales. Flycatchers winter in Mexico, Central America, and possibly northern South America.

Q: What constitutes southwestern willow flycatcher breeding habitat?

A: The southwestern willow flycatcher breeds in patchy to dense riparian habitats along streams, reservoirs, or other wetlands. Common tree or shrub species include willow, boxelder, salt cedar, and cottonwood. Habitat characteristics vary across the subspecies' range. However, occupied breeding sites usually consist of dense vegetation in the patch interior, or dense patches interspersed with openings, creating a mosaic that is not uniformly dense. In almost all cases, slow-moving or still water, or saturated soil is present at or near breeding sites during non-drought years.

Q: What is critical habitat?

A: Critical habitat is a term in the Endangered Species Act (ESA) that identifies geographic areas essential for the conservation of a threatened or endangered species. The ESA defines "conservation" as the actions leading towards the eventual recovery of a species to the point where it is no longer threatened or endangered.

Critical habitat provides protection from the prohibition against destruction or adverse modification from actions carried out, funded, or authorized by a federal agency and is carried out through required consultation under section 7 of the ESA. Due to legal challenges, the Service no longer relies on the regulatory definition of "destruction or adverse modification" of critical habitat. Instead, the Service relies on the statutory provisions of the ESA to complete adverse modification analysis.

Q: Does a 'critical habitat' designation mean an area is considered a wildlife refuge or sanctuary?

A: The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. A critical habitat designation identifies areas that are important to the conservation of federally listed threatened or endangered species. A critical habitat designation requires federal agencies to consult with the Service on any of their actions that may affect critical habitat in designated areas. The Service can then recommend ways to minimize any adverse effects. It imposes no requirements on state or private actions on state or private lands where no federal funding, permits or approvals are required.

Q: What has been designated as critical habitat for the southwestern willow flycatcher?

A: The revised final critical habitat designation includes 1,227 floodplain miles in California, Arizona, Nevada, Utah, Colorado, and New Mexico encompassing a total area of approximately 208,973 acres within the 100-year floodplain or flood-prone areas. The 2002 Southwestern Willow Flycatcher Recovery Plan describes the types of stream- and lake-edge habitats and their geographic distribution across the bird's breeding range that are important to conserving the subspecies, which was used as guidance in developing the critical habitat revision. The locations support large populations and the revised designation rule addresses the importance of maintaining those nesting birds' access to other local and inter-basin populations. The revised critical habitat also identifies some areas with few or no known territories where improvement is needed to meet numerical and habitat related recovery goals.

Protecting the designated configuration of habitats will provide population stability, assure that birds can expand and colonize other locales, promote genetic diversity, and provide essential migratory stopover habitat for shelter and food. Identifying these areas as critical habitat will elicit federal agency participation in meeting the habitat requirements identified to recover the flycatcher (1,950 territories). The designated areas within broad floodplains will accommodate the shifting and flooding nature of Southwest rivers, allowing habitat to persist, grow, recycle, and regenerate.

The 2005 southwestern willow flycatcher critical habitat designation remains in effect until the effective date of the revision, February 4, 2013.

Q: Why does the revised critical habitat include more area than the 2005 designation?

A: The primary difference in the increase in the overall distribution and abundance of critical habitat in 2012, compared to the 2005 designation, was using the geographic territory and habitat based recovery goals to guide the 2012 designation.

Q: How did the Service determine what areas to designate as flycatcher critical habitat?

A: The Service identified locations that are distributed to meet geographic and territory/habitat abundance goals described in the Recovery Plan.

Critical habitat is designated as stream segments to account for: riparian habitat dynamics; flycatcher nesting fidelity to an area (rather than a specific nest/habitat patch); breeding site connectivity; flycatcher within and between drainage movement; population stability, and migration habitat. The Service identified stream segments with large flycatcher nesting populations ($\geq$ 10 territories) and small populations with high connectivity (within 35 km/22 mi) that together make-up a large population.

Where large populations are not known to occur or when the methodology did not distinguish river segments or populations, the Service used professional expertise and a variety of factors to generate proposed river segments — including the Recovery Plan, areas with known territories, and habitat features to identify potentially suitable and suitable habitat segments.

