

**Final Recovery Plan**  
**Southwestern Willow Flycatcher**  
*(Empidonax traillii extimus)*

August 2002

Prepared By

Southwestern Willow Flycatcher Recovery Team  
Technical Subgroup



For

Region 2  
U.S. Fish and Wildlife Service  
Albuquerque, New Mexico 87103

Approved:

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Date:

8/30/02

## **Disclaimer**

Recovery Plans delineate reasonable actions that are believed to be required to recover and/or protect listed species. Plans are published by the U.S. Fish and Wildlife Service, sometimes prepared with the assistance of recovery teams, contractors, State agencies, and others. Objectives will be attained and any necessary funds made available subject to budgetary and other constraints affecting the parties involved, as well as the need to address other priorities. Recovery plans do not necessarily represent the views nor the official positions or approval of any individuals or agencies involved in the plan formulation, other than the U.S. Fish and Wildlife Service. They represent the official position of the U.S. Fish and Wildlife Service only after they have been signed by the Regional Director or Director as approved. Approved Recovery plans are subject to modification as dictated by new findings, changes in species status, and the completion of recovery tasks.

Some of the techniques outlined for recovery efforts in this plan are completely new regarding this subspecies. Therefore, the cost and time estimates are approximations.

## **Citations**

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## **Executive Summary**

### **Southwestern Willow Flycatcher Recovery Plan**

#### **Current Status of the Species**

The southwestern willow flycatcher (*Empidonax traillii extimus*) breeds in dense riparian habitats in southwestern North America, and winters in southern Mexico, Central America, and northern South America. Its breeding range includes far western Texas, New Mexico, Arizona, southern California, southern portions of Nevada and Utah, southwestern Colorado, and possibly extreme northern portions of the Mexican States of Baja California del Norte, Sonora, and Chihuahua. The subspecies was listed as endangered effective March 29, 1995. Approximately 900 to 1100 pairs exist.

#### **Habitat Requirements, Threats, and Other Limiting factors**

The southwestern willow flycatcher breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes (e.g., reservoirs). Most of these habitats are classified as forested wetlands or scrub-shrub wetlands. Habitat requirements for wintering are not well known, but include brushy savanna edges, second growth, shrubby clearings and pastures, and woodlands near water. The southwestern willow flycatcher has experienced extensive loss and modification of breeding habitat, with consequent reductions in population levels. Destruction and modification of riparian habitats have been caused mainly by: reduction or elimination of surface and subsurface water due to diversion and groundwater pumping; changes in flood and fire regimes due to dams and stream channelization; clearing and controlling vegetation; livestock grazing; changes in water and soil chemistry due to disruption of natural hydrologic cycles; and establishment of invasive non-native plants. Concurrent with habitat loss have been increases in brood parasitism by the brown-headed cowbird (*Molothrus ater*), which inhibit reproductive success and further reduce population levels.

#### **Recovery Objectives**

1. Recovery to the point that reclassification to “threatened” is warranted.
2. Recovery to the point that delisting is warranted.

#### **Recovery Criteria**

Reclassification from endangered to threatened may be considered when either of the following criterion have been met:

Criterion A: Increase the total known population to a minimum of 1,950 territories (equating to approximately 3,900 individuals), geographically distributed to allow proper functioning as metapopulations, so that the flycatcher is no longer in danger of extinction. For reclassification to threatened status, these prescribed numbers and distributions must be reached *as a minimum, and maintained over a five year period.*

Criterion B: Increase the total known population to a minimum of 1,500 territories (equating to approximately 3,000 individuals), geographically distributed among Management Units and Recovery Units, so that the flycatcher is no longer in danger of extinction. For reclassification to threatened status, these prescribed numbers and distributions must be reached *as a minimum, and maintained over a three year period*, and the habitats supporting these flycatchers must be protected from threats and loss.

The southwestern willow flycatcher may be removed from the list of threatened and endangered species when both of the following criteria have been met:

Criterion 1. Meet and maintain, at a minimum, the population levels and geographic distribution specified under reclassification to threatened Criterion A; increase the total known population to a minimum of 1,950 territories (equating to approximately 3,900 individuals), geographically distributed to allow proper functioning as metapopulations, as presented in Table 10.

