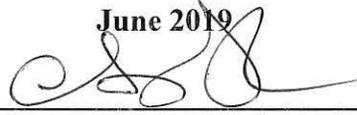


**Supplemental Finding for Ashy dogweed (*Thymophylla tephroleuca*) Recovery Plan**

**Original Approved:** July 29, 1988

**Original Prepared by:** Jackie M. Poole, Texas Parks and Wildlife Department

**For  
U.S. Fish and Wildlife Service  
Southwest Region  
Albuquerque, New Mexico**

Approved: ✓ DRAFT  Date: 7/25/19  
Regional Director, Region 2  
U.S. Fish and Wildlife Service

**BACKGROUND INFORMATION**

Section 4(f)(1)(B)(ii) of the Endangered Species Act (Act) requires that each recovery plan shall incorporate, to the maximum extent practicable, “objective, measurable criteria which, when met, would result in a determination...that the species be removed from the list.” It is possible that for some species, however, delisting cannot be foreseen at the time a recovery plan is written. In some rare cases, the best available information is so seriously limited that it is truly not possible to identify delisting criteria. This would be an unusual case, such as one in which the species’ threats are not understood well enough to identify priorities and appropriate actions to remove (or offset) the threats. For example, the natural habitat may have been so reduced for an endangered species that captive propagation and active management is necessary for the life of a reasonable recovery plan. In another example, the population of a long-lived, slow growing species may be so depleted that possible recovery may be beyond the life of a reasonable recovery plan.

A 2006 Government Accountability Office (GAO) audit of the National Marine Fisheries Service’s (NMFS) and U.S. Fish and Wildlife Service’s (USFWS) endangered species recovery programs recommended that the Secretaries of the Department of Commerce and the Interior direct their staff to ensure that all new and revised recovery plans have either recovery criterion evidencing consideration of all five delisting factors or a statement regarding why it is impracticable to do so (GAO 2006). Since the 2006 GAO audit, we have updated our recovery planning and implementation guidance (NMFS and USFWS 2010), and new plans have included determinations regarding the feasibility or possibility of incorporating delisting criteria related to each of the five factors, as recommended by the GAO. Active recovery plans remain, however, that lack delisting criteria and contain either an incomplete determination regarding the practicability of incorporating delisting criteria, or are silent about the absence of delisting criteria in the recovery plan. In this document, we clarify why it remains impracticable to incorporate delisting criteria for Ashy dogweed in the 1988 Ashy dogweed (*Thymophylla tephroleuca*) Recovery Plan (Recovery Plan).

## **METHODOLOGY USED TO COMPLETE THE FINDING**

Texas Coastal Ecological Services Field Office staff conducted this review incorporating information from the following: the proposed and final listing rules for Ashy dogweed under the Endangered Species Act (68 FR 12184, 47 FR 7424); the Recovery Plan (USFWS 1988, entire); the species' 5-Year Review (USFWS 2011, entire); and other published and unpublished sources, as listed below.

## **FINDING**

The 1988 Recovery Plan does not include quantifiable downlisting or delisting criteria. The goal of the Recovery Plan is to protect ashy dogweed and its habitat from further destruction owing to human activities, and to establish healthy populations in their natural habitat at levels that would allow the species to be downlisted to threatened and eventually delisted. At the time the Recovery Plan was written, limited data made it impossible to quantify habitat and plant abundance with the precision needed to establish quantified downlisting and delisting criteria (1988, p. 13). Although lack of species information prevented the development of recovery criteria, the following list of actions was given: maintain present populations through landowner cooperation and habitat management, establish new populations in suitable habitats, obtain biological information needed for effective management, and develop public support for preservation of ashy dogweed (USFWS 2011, p. 4). At the time of the 5-Year Status Review in 2011, six extant populations were known (USFWS 2011, p. 5). Three occur on private lands and one population partially occurs within a Texas Department of Transportation (TxDOT) highway right-of-way (ROW) and on adjacent private land (USFWS 2011, p. 5).

The USFWS lacks current information about the magnitude and degree of threats to these extant populations due to lack of monitoring and follow-up studies (USFWS 2011, p 4). Based on known occurrence data, all populations are restricted to Webb and Zapata counties (USFWS 2018, p. 1), with 5 of the 6 populations located on private lands and the other occurs, at least in part, on TxDOT right-of-way (USFWS 1988, see Table 1). In 2010, the South Texas Plant Recovery Team was tasked with updating recovery plans, including the establishment or revision of objective and measurable recovery criteria (USFWS 2011, p. 4). Landowners where three of the populations are located have 10-year Texas Parks and Wildlife Department (TPWD) Volunteer Conservation Agreements (USFWS 2011, p.12). However, no active monitoring has occurred at these sites since 2004 (USFWS 2011, see Table 1). Efforts are currently underway by the USFWS and TPWD to reengage with landowners and managers whose properties have extant ashy dogweed populations. These efforts have been impeded by safety concerns for staff due to high levels of illegal immigration and drug cartel trafficking occurring through these areas. The USFWS was able to conduct a site visit on the TxDOT right-of-way, Airport and Canada Hondo ranches in 2018 and verified their status was unchanged and appeared stable.

Currently data is lacking to develop informed delisting criteria due to the inability to conduct follow-up studies to known populations. Following coordination with landowners to gain access to Ashy dogweed populations, additional time for border tensions to ease and staff safety concerns to minimize is needed before surveys can be conducted to assess population status and threats.