Lateral extent (width) of critical habitat: Flycatchers use riparian habitat. The zone where this vegetation occurs is typically within the 100-year floodplain. Habitat typically changes its location over time due to factors such as shifting river channels, flooding, and drought, etc. The riparian zone

was primarily identified using digital data and visual interpretation of remotely sensed-data (aerial photographs and satellite imagery). The Service designated critical habitat on lands that:

- were known to be within the specific geographic area occupied by the flycatcher at the time of listing (from surveys occurring from 1991 to 1994) that contain the essential physical or biological features which may require special management; or
- are essential to the conservation of the flycatcher based on the Recovery Plan goals.

Q: Did the Service exclude areas that had been proposed for southwestern willow flycatcher critical habitat?

A: Department of Defense lands with completed, Service-approved Integrated Natural Resources Management Plans (INRMPs) were exempted from the proposed and final critical habitat designation. These exemptions resulted in about 63 river miles of streams that would have otherwise been proposed for designation as critical habitat. All other lands identified in the Service's methodology were included in the proposed revision. (The Service did not exclude any areas at the time of the proposal.)

The Service recognizes that a substantial amount of the proposed areas are already being managed to accommodate or advance flycatcher recovery through Habitat Conservation Plans, Department of Defense commitments, tribal management and other partnerships. Areas such as these were determined to be protected, and will not result in the extinction of the subspecies, or otherwise do not meet the definition of critical habitat. Ultimately, 948 stream miles of proposed critical habitat have been excluded from the final revised designation.

The Service prepared an economic analysis of the revised critical habitat. No critical habitat exclusions resulted from the economic analysis.

Q: Would everything within designated critical habitat be treated as critical habitat?

A: No. The Service cannot map critical habitat in sufficient detail to exclude all developed areas and other lands unlikely to contain "primary constituent elements" essential for flycatcher conservation. Within the revised critical habitat boundaries, only lands containing some or all of the primary constituent elements are designated as critical habitat. Existing man-made features and structures within critical habitat, such as buildings; roads; residential landscaping; residential, commercial, and industrial developments; and other features, do not contain some or all of the primary constituent elements. Therefore, these areas will not be considered critical habitat and will be specifically excluded from critical habitat by definition.

Q: What are *"primary constituent elements"*?

A: With this critical habitat designation, we intend to identify the physical or biological features essential to the conservation of the species, through the identification of the features' primary constituent elements sufficient to support the life-history processes of the species.

Primary constituent elements are derived from the physical or biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species. They are habitat features needed for life needs and successful reproduction of a species. These include but are not limited to:

- space for individual and population growth, and for normal behavior (migration, etc.)
- cover, food, water, and other nutritional/physiological requirements
- locations for breeding, feeding and rearing offspring

Q: What are the "*primary constituent elements*" of flycatcher critical habitat?

A: The areas designated as critical habitat are designed to provide sufficient riparian habitat for breeding, non-breeding, territorial, dispersing and migrating southwestern willow flycatchers and to flycatchers throughout their range, and provide those habitat components essential for conservation of the subspecies. They include:

- **Trees and shrubs** that include, but are not limited to, willow species and boxelder;
- **Dense riparian vegetation** with thickets of trees and shrubs ranging in height from 6 to 98 feet tall in middle and lower elevation riparian forests, and with lower-stature thickets (6 to 13 feet tall) found at higher elevation riparian;
- Dense riparian **understory** foliage at least from the ground level up to approximately 13 feet;
- Sites for nesting that contain a dense tree and/or shrub **canopy** (i.e., a tree or shrub canopy with densities ranging from 50 percent to 100 percent);
- Dense patches of riparian forests that are interspersed with small openings of open water or marsh or shorter/sparser vegetation, that creates a **mosaic**; and
- A variety of **insect** prey populations (wasps, bees, flies, beetles, butterflies and moths, etc.).

Q: Why and how were areas within the 100-year floodplain chosen to demark critical habitat?

A: Flycatcher breeding habitat (as noted above) is usually contained within the 100-year floodplain (including reservoir draw-down areas).

The boundary or "lateral extent" of the critical habitat all fall within the 100-year floodplain, but are frequently limited to flood-prone areas less expansive than the 100-year floodplain. The Federal Emergency Management Agency (FEMA) designates and maps the 100-year floodplain boundaries for many larger rivers in the vicinity of urban and suburban areas. However, not all of 100-year floodplains throughout the revised critical habitat areas have been mapped by FEMA.

As a result, the Service has mapped the lateral extent or riparian zones by one of two methods; the areas were either captured from existing digital sources or created through expert visual interpretation of aerial photographs and satellite imagery. These maps will be available at http://www.fws.gov/southwest/es/arizona/ and http://www.regulations.gov/.