Criterion 2. Provide protection from threats and create/secure sufficient habitat to assure maintenance of these populations and/or habitats over time. The sites containing flycatcher breeding groups, in sufficient number and distribution to warrant downlisting, must be protected into the foreseeable future through development and implementation of conservation management agreements (e.g., public land management planning process for Federal lands, habitat conservation plans (under Section 10 of the ESA), conservation easements, and land acquisition agreements for private lands, and inter-governmental conservation agreements with Tribes). Prior to delisting, the USFWS must confirm that the agreements have been created and executed in such a way as to achieve their role in flycatcher recovery, and individual agreements for all areas within all Management Units (public, private, and Tribal) that are critical to metapopulation stability (including suitable, unoccupied habitat) must have demonstrated their effectiveness for a period of at least 5 years.

#### **Actions Needed**

Recovery actions in the Plan are categorized into nine types:

1. Increase and improve occupied, suitable, and potential breeding habitat;
2. Increase metapopulation stability;
3. Improve demographic parameters;
4. Minimize threats to wintering and migration habitat;
5. Survey and monitor;
6. Conduct research;
7. Provide public education and outreach;
8. Assure implementation of laws, policies, and agreements that benefit the flycatcher;
9. Track recovery progress.

### Estimated Cost of Recovery (\$1000s)

Costs associated with recovery are estimated for each of the nine categories listed above, based on the years in which specific actions are scheduled to occur. These costs are further detailed in the Implementation Schedule.

Year	Action 1	Action 2	Action 3	Action 4	Action 5	Action 6	Action 7	Action 8	Action 9	Total
FY01	8182*	1629	0*	225	835	2147	30*	183*	30	13261
FY02	8182*	1629	0*	225	835	2147	30*	183*	30	13261
FY03	7816*	4951	390*	225	835	2773	30*	183*	30	17233
FY04	7216*	4951	390*	225*	835	2348	30*	183*	50	16228
FY05	7216*	4951	390*	225*	850	2348	30*	183*	190	16383
FY 6-20	25430*	6300	1950*	0*	0	860*	25*	25*	0	34590
FY 21-30	16210*	0	0	0*	0	0*	50*	250*	0	16510
<b>Total</b>	<b>80252*</b>	<b>24411</b>	<b>3120*</b>	<b>1125*</b>	<b>4190</b>	<b>12623*</b>	<b>225*</b>	<b>1190*</b>	<b>330</b>	<b>127466</b>

\*Does not represent total potential funds due to inability to estimate costs for specific recovery actions at this time. See Section V. Implementation Schedule for detailed estimate of funds and potential partners.

### Date of Recovery

Reclassification to threatened could be initiated in 2020, or earlier.

Delisting could be accomplished within 10 years of reclassification.

**TABLE OF CONTENTS**  
**SOUTHWESTERN WILLOW FLYCATCHER RECOVERY PLAN**

**I. INTRODUCTION AND BACKGROUND**

A. Overview ..... 1  
B. Ecosystem and Watershed Approaches ..... 2  
C. Recovery Team Subgroup and Issue Paper Approach ..... 3  
D. Species Description ..... 4  
E. Listing History ..... 5  
F. Critical Habitat Designation History ..... 5

**II. BIOLOGY, ECOLOGY, AND STATUS**

A. Taxonomy ..... 6  
B. Range and Distribution ..... 7  
C. Habitat Characteristics ..... 11  
D. Breeding Biology ..... 19  
E. Foraging and Diet ..... 25  
F. Competitors ..... 26  
G. Predation and Predators ..... 27  
H. Disease and Parasites ..... 27  
I. Status and Trends of Populations and Habitat ..... 29  
J. Reasons For Listing and Current Threats ..... 33

**III. CONSERVATION MEASURES**

A. Regulatory Protection ..... 43  
B. Actions to Offset Impacts, and Mitigation Efforts ..... 49  
C. Conservation Efforts ..... 52  
D. Conservation of Listed, Proposed, Candidate Species and Species Of Concern ..... 55



**IV. RECOVERY**

A. Recovery Strategy . . . . . 61

    1. Recovery Units . . . . . 61

    2. Management Units . . . . . 62

    3. Recovery Unit Descriptions . . . . . 63

    4. Population Viability Analysis . . . . . 72

    5. Approach to Identifying Recovery Criteria . . . . . 74

B. Recovery Objectives and Criteria . . . . . 77

C. Recovery Implementation Oversight . . . . . 93

D. Stepdown Outline . . . . . 96

E. Narrative Outline of Recovery Actions . . . . . 105

F. Minimization of Threats to the Southwestern Willow Flycatcher Through Implementation of Recovery Actions . . . . . 137

**V. IMPLEMENTATION SCHEDULE**

A. Implementation Schedule . . . . . 142

**VI. LITERATURE CITED . . . . . 170**

**VII. APPENDICES**

A. Implementation Subgroup Members . . . . . A - 1

B. List of Acronyms and Abbreviations . . . . . B - 1

C. Glossary . . . . . C - 1

D. Issue Paper: Southwestern Willow Flycatcher Habitat . . . . . D - 1

E. Issue Paper: Willow Flycatcher Migration and Winter Ecology . . . . . E - 1

F. Issue Paper: Cowbird Parasitism and the Southwestern Willow Flycatcher:  
    Impacts and Recommendations for Management . . . . . F - 1

G. Issue Paper: Management of Livestock Grazing in the Recovery of  
    the Southwestern Willow Flycatcher . . . . . G - 1

H. Issue Paper: Exotic Plant Species in Riparian Ecosystems of the U.S. Southwest . . . . . H - 1

I. Issue Paper: Implications of Water and River Management for the Southwestern Willow Flycatcher:  
    The Fluvial, Hydrologic, and Geomorphic Context for Recovery . . . . . I - 1

J. Issue Paper: Fluvial Hydrology of Regulated Rivers  
    in the Range of the Southwestern Willow Flycatcher . . . . . J - 1

K. Issue Paper: Habitat Restoration . . . . . K - 1

L. Issue Paper: Riparian Ecology and Fire Management . . . . . L - 1

M. Issue Paper: Potential Recreation Impacts on Southwestern Willow Flycatchers and their Habitat . . . .	M -1
N. Issue Paper: Tribal Perspectives on Southwestern Willow Flycatcher Management and the Endangered Species Act . . . . .	N - 1
O. Summary of Comments on Draft Recovery Plan . . . . .	O - 1

**LIST OF FIGURES**

Figure 1. Breeding range distributions of the willow flycatcher subspecies . . . . .	7
Figure 2. Breeding chronology of the southwestern willow flycatcher . . . . .	21
Figure 3. Breeding range of the southwestern willow flycatcher . . . . .	see pg. 66
Figure 4. Recovery and Management Units for the southwestern willow flycatcher . . . . .	see pg. 66
Figure 5. Coastal California Recovery Unit . . . . .	see pg. 66
Figure 6. Basin and Mojave Recovery Unit . . . . .	see pg. 66
Figure 7. Upper Colorado Recovery Unit . . . . .	see pg. 66
Figure 8. Lower Colorado Recovery Unit, western part . . . . .	see pg. 66
Figure 9. Lower Colorado Recovery Unit, eastern part . . . . .	see pg. 66
Figure 10. Gila Recovery Unit . . . . .	see pg. 66
Figure 11. Rio Grande Recovery Unit . . . . .	see pg. 66

**LIST OF TABLES**

Table 1. Number of known flycatcher territories located within major habitat types, by Recovery Unit . . . . .	12
Table 2. Relative abundance of southwestern willow flycatcher nests, by substrate . . . . .	14
Table 3. Southwestern willow flycatcher nest success, by substrate . . . . .	15
Table 4. Known numbers of flycatchers by State . . . . .	29
Table 5. Rates of parasitism by brown-headed cowbirds on the southwestern willow flycatcher at selected locations . .	40
Table 6. Listed vertebrate species occupying the same ecosystems as the southwestern willow flycatcher . . . . .	56
Table 7. Recovery Units and Management Units for the southwestern willow flycatcher. . . . .	63
Table 8. Southwestern willow flycatcher site codes and site names, by Recovery Unit . . . . .	67
Table 9. Recovery Criteria, by Recovery and Management Units . . . . .	84
Table 10. Specific river reaches within Management Units, suggested for recovery efforts . . . . .	86