Many aspects of Ashy dogweed's biology and specific habitat requirements are unknown. Therefore, specific delisting criteria are not defined (USFWS 1992, p. 10). The Recovery Plan outlines recovery actions that, when completed, can help to achieve downlisting of the species and track the success of these actions on the species' recovery status. The actions outlined were to 1) Manage known plants and habitat by removing and preventing threats to their existence, 2) Study the life history and ecology of the Ashy dogweed, 3) Search potential habitat for additional populations, 4) Establish additional populations in suitable natural habitat within the historic range of the species, and 5) Develop public awareness, appreciation and support of the preservation of Ashy dogweed. These recovery actions are not complete; therefore, Recovery Actions need to be re-assessed to determine which actions need to be addressed (USFWS 2011, p. 4).

Because no genetic studies have been completed to describe diversity within or between populations, it is difficult to determine "adequate" representation, particularly since Ashy dogweed grows colonially and has a relatively restricted range of occurrence. The genetic studies would allow the USFWS to become better informed about species diversity which will help develop a better understanding of species representation.

We lack information about the immediacy and extent of threats since not all sites have been consistently assessed nor new populations identified. The best available information indicates that the primary threats to Ashy dogweed stem from destruction, modification, and curtailment of habitat. Historically, clearing native vegetation and the introduction of exotic grasses to increase livestock foraging for cattle grazing were the dominate land use practices and stressors to ashly dogweed and its habitat (USFWS 1984; USFWS 2011, p. 4). Land clearing and over-grazing lead to the encroachment of undesirable vegetation (buffelgrass *Pennisetum ciliare* syn. *Cenchrus siliaris* L.) into occupied habitat, soil surface compaction by cattle, and a limitation of potential recruitment of new individuals to populations. We expect these practices and additional habitat loss through land development to continue into the foreseeable future within the geographic range of the Ashy dogweed.

High levels of oil and gas exploration and production continue throughout the range of Ashy dogweed. The extent of damage to, and loss of populations, or portions of populations is unquantified because most populations occur on privately-owned land where a lack of accessibility has precluded adequate surveys (USFWS 2018, p. 6). Pipelines, well pads, and associated road construction diminish habitat quality and quantity for ashly dogweed. Stressors from oil and gas include direct loss of habitat, introduction of nonnative species and altered site hydrology. The lack of regulatory mechanisms on private land resulting destruction or damage to populations and/or their habitat will continue to be a significant stressor to the species as the demands for oil and gas production continue (USFWS 2011, p. 26).

Currently there are three Voluntary Conservation Agreements with landowners, providing access to three of the known Ashy dogweed populations. However, there are two additional populations located on private lands where there are, no signed conservation agreements and the status of these populations remains unknown. The USFWS lacks sufficient information to evaluate the status of Ashy dogweed throughout its range and develop informed delisting criteria at this time. Since five of the six known populations are wholly located on private lands, it is essential to

engage landowners and managers to encourage collaboration during the development of recovery criteria. Studies are needed to fully assess the species' population biology and ecology to augment our existing knowledge, as recommended in the recovery plan. Additional studies are needed, particularly on the effects of climate change and to determine a minimum viable population number for this species as well as a determination on the number of self-sustaining populations needed for recovery. Adequate surveys also needed to be conducted (gaining access on private lands) in all areas of the species' range; study threats (specific to each extant population), and take appropriate management actions to protect existing populations (USFWS 2011, p. 30).

## **SUMMARY**

The 1988 Recovery Plan does not include quantifiable downlisting or delisting criteria. The goal of the Recovery Plan is to protect Ashy dogweed and its habitat from further destruction owing to human activities, and to establish healthy populations in their natural habitat at levels that would allow the species to be downlisted to threatened and eventually delisted. These goals have not been met. The Ashy dogweed is a local endemic species, persisting in two counties in Texas (USFWS 2018, p.1). All known populations are located on private property, one of which also occurs on adjacent TxDOT ROW (USFWS 1988, see Table 1). Although three of the six known populations are on private lands with 10-year Volunteer Conservation Agreements they were last surveyed in 2004 (USFWS 2011, see Table 1). Data on Ashy dogweed's biology, needs and habitat requirements are lacking. Efforts to reengage with landowners to gain access to Ashy dogweed populations are occurring; however, high levels of illegal immigrations and drug trafficking may curtail survey attempts due to safety concerns.

The best available information indicated that the primary threats to ashly dogweed stem from destruction, modification, and curtailment of habitat. Historically, clearing native vegetation and the introduction of exotic grasses to increase livestock foraging for cattle grazing were the dominant land use practices and stressors to Ashy dogweed and its habitat (USFWS 1984; USFWS 2011, p.4). More recently, oil and gas exploration and production occurs across the species range (USFWS 2011, p. 26). Both of these threats will continue into the future and the lack of regulatory mechanisms on private lands limit the abatement of these threats. Due to the lack of access of population for monitoring, the USFWS lacks information about the immediacy and extent of threats.

Therefore, because the USFWS lacks sufficient data on the species needs, biology, and threats and access to the privately owned lands needed to obtain these data are limited by permission and safety concerns the development of meaningful quantifiable recovery criteria is not practicable at this time.

## **REFERENCES**

Government Accountability Office (GAO), 2006. Endangered Species: Time and Costs Required to Recover Species Are Largely Unknown. GAO-06-463R Endangered Species Recovery. Prepared for the U.S. Congress, Washington, D.C. 8 pp. with enclosures.

National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). 2010. Interim Endangered and Threatened Species Recovery Planning Guidance. Version 1.3. U.S. Fish & Wildlife Service. Arlington, VA: 122 pp.

U.S. Fish and Wildlife Service. 1988. Ashy dogweed (*Thymophylla tephroleuca*) Recovery Plan. U.S. Fish and Wildlife Service, Albuquerque, NM: 46 pp.

U.S. Fish and Wildlife Service. 2011. Ashy dogweed (*Thymophylla tephroleuca*) 5 Year Review U.S. Fish and Wildlife Service, Albuquerque, NM