



DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FWS-R1-ES-2024-0005; FXES1113090FEDR-267-FF09E22000]

RIN 1018-BG68

Endangered and Threatened Wildlife and Plants; Reclassification of the Rough Popcornflower from Endangered to Threatened with a Section 4(d) Rule

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final Rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are reclassifying the rough popcornflower (*Plagiobothrys hirtus*) from endangered to threatened (downlist) under the Endangered Species Act of 1973, as amended (Act). This action is based on our evaluation of the best scientific and commercial data available, which indicates that the species' status has improved such that it is not in danger of extinction throughout all or a significant portion of its range, but that it is still likely to become so within the foreseeable future. We also finalize protective regulations under the authority of section 4(d) of the Act that are necessary and advisable to provide for the conservation of this species.

DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: This final rule is available on the internet at <https://www.regulations.gov>. Comments and materials we received are available for public inspection at <https://www.regulations.gov> at Docket No. FWS-R1-ES-2024-0005.

Availability of supporting materials: Supporting materials we used in preparing this rule, including the 5-year reviews, the 2003 recovery plan, the 2019 recovery plan

amendment, and the species status assessment report, are available on the Service's website at <https://ecos.fws.gov/ecp/species/2500> and at <https://www.regulations.gov> under Docket No. FWS–R1–ES–2024–0005.

FOR FURTHER INFORMATION CONTACT: Kessina Lee, State Supervisor, U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office; 503–231–6179; kessina_lee@fws.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION

Executive Summary

Why we need to publish a rule. Under the Act (16 U.S.C. 1531 *et seq.*), a species warrants reclassification from endangered to threatened if it no longer meets the definition of an endangered species (in danger of extinction throughout all or a significant portion of its range). The rough popcornflower is listed as endangered, and we are reclassifying (downlisting) the rough popcornflower as threatened. We have determined the rough popcornflower does not meet the Act's definition of an endangered species but it does meet the definition of a threatened species (likely to become an endangered species throughout all or a significant portion of its range within the foreseeable future). Reclassifying a species as a threatened species can be completed only by issuing a rule through the Administrative Procedure Act rulemaking process (5 U.S.C. 551 *et seq.*).

What this document does. This rule downlists the rough popcornflower from endangered to threatened on the Federal List of Endangered and Threatened Plants (List), with a rule issued under section 4(d) of the Act, based on the species' current status, which has been improved through implementation of conservation actions including

additional monitoring that has revealed populations and plants not known at the time of listing.

The basis for our action. Under the Act, we may determine that a species is an endangered species or a threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We may reclassify a species if the best scientific and commercial data available indicate the species no longer meets the applicable definition in the Act. Based on the status review, the current threats analysis, and evaluation of conservation measures discussed in this rule, we conclude that the rough popcornflower no longer meets the Act's definition of an endangered species and should be reclassified to a threatened species. The species is no longer in danger of extinction throughout all or a significant portion of its range, but is likely to become so within the foreseeable future.

We have determined that the rough popcornflower is a threatened species due to the following threats: destruction and/or alteration of habitat by development and hydrological changes (e.g., wetland fills, draining, construction), competition from nonnative invasive plant species, impacts due to climate change (e.g., winter flooding, drier summer soils, and decreased fruit production), and lack of regulatory mechanisms.

Previous Federal Actions

Please refer to the proposed rule to reclassify the rough popcornflower, published on December 11, 2024 (89 FR 99809), for a detailed description of previous Federal actions concerning this species.

Peer Review

A species status assessment (SSA) team prepared an SSA report for the rough

popcornflower. The SSA team was composed of Service biologists, in consultation with other species experts. The SSA report represents a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species.

In accordance with our joint policy on peer review published in the *Federal Register* on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing and recovery actions under the Act (<https://www.fws.gov/sites/default/files/documents/peer-review-policy-directors-memo-2016-08-22.pdf>), we solicited independent scientific review of the information contained in the rough popcornflower SSA report. As discussed in the proposed rule, we sent the SSA report to three independent peer reviewers and received two responses. The peer reviews can be found at <https://www.regulations.gov> under Docket No. FWS–R1–ES–2024–0005. In preparing the proposed rule, we incorporated the results of these reviews, as appropriate, into the SSA report, which was the foundation for the proposed rule and this final rule. A summary of the peer review comments and our responses can be found in the proposed rule (89 FR 99811–99812).

Summary of Changes from the Proposed Rule

We received two responses to our request for information on the proposed rule during the public comment period. Only the submission from the Oregon Department of Agriculture (ODA) raised substantive issues that needed to be fully considered and addressed. We summarize these issues in the 7 comments and provide our responses below (See **Summary of Comments and Recommendations**). Minor, nonsubstantive changes and corrections were made in response to comments on the proposed rule and are reflected throughout this final rule. The information we received during the comment period on the proposed rule did not change our determination for either reclassifying the

rough popcornflower as a threatened species under the Act or the 4(d) rule for the species.

The ODA submitted comments that included additional information on current population numbers from recent surveys and refined population areas. Surveys were conducted by The Nature Conservancy (TNC), the Oregon Department of Transportation (ODOT), ODA, and the Service. In addition, Service staff conducted visits of some rough popcornflower populations to get new estimates of population size and area coverage. In response, we updated the population numbers and area for all populations of rough popcornflower where available. This new information resulted in one more downlisting criterion being fulfilled and changed the degree to which other recovery criteria have been met. We updated the number of populations reaching certain recovery criteria where applicable throughout this final rule.

Finally, we developed an addendum to accompany the SSA report version 1.0 that contains the updated population and area data for the rough popcornflower that became available since the publication of the proposed rule on December 11, 2024 (89 FR 99809). The addendum also contains updated monitoring information for all populations of rough popcornflower (USFWS 2026, entire).

Summary of Comments and Recommendations

In the proposed rule published on December 11, 2024 (89 FR 99809), we requested that all interested parties submit written comments on the proposal by February 10, 2025. We also contacted appropriate Federal and State agencies, Tribal entities, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. Newspaper notices inviting general public comment were published in The News-Review. We did not receive any requests for a public hearing. All substantive information received during the comment period has either been incorporated directly into this final determination or is addressed below.

Comments from States

(1) Comment: ODA commented that data presented in the proposed downlisting rule (89 FR 99809) did not adequately demonstrate that the downlisting criteria in the 2019 amendment to the recovery plan for rough popcornflower (USFWS 2019, entire) had been fully met, though they agreed that rough popcornflower merits downlisting from endangered to threatened.

Our response: In accordance with section 4(b)(1)(A) of the Act (16 U.S.C. 1531 et seq.), the downlisting determination for rough popcornflower is based on the best scientific and commercial data available to the Service. While we consider recovery plans to be ‘roadmaps’ to guide recovery, they are not binding regulatory documents, and achievement, or lack of achievement, of specific recovery criteria therein does not automatically confer regulatory status under section 4(a)(1) of the Act. Ultimately, our determination of listing status is based on an evaluation of whether a species meets the definition of a threatened or endangered species under the Act. Therefore, in our SSA, we analyzed population resiliency, redundancy, and representation to evaluate whether a species still meets the definition of “endangered.” In the case of the rough popcornflower, we determined that the best scientific and commercial data available supports downlisting the species from endangered to threatened. For more information on the viability of the species, please see the SSA (USFWS 2021, entire). Responses to ODA’s comments on specific recovery criteria not being fully met are provided below.

(2) Comment: ODA stated that our assessment that 10 of 12 reserves meet recovery criterion 1 (see **Background** for descriptions of the recovery criteria) is misleading because two populations are not legally protected. Further, they stated that the definition of a “reserve” requires both a minimum population size (5,000 plants) and formal protection with management for long-term survival. ODA commented that two rough popcornflower populations (Horsepasture 2 and TNC/ODOT Popcornswale

Preserve) are not legally protected, and it is unclear if they are managed specifically to protect the species.

Our response: We agree that the two rough popcornflower populations on privately held property do not have formal protection. We consider formal protection to be habitat secured through ownership or management arrangement that ensures long-term preservation of the habitat features on which rough popcornflower depends. We acknowledge the Horsepasture 2 population occurs on privately held land that is not managed specifically to protect rough popcornflower, and it is not subject to any legal land or regulatory protection (except for requirements for consultation with the Service for any Federal actions that may affect the rough popcornflower). We now consider the property unprotected and have removed it as a “reserve” population.

We consider the TNC/ODOT Popcornswale Preserve population, which contains lands owned by both TNC and ODOT, to be a reserve due to: (1) our long-term partnership with TNC; and (2) the protections in place on the portion of the lands owned by ODOT. We have cooperated with TNC on many occasions to augment the rough popcornflower population, restore habitat, and survey the TNC/ODOT Popcornswale Preserve population. TNC has partnered with many of our agency’s initiatives and programs throughout the United States for many years, including a Jobs in the Woods program at the TNC/ODOT Popcornswale Preserve that focused on rehabilitating wet prairie at the Popcornswale Preserve through removal of trees and shrubs and the control of nonnative invasive species to benefit rough popcornflower (USFWS 2003a, entire). We maintain close communication with TNC regarding the rough popcornflower population at this site.

The rough popcornflower is afforded protection by state law on the ODOT portion of this population, under Oregon Revised Statutes (ORS) 564.010-.994 (e.g., ORS 564.115, Protection and conservation programs). Because the ODOT’s

Popcornswale property lies adjacent to and is part of the same biological population as the TNC property, we consider the ODOT population to independently meet “reserve” level population status without considering the portion of the population that falls on TNC property. Thus, for the reasons stated above, we consider the TNC/ODOT Popcornswale Preserve population to be a reserve.

(3) Comment: ODA commented that criterion 3, which requires a specific distribution of reserve populations throughout the three recovery units and areas outside the recovery units, has not been met. ODA remarked that there is a need for one more qualifying reserve in both the Sutherlin and Calapooya Creek recovery units to meet the criterion, though they consider the intent of criterion 3 met. ODA commented that we should meet these requirements or formally revise them with clear scientific justification before proceeding with downlisting the rough popcornflower.

Our response: In the past several years, new census data has resulted in updated population numbers for the rough popcornflower populations. These data refine the area estimates for populations of rough popcornflower, which changed the number of populations that met the distribution requirement for criterion 3. Currently, there are four reserves in the Sutherlin Creek recovery unit (Orenco Ponds, ODOT Wilbur, ODOT Popcornswale, and Southside Swale), one reserve in the Yoncalla Creek recovery unit (Yoncalla 2), no reserves in the Calapooya Creek recovery unit, and one reserve located in the North Bank Habitat Management Area (Middle Barn), that meet criterion 3. Although not considered a reserve, the Horsepasture 2 population meets both area and population requirements for criterion 3, as well. The most recent survey data indicate that 12 populations, including Horsepasture 2, exceed 5,000 plants distributed across all recovery units and the Umpqua Management Area, and 8 populations exceed 500 square meters (m^2) (5,382 square feet (ft^2)) of plant cover. Considering this updated information, we find that the intent of criterion 3 has been met.

It is not a requirement of the Act that we revise recovery criteria prior to undertaking a reclassification. Recovery plans provide roadmaps to species recovery but are not required to achieve recovery of a species or to evaluate it for downlisting. In addition, recovery plans are nonbinding documents that rely on voluntary participation from landowners, land managers, and other recovery partners. A determination of the status for a valid, extant species is made solely on the question of whether it meets the definition of an endangered or threatened species. As explained below (see **Final Reclassification Decision**), the rough popcornflower no longer meets the definition of an endangered species but meets the definition of a threatened species.

(4) Comment: ODA commented that monitoring data presented in the proposed rule do not fully support the criterion 4 objective that stable or increasing population trends occur over a 5-year period for at least seven reserve populations, with only six reserve populations showing population stability and three other populations without sufficient data.

Our response: New data obtained since the proposed rule now show that nine reserve populations have a stable or increasing population trend over a 5-year period (USFWS 2026, entire); thus, this criterion is met.

(5) Comment: ODA commented that persistent threats to rough popcornflower remain across its range and should be routinely addressed to ensure the species persists. They suggested that one-third of the rough popcornflower populations are small, at risk of exposure to development or succession, and likely to suffer from genetic isolation and other genetic problems. In addition, they expressed concern that rough popcornflower populations face challenges from a changing climate, lack of secure regulatory requirements to protect the species, and invasive species.

Our response: We review the best scientific and commercial data available when conducting a threats analysis. The identification of factors that could impact a species

negatively is not sufficient to compel a finding that a species meets the definition of an endangered or threatened species under the Act. In considering what factors might constitute a threat, we must look beyond the mere exposure of the species to the factor to determine whether the exposure is likely to cause actual impacts to the species and the degree to which these factors are currently impacting and likely to impact the species within the foreseeable future.

We agree with ODA that the factors identified present some level of continued threat to the species into the future, and we discuss these population-level threats in the context of the overall species-level population and occupied area trends in the SSA (USFWS 2021, pp. 17–26). However, the species has recovered to the point at which it is no longer currently in danger of extinction but is likely to become in danger of extinction within the foreseeable future. While some populations remain small and potentially isolated, the majority of rough popcornflower populations support more than 5,000 individuals each, which is the population size at which the species is resilient to disturbances and less susceptible to stochastic events and genetic issues. Connectivity between populations has also improved since the initial listing of the species, helping to alleviate potential genetic isolation for some populations.

Competition with nonnative invasive plants remains an ongoing threat for the rough popcornflower, primarily due to habitat encroachment and elimination of bare ground needed for popcornflower seed germination. However, nonnative invasive species management remains a priority for many of the land managers where rough popcornflower is found, and investments in weed control and improved invasive species management have contributed to the species' stable or increasing populations (USFWS 2021, p. 24). While these efforts need to be maintained, the impact of nonnative invasive plants can be managed.

Rough popcornflower has the potential to be negatively impacted by climate change, primarily due to the increased variability of precipitation leading to periods of prolonged drought interspersed by years with heavy rainfall events. This variation in precipitation could increase the frequency at which wetlands dry before rough popcornflower has completed the flowering and fruiting stage. Temperatures could also rise above those suitable for growth of the species. Conservation efforts have increased the species' resiliency, redundancy, and representation such that the species is now better able to sustain viability through changing climate conditions, though we agree these impacts may persist in the foreseeable future (UFWFS 2021, pp. 24–25).

Rough popcornflower is a conservation-reliant species, and significant progress has been made in protecting and managing sites supporting the species through the use of conservation efforts such as vegetation control, reintroductions and augmentation, and conservation agreements. At the time of listing, rough popcornflower was known to consist of approximately 7,000 individuals in 8 populations. With implementation of recovery actions and the discovery of previously unknown populations, there are currently over 2,000,000 plants in 18 populations. While challenges for the species remain, the current and future viability of the species supports a status change to downlist from an endangered species to a threatened species under the Act.

(6) Comment: ODA commented that the analysis of resiliency, redundancy, and representation under Scenario B indicating that the viability of rough popcornflower is not likely to be significantly reduced over the next 30 years is overly optimistic given the current threats facing rough popcornflower.

Our response: Future scenarios are not intended to function as predictions; rather, they are a tool for assessing the potential long-term viability of the species in response to a range of plausible future conditions.

In our assessment of future viability of the species in the SSA report, we considered better than expected (Scenario A), moderate (Scenario B), and worse than expected (Scenario C) scenarios that examined species viability over the next 30 years (USFWS 2021, pp. 41–47). We include these scenarios to capture the full range of plausible futures for rough popcornflower. Scenario B is the most likely scenario based on current condition trajectories; it estimates that government agencies, non-profit conservation organizations, academic institutions, and private landowners will continue to collaborate and contribute conservation resources to the rough popcornflower and its habitats. Scenario A, the upper plausible limit, projects even greater conservation effort. Scenario C projects conservation efforts decrease from current levels. Therefore, Scenario B is only one of the plausible future outcomes we considered for the species and falls between the upper and lower condition outcomes. No one scenario is relied on to assess the status of the species. Rather, we look at the entire range of plausible outcomes to inform the status determination.

(7) Comment: ODA commented that it is misleading to suggest that conservation measures and recovery actions of partners are responsible for the increase of known plants from about 7,000 at the time of listing to over 800,000 at the time of the proposed rule (now over 2,000,000 with updated survey information).

Our response: We amended language in the rule to attribute some population increases to reintroduction, augmentation, and restoration efforts, and attribute other population increases to the discovery of existing populations that were not known or completely censused at the time of the listing. We further note that we consider the discovery of additional populations to be the direct result of recovery plan-driven survey efforts by partners such as ODOT, ODA, Phoenix School volunteers, and TNC and their volunteers.

I. Final Reclassification Determination

Background

Rough popcornflower is an herbaceous plant in the borage or “forget-me-not” family (Boraginaceae) and is endemic to the Umpqua River basin in Douglas County, Oregon, with populations concentrated in the Sutherlin Creek drainage (figure 1). It is closely associated with emergent wetlands within seasonally wet meadows or prairie and relatively level, open habitats formed from poor draining clay-loam soils.

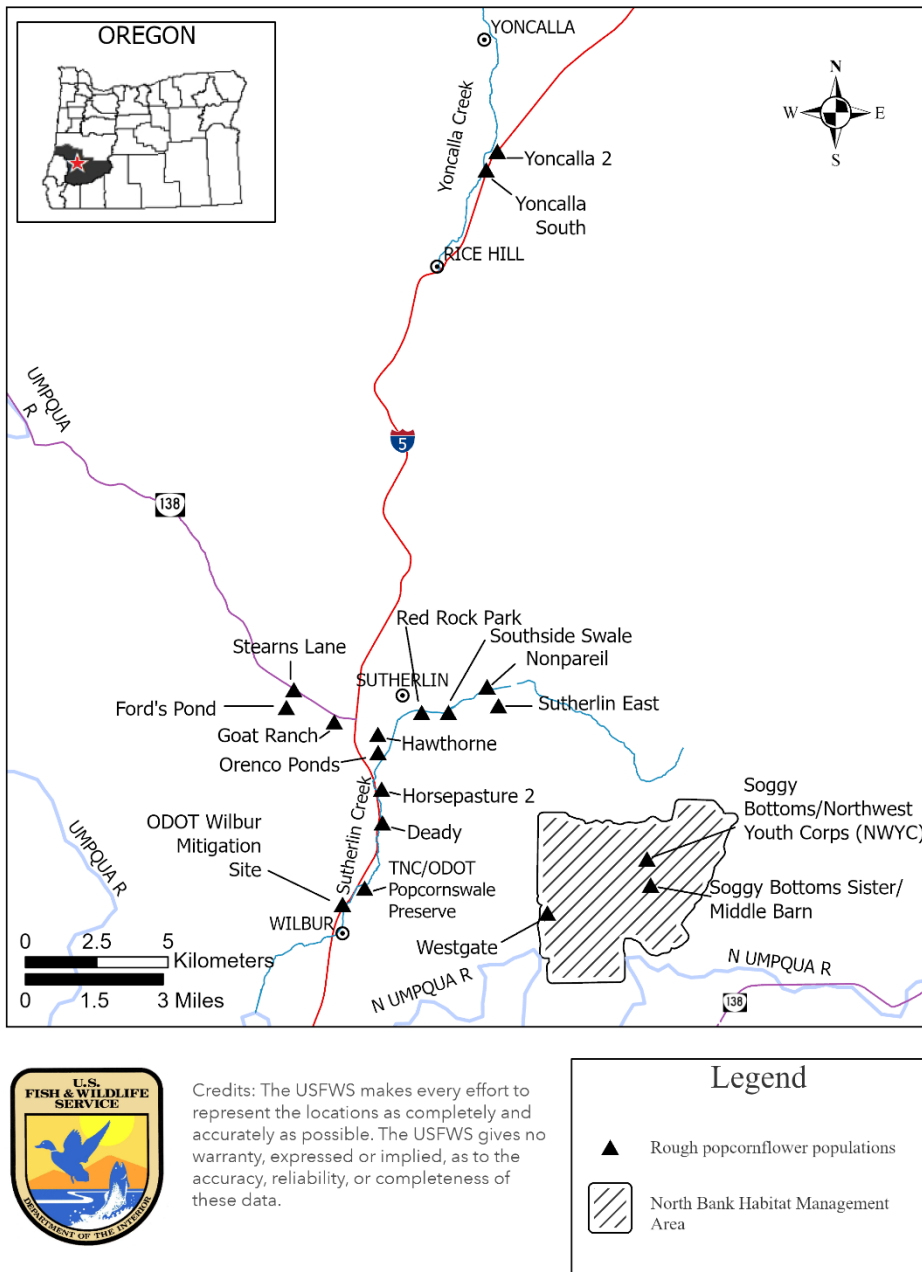


Figure 1. Distribution of rough popcornflower in Douglas County, Oregon.

Rough popcornflower can be either an annual or a short-lived perennial.

Individual rough popcornflower plants are between 7 centimeters (cm) (2.75 inches (in)) and 60 cm (23.6 in) tall, with narrow, bright-green leaves. Their trumpet-shaped, non-

fragrant flowers consist of five fused petals and are mostly white with yellow centers. Rough popcornflower plants, whether annual or perennial, reach sexual maturity and produce fruits in their first year. The plants generally germinate in the fall, bloom in late spring and early summer, produce seed beginning in late June, and then senesce between July and November. The species is capable of either self-fertilization or cross-fertilization; however, generalist insect pollination appears to be the predominant vector enabling rough popcornflower reproduction (Amsberry and Meinke 2001, pp. 12–13). A thorough review of the taxonomy, life history, and ecology of the rough popcornflower is presented in the SSA report, version 1.0 (USFWS 2021, entire).

Recovery Criteria

Section 4(f) of the Act directs us to develop and implement recovery plans for the conservation and survival of endangered and threatened species unless we determine that such a plan will not promote the conservation of the species. Under section 4(f)(1)(B)(ii), recovery plans must, to the maximum extent practicable, include objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of section 4 of the Act, that the species be removed from the Lists of Endangered and Threatened Wildlife and Plants.

Recovery plans provide a roadmap for us and our partners on methods of enhancing conservation and minimizing threats to listed species, as well as measurable criteria against which to evaluate progress towards recovery and assess the species' likely future condition. However, they are not regulatory documents and do not substitute for the determinations and promulgation of regulations required under section 4(a)(1) of the Act. A decision to revise the status of a species, or to delist a species, is ultimately based on an analysis of the best scientific and commercial data available to determine whether a species is no longer an endangered species or a threatened species, regardless of whether that information differs from the recovery plan.

There are many paths to accomplishing recovery of a species, and recovery may be achieved without all of the criteria in a recovery plan being fully met. For example, one or more criteria may be exceeded while other criteria may not yet be accomplished. In that instance, we may determine that the threats are minimized sufficiently and that the species is robust enough that it no longer meets the definition of an endangered species or a threatened species. In other cases, we may discover new recovery opportunities after having finalized the recovery plan. Parties seeking to conserve the species may use these opportunities instead of methods identified in the recovery plan. Likewise, we may learn new information about the species after we finalize the recovery plan. The new information may change the extent to which existing criteria are appropriate for identifying recovery of the species. The recovery of a species is a dynamic process requiring adaptive management that may, or may not, follow all of the guidance provided in a recovery plan.

We completed a final recovery plan for the rough popcornflower in 2003 (USFWS 2003b, entire) and amended the plan in 2019 (USFWS 2019, entire). The objective of the original recovery plan for rough popcornflower was to reduce the threats and increase population viability to the point that the species could be downlisted to threatened status (USFWS 2003b, p. 21). The original recovery plan assigned each known natural population to one of three recovery units (Calapooya Creek, Sutherlin Creek, and Yoncalla Creek). The recovery units each corresponded to a drainage basin within the Lower North Umpqua system and represented groups of populations which share phenotypic similarities and are potentially genetically similar. The original recovery plan also established recovery criteria for downlisting (USFWS 2003b, pp. 21–22). At that time, the information available was insufficient to identify recovery criteria for delisting. The 2019 recovery plan amendment evaluated the adequacy of existing

recovery criteria, amended downlisting criteria, added delisting criteria, and presented rationale supporting the recovery plan modification (USFWS 2019, entire).

Below are the downlisting criteria for the rough popcornflower as amended in 2019 (USFWS 2019, pp. 4–6), and the progress made to date toward achieving each criterion.

Criterion 1 for Downlisting

Criterion 1 states that at least 9 reserves, containing a minimum of 5,000 plants each, are protected and managed to assure their long-term survival. A reserve refers to one or more patches of rough popcornflower located within 1 kilometer (km) (0.6 miles (mi)) of each other that are protected from development and managed for the continued existence of the species (USFWS 2019, p. 3). The minimum population size of 5,000 individuals per reserve is intended to provide sufficient resiliency to withstand stochastic events (Culotta 1995, pp. 31–32; Traill et al. 2007, p. 164). The number of reserves is intended to provide sufficient redundancy such that rough popcornflower is not at risk of extinction due to catastrophic events. The maximum distance between patches within a reserve provides connectivity for pollinator-mediated gene flow across the population (USFWS 2019, p. 4).

At the time of listing, our knowledge of rough popcornflower abundance and distribution was limited to approximately 7,000 known plants in 8 populations (USFWS 2021, p. 9). Since then, many conservation partners have made significant contributions to rough popcornflower recovery efforts, including additional monitoring that has revealed populations and plants not known at the time of listing. For example, the ODA collected seed, sowed seed for use by multiple partners, augmented existing populations, conducted monitoring, and provided technical expertise. Other conservation partners, such as the Douglas Soil and Water Conservation District, City of Sutherlin, and Bureau of Land Management (BLM), have committed to conservation measures that include

habitat restoration followed by seeding on several properties (USFWS 2001, entire; USFWS 2004, entire; USFWS 2023c, entire). Recent surveys (USFWS 2021, appendix 3; USFWS 2022, entire; USFWS 2023a, entire; USFWS2025, entire) documented a total of 11 rough popcornflower reserves. All 11 of those reserves are protected and managed, while 1 additional population (a privately owned parcel containing over 1,000,000 plants) is currently adequately supporting rough popcornflower but is not protected and thus not considered a reserve (table 1).

Ten of the 11 reserves meet the minimum population size of 5,000 individuals per reserve to fully satisfy criterion 1 (USFWS 2026, entire). This number of plants and the distribution of populations is expected to enable rough popcornflower to withstand both stochastic and catastrophic events, and to maintain the capacity to adapt to future environmental changes. As such, we conclude that this downlisting criterion has been met and exceeded.

Criterion 2 for Downlisting

Criterion 2 states a minimum of 500 m² (5,382 ft²) is occupied by rough popcornflower within each of the 9 reserves called for in criterion 1. The intent of this criterion is to have multiple populations large enough to maintain sufficient resiliency to withstand stochastic events.

Six of the 10 reserves that meet criterion 1 contain at least 500 m² (5,382 ft²) of occupied habitat to meet the description of criterion 2. Two other populations (Deady and Horsepasture 2) also meet or exceed the area coverage parameter but do not satisfy the criterion as they are not considered to be protected populations (see table 1, below). Although this criterion is not fully met as identified in the 2019 amendment to the recovery plan, there are eight populations that meet or exceed the area coverage parameter (USFWS 2026, entire). These eight populations are sufficiently spatially distributed across the species' range to enable the species to withstand both stochastic

and catastrophic events, and to maintain the capacity to adapt to future environmental changes. We conclude that the intent of this criterion has been met.

Criterion 3 for Downlisting

Criterion 3 states that a minimum of nine reserves, each meeting criteria 1 and 2, are distributed across the recovery units, with a minimum of five reserves in the Sutherlin Creek recovery unit and at least one reserve each in the Yoncalla Creek and Calapooya Creek recovery units. The remaining two reserves may be located within any of the natural recovery units or elsewhere within the watersheds containing the recovery units. The intent of this criterion is to provide sufficient redundancy of populations across the species' range to allow the species to withstand catastrophic events.

Of the six reserves meeting criteria 1 and 2, four are in the Sutherlin Creek recovery unit, one is in the Yoncalla Creek recovery unit, none are in the Calapooya Creek recovery unit, and one is in the Umpqua Management Area, which includes introduced populations of rough popcornflower in the BLM's North Bank Habitat Management Area (USFWS 2026, entire).

Criterion 3 has not been fully met because the number of reserves fully meeting both criteria 1 and 2 is not met, and one fewer reserve than is indicated in the criterion currently exists in both the Sutherlin Creek and Calapooya Creek recovery units. However, the distribution of 12 populations that each exceed 5,000 plants (10 meeting criterion 1) across all recovery units and the Umpqua Management Area, and 8 populations that exceed 500 m² (5,382 ft²) occupied by rough popcornflower, demonstrate that relatively large populations are spatially distributed across the species' range. Although reserve populations are not distributed as prescribed in the recovery plan, the distribution and number of populations exceeding 5,000 plants indicate the species is likely to be sufficiently resilient to catastrophic events. Therefore, we find that the intent of this downlisting criterion has been met.

Criterion 4 for Downlisting

Criterion 4 states that over a period of 5 years, with a minimum of 3 individual years of monitoring, demographic data indicate at least seven of the nine reserves referenced in criterion 1 have average population numbers that are stable or increasing, without decreasing trends lasting more than 2 years. Stable or increasing populations are an indicator of resiliency. While some inter-annual variability is expected due to demographic and environmental stochasticity, this criterion is intended to provide sufficient confidence that large, sustained declines will not occur. Population monitoring, which entails taking a full plant census, occurs in late spring or early summer, either annually or biannually. We monitor populations on private, city, or county land when authorized to do so. Alternatively, we provide funding through the Cooperative Endangered Species Conservation Fund to the ODA to monitor populations. Conservation partners, including the BLM, ODOT, and TNC monitor populations on their lands biennially.

Nine of the 10 rough popcornflower reserves that meet criterion 1 also currently meet this criterion (see table 1, below), and thus this downlisting criterion is met. Although the remaining reserve meeting criterion 1 has not been monitored with sufficient frequency to satisfy all of the requirements of this criterion (ODOT Wilbur Mitigation Site), it has maintained relatively stable population numbers between monitoring events from 2011–2024 (USFWS 2021 pp. 13–16; USFWS 2022, entire; USFWS 2023a, entire; USFWS 2025, entire). Having all 10 of the reserve populations exhibiting stable or increasing numbers across the range of the species demonstrates that rough popcornflower has sufficient resiliency to respond to inter-annual environmental variability and is unlikely to experience sustained declines across its range.

Table 1—Rough Popcornflower Downlisting Criteria and Status by Recovery Units/Area, Douglas County, Oregon
[✓ = criterion met]

Population		Recovery Unit	Downlisting criteria					
			#1			#2	#3	#4
			Plants > 5,000 (# of plants)	Managed or protected	Patches within 1 km	Area >500 m ² (size in m ²)	Criteria #1 and #2 met ⁵	3 survey yrs. w/in last 5 yrs.; no 2-yr decrease
1	Horsepasture 2 ¹	Sutherlin Creek	✓ (1,000,000)		✓	✓ (10,700)		
2	TNC ² Popcornswale Preserve	Sutherlin Creek	✓ (326,951)	✓	✓	✓ (1,384)	✓	✓
3	ODOT ³ Wilbur Mitigation Site	Sutherlin Creek	✓ (590,361)	✓	✓	✓ (914)	✓	
4	Hawthorne	Sutherlin Creek	(250)		✓	(10)		
5	Orenco Ponds	Sutherlin Creek	✓ (97,126)	✓	✓	✓ (1,344)	✓	✓
6	Red Rock Park	Sutherlin Creek	(3,175)	✓	✓	(82)		
7	Southside Swale	Sutherlin Creek	✓ (19,520)	✓	✓	✓ (2,785)	✓	✓
8	Deady	Sutherlin Creek	✓ (6,000)		✓	✓ (506)		
9	Sutherlin East	Sutherlin Creek	(1,000)		✓	(6)		
10	Ford's Pond	Calapooya Creek	✓ (27,130)	✓	✓	(145)		✓
11	Stearns Lane	Calapooya Creek	(2)		✓	(2)		
12	Nonpareil	Calapooya Creek	(300)		✓	(100)		
13	Goat Ranch	Calapooya Creek	(75)		✓	(5)		
14	ODOT ³ Yoncalla South	Yoncalla Creek	✓ (12,451)	✓	✓	(210)		✓
15	Yoncalla 2	Yoncalla Creek	✓ (15,175)	✓	✓	✓ (845)	✓	✓
16	Soggy Bottoms/ NWYC Patch	Umpqua Mgmt. Area ⁴	✓ (7,698)	✓	✓	(107)		✓
17	Middle Barn/Soggy Bottoms Sister	Umpqua Mgmt. Area ⁴	✓ (45,092)	✓	✓	✓ (500)	✓	✓
18	Westgate	Umpqua Mgmt. Area ⁴	✓ (10,157)	✓	✓	(229)		✓
TOTAL			2,162,463 plants			19,874 m²		

¹ The Horsepasture 2 population meets the population and area requirements of downlisting criteria 1 and 2 but is located on private property and is not considered protected. We do not consider this population to be a reserve.

² TNC means The Nature Conservancy.

³ ODOT means the Oregon Department of Transportation.

⁴ The Umpqua Management Area is not an official recovery unit. This area is an additional recovery management area that includes introduced populations of rough popcornflower in the Bureau of Land

Management (BLM)'s North Bank Habitat Management Area. While not an official recovery unit, the Umpqua Management Area populations do contribute toward the overall species' recovery.

⁵ Downlisting criterion 3 states that a minimum of nine reserves, each meeting the requirements in downlisting criteria 1 and 2, are distributed with at least one reserve each in the Calapooya Creek and Yoncalla Creek recovery units, and a minimum of five reserves in the Sutherlin Creek recovery unit.

Regulatory and Analytical Framework

Regulatory Framework

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations in title 50 of the Code of Federal Regulations (CFR) set forth the procedures for determining whether a species is an endangered species or a threatened species, issuing protective regulations for threatened species, and designating critical habitat for endangered and threatened species.

The Act defines an "endangered species" as a species that is in danger of extinction throughout all or a significant portion of its range, and a "threatened species" as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

- (A) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) Overutilization for commercial, recreational, scientific, or educational purposes;
- (C) Disease or predation;
- (D) The inadequacy of existing regulatory mechanisms; or
- (E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals

of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects. We consider these same five factors in downlisting a species from endangered to threatened.

We use the term “threat” to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term “threat” includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term “threat” may encompass—either together or separately—the source of the action or condition or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an “endangered species” or a “threatened species.” In determining whether a species meets either definition, we must evaluate all identified threats by considering the species’ expected response and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an “endangered species” or a “threatened species” only after conducting this cumulative analysis and describing the expected effect on the species.

The Act does not define the term “foreseeable future,” which appears in the statutory definition of “threatened species.” Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis which is further described in the 2009 Memorandum Opinion on the foreseeable future from the Department of the Interior, Office of the Solicitor (M-37021, January 16,

2009; “M- Opinion,” available online at

<https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/M-37021.pdf>). The foreseeable future extends as far into the future as the U.S. Fish and Wildlife Service can make reasonably reliable predictions about the threats to the species and the species’ responses to those threats. We need not identify the foreseeable future in terms of a specific period of time. We will describe the foreseeable future on a case-by-case basis, using the best scientific and commercial data available and taking into account considerations such as the species’ life-history characteristics, threat-projection timeframes, and environmental variability. In other words, the foreseeable future is the period of time over which we can make reasonably reliable predictions. “Reliable” does not mean “certain”; it means sufficient to provide a reasonable degree of confidence in the prediction, in light of the conservation purposes of the Act.

Analytical Framework

The SSA report documents the results of our comprehensive biological review of the best scientific and commercial data available regarding the status of the species, including an assessment of the potential threats to the species. The SSA report does not represent our decision on whether the species should be reclassified as a threatened species under the Act. However, it does provide the scientific basis that informs our regulatory decisions, which involve the further application of standards within the Act and its implementing regulations and policies.

To assess the rough popcornflower’s viability, we used the three conservation biology principles of resiliency, redundancy, and representation (Shaffer and Stein 2000, pp. 306–310). Briefly, resiliency is the ability of the species to withstand environmental and demographic stochasticity (for example, wet or dry, warm or cold years), redundancy is the ability of the species to withstand catastrophic events (for example, droughts, large pollution events), and representation is the ability of the species to adapt to both near-

term and long-term changes in its physical and biological environment (for example, climate conditions, pathogens). In general, species viability will increase with increases in resiliency, redundancy, and representation (Smith et al. 2018, p. 306). Using these principles, we identified the species' ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing the species' viability.

The SSA process can be categorized into three sequential stages. During the first stage, we evaluated individual species' life-history needs. The next stage involved an assessment of the historical and current condition of the species' demographics and habitat characteristics, including an explanation of how the species arrived at its current condition. The final stage of the SSA involved making predictions about the species' future condition, including responses to positive and negative environmental and anthropogenic influences. Throughout all of these stages, we used the best scientific and commercial data available to characterize viability as the ability of a species to sustain populations in the wild over time, which we then used to inform our regulatory decision.

The following is a summary of the key results and conclusions from the SSA report; the full SSA report can be found at Docket No. FWS-R1-ES-2024-0005 on <https://www.regulations.gov> and at <https://ecos.fws.gov/ecp/species/2500>.

Summary of Biological Status and Threats

In this discussion, we review the biological condition of the species and its resources, and the threats that influence the species' current and future condition, in order to assess the species' overall viability and the risks to that viability. In addition, the SSA (USFWS 2021, entire) documents our comprehensive biological status review for the species, including an assessment of the potential threats to the species. The following is a summary of this status review and the best scientific and commercial data available gathered since that time that have informed this decision.

Species Needs

Rough popcornflower typically occupies seasonally wet meadows or prairie, seasonally ponding mudflats, and Oregon ash (*Fraxinus latifolia*) swale openings dominated by native wetland-associated plants in valley lowlands where the ground is moist well into the summer season. Rough popcornflower requires early seral habitat and is not associated with dense tree or shrub canopies. Periodic disturbance (e.g., flooding, fire, mowing, or grazing) is necessary to control nonnative invasive plant competitors and maintain the early seral and open habitat conditions in which rough popcornflower populations thrive. Several insects are known to pollinate rough popcornflower: honeybees (*Apis* spp.); bumble bees (*Bombus* spp.); halictid and megachilid bees; Hemiptera (true bugs); bombyliid, syrphid, and tachinid flies; and red-shouldered ctenucha moths (*Ctenucha rubroscapus*). These insects require diverse native vegetation and minimal pesticide exposure.

Resilient rough popcornflower populations need enough individuals to withstand stochastic events and disturbances. The minimum viable population size for rough popcornflower has not been identified. However, the recovery plan characterizes 5,000 plants as approximately the number of plants required to achieve an effective population size of 500 – the minimum effective population size where an isolated population is likely to be resilient to most disturbances and capable of resisting inbreeding depression (USFWS 2003b, p. 17; USFWS 2019, p. 4). Though some current populations may have fewer than 5,000 plants, taking into consideration other factors such as habitat quantity, habitat quality, connectivity, management, protection, reproduction, they may still be considered to have high resiliency (USFWS 2021, p. 31). For rough popcornflower to be considered viable as a species, it must be able to withstand catastrophic events and adapt to environmental changes. This can be achieved with sufficient resilient populations distributed across the species' geographic range, representing the range of ecological

settings in which the species is known to exist. The minimum number of populations required for rough popcornflower has not been determined. However, distribution and abundance goals laid out in the recovery plan (USFWS 2003b, pp. 21–22; USFWS 2019, pp. 4–8) and described above under **Recovery Criteria** provide a benchmark for evaluating the species' condition.

Threats

When we listed rough popcornflower as endangered (65 FR 3866; January 25, 2000), the primary threats were identified as habitat alteration by wetland filling and development, livestock grazing (or herbivory), and competition from nonnative invasive species. Small, isolated populations contributed toward the species' vulnerability to these threats. Lesser potential threats included overcollection for scientific or horticultural purposes, vandalism, the inadequacy of regulatory mechanisms, road maintenance, fire, and flooding (65 FR 3866 at 3870–3872; January 25, 2000). Since the time of listing, we found that the primary threats to rough popcornflower are habitat alteration by wetland filling and development, competition from native and nonnative species, impacts due to climate change, and lack of regulatory mechanisms. The best available information does not indicate that livestock grazing, overcollection, vandalism, road maintenance, fire or flooding currently pose a threat to the species (USFWS 2003b, p. 13; USFWS 2023b, entire).

Habitat Loss and Fragmentation

In the final listing rule (65 FR 3866 at 3869; January 25, 2000), we described how rough popcornflower populations had become fragmented due to draining and filling of wetlands from properties being developed. At the time of listing, only five populations of rough popcornflower were protected from detrimental land-use activities. Currently, 11 of the 18 populations are under Federal, State, municipal, or land trust protections. Education efforts have increased recognition of rough popcornflower habitat, as well as

avoidance, minimization, or mitigation of development impacts. Because 11 of the 18 known populations are now protected, the threat posed by detrimental land use activities has been significantly reduced since the time of listing. However, the lack of formal commitments for the long-term beneficial management of rough popcornflower in the remaining 7 populations (approximately 47 percent of the total number of individuals rangewide) means that the threat of detrimental land-use activities remains in some parts of the species' distribution.

Small Population Size

In the final listing rule (65 FR 3866 at 3869–3870; January 25, 2000), we described the distribution of the rough popcornflower as 17 small patches of 1 to 3,000 plants (8 populations with approximately 7,000 plants total) that were threatened by natural (i.e., flood) events, anthropogenic (e.g., herbicide treatment) events, or both. At that time, the species' small population size was considered a threat because a single natural or human-caused event had the potential to extirpate rough popcornflower patches.

Due to implementation of recovery actions, including survey efforts leading to the discovery of previously unknown populations, there are currently over 2,000,000 plants in 18 populations (see table 1, above). Twelve of the 18 populations have over 5,000 plants. At the time of listing, 84% of rough popcornflower individuals were on unprotected land, but new information gathered through these survey efforts indicates populations at protected sites have increased such that a much smaller proportion of individuals (47%) occur on unprotected land. Although small populations that remain vulnerable to extirpation occur, individual populations are broadly distributed and the likelihood of a large-scale event affecting them collectively is unlikely. During years with below average precipitation, drought, or fires, seed set could fall short of what is needed to maintain population stability. However, with a large number of seed produced by

plants, it is likely that any periodic depletion of seed bank will be short-term and the seed bank will be replenished (USFWS 2021, p. 7). One population thought to be extirpated for several years was documented flowering after 3 years of species absence (Amsberry and Meinke 2008, p. 14).

At the time of listing, data also indicated that small, isolated populations may not be able to sustain adequate genetic variation, and that a lack of connectivity between isolated patches and populations would limit pollinator-mediated gene flow. Our current analysis of connectivity for the 18 rough popcornflower populations ranked 11 populations as having high connectivity (within 950 meters (m) (3,117 ft) or less) and 3 populations as having medium connectivity (between 950 and 1,500 m (3,117 and 4,921 ft)) (USFWS 2021, p. 35), indicating that rough popcornflower populations are less isolated than at the time of listing. Overall, while the connectivity of small populations is still of some concern, the species is much less vulnerable to the effects of small population size and genetic isolation than when it was listed in 2000.

Herbivory

Herbivory by rodents and livestock has been documented and was identified as a threat to rough popcornflower (65 FR 3866 at 3871; January 25, 2000). Although high densities of white-tailed (*Odocoileus virginianus*) and black-tailed deer (*Odocoileus hemionus hemionus*) overlap with the distribution of rough popcornflower, the best available information does not indicate that deer herbivory is adversely impacting rough popcornflower populations (USFWS 2021, p. 23).

Grazing by livestock may or may not be consistent with rough popcornflower conservation. Grazing of rough popcornflower during its growing period can be detrimental to the species. However, grazing can help control nonnative plant competitors and provide a measure of disturbance that maintains the preferable early seral and open habitat conditions for rough popcornflower. Four rough popcornflower populations with

more than 5,000 plants each are partially or entirely on privately-owned grazing lands; the largest single population (more than 1,000,000 plants) is on a private horse ranch where grazing is managed in a manner compatible with the long-term survival of rough popcornflower (USFWS 2021, p. 16). Depending on how grazing is managed, it can adversely impact or benefit individual populations of rough popcornflower. With 11 of the 18 populations considered protected or on adequately managed land, livestock herbivory is not currently considered a threat to the species overall. However, because formal commitments for long-term management of livestock grazing for the benefit of rough popcornflower have not been secured for some populations (including the largest population of over 1,000,000 plants), these populations remain potentially exposed to this threat and its impacts.

Nonnative Invasive Plant Encroachment

Nonnative invasive plants, including pennyroyal (*Mentha pulegium*), teasel (*Dipsacus* spp.), creeping thistle (*Cirsium arvense*), and reed canary grass (*Phalaris arundinacea*) are a primary threat to the establishment and maintenance of rough popcornflower due to their encroachment of habitat and elimination of bare ground, which popcornflower seeds require to germinate. Pennyroyal is present at many rough popcornflower sites, and teasel and creeping thistle control require constant conservation efforts at the North Bank Habitat Management Area, Yoncalla South, and TNC/ODOT Popcornswale Preserve populations.

Rough popcornflower is conservation reliant, and when natural disturbance events are lacking, active management (e.g., manual weeding, herbicide application, mowing, and strategic grazing) is necessary to control competing vegetation and maintain early