Q: How will the revised critical habitat compare to the Southwestern Willow Flycatcher Recovery Team's recommendations for habitat conservation?

A: The Service recognizes that the Recovery Team's efforts and the adopted Recovery Plan represent a treatment of the best, most current biological information and a projected plan for the recovery of the subspecies. However, the plan makes no critical habitat recommendations. The science, threats, issues, importance of "metapopulation" stability, and affected entities that are identified in the Recovery Plan have been incorporated into the critical habitat revision.

Q: **Hasn't the southwestern willow flycatcher always had a sparse distribution?**

A: The flycatcher has always been sparsely distributed in the Southwest due to the sparse distribution of riparian (streamside) habitat in this predominantly arid region. However, sparse distribution and rarity are not equivalent. Although flycatcher habitat is rare, nesting pairs have occurred in high densities where suitable habitat is present.

Q: Will the southwestern willow flycatcher only be protected in designated critical habitat areas?

A: No. All other protections afforded by the ESA apply both on and off designated critical habitat. Listed species, both inside and outside critical habitat, are protected from 'take,' which includes harming (e.g., shooting, killing, trapping, collecting) and harassing individual animals. However, incidental taking that may result from, but is not the purpose of, otherwise legal activities may be allowed with a permit available from the Service.

Q: When will a critical habitat designation become effective?

A: The revised designation becomes effective on February 4, 2013. The 2005 southwestern willow flycatcher critical habitat designation remains in effect until then.

Q: How does a critical habitat designation affect my private land?

A: Requirements for consultation on critical habitat do <u>not</u> apply to entirely private actions on private lands. Critical habitat designations only apply to federal lands or federally funded or permitted activities on private lands. Activities on private or state lands that are funded, permitted or carried out by a federal agency, such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act, or a section 402 permit under the Clean Water Act from the Environmental Protection Agency, 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 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 flycatchers or their habitat (e.g., suitable habitat outside of critical habitat), and actions on non-federal lands that are not federally funded, permitted or carried out, will not require section 7 consultation.

Q: What can a landowner do to enhance habitat for the flycatcher?

A: The Service is able to provide technical and financial assistance to landowners who want to improve or restore habitat on their property through the Partners for Fish and Wildlife Program and other private stewardship grant programs.

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

A: 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 for the flycatcher.

Q: Will livestock grazing be affected by critical habitat designation?

A: Formal consultation under the ESA is required only when federally permitted grazing may adversely affect critical habitat. Federal land management agencies are required to evaluate the effect grazing has on federally managed critical habitat areas. The flycatcher can exist in grazed areas, but does best in areas where the species' habitat suitability is maintained in good condition and cowbird populations are kept in check.

Q: Why is the Service revising the designation of critical habitat for the flycatcher?

A: The critical habitat is being revised following a settlement agreement stemming from legal challenges to the 2005 critical habitat designation. The Court granted the Service's request to leave the 2005 critical habitat designation in effect during the current rulemaking process.

Q: How were public comments on the proposed rule addressed?

A: The Service received approximately 240 comment letters from the public, industry and conservation groups. All comments will be incorporated into or addressed in the final designation and supporting environmental assessment and economic analysis. The Service sought scientific peer review of the proposed revision and rational for critical habitat designations. Scientific reviewers were generally supportive of the overall proposal, and confirmed use of best available scientific information.

Q: What economic considerations were be given before critical habitat is designated?

A: The Service is required to take into consideration the economic impact, and any other relevant impact, of designating particular areas as critical habitat. The Service may exclude areas from critical habitat designation when the benefits of exclusion outweigh the benefits of including the areas within critical habitat, provided the exclusion will not result in extinction of the species. The final economic analysis of the revised critical habitat is now available. No critical habitat exclusions resulted from the economic analysis.

Q: What were the conclusions in the draft economic analysis?

A: The economic analysis estimates economic impacts of flycatcher conservation efforts associated economic activity across seven categories and has been updated following public comments. The total potential incremental economic impacts over the next 20 years range from $11 million to $19 million ($920,000 to $1.7 million annualized). Transportation activities (road and bridge construction and maintenance) may experience the largest impacts. The analysis also showed that the proposed critical habitat designation will not have a significant economic impact on a substantial number of small business entities.

The complete final economic analysis (including an executive summary) is available at http://www.fws.gov/southwest/es/arizona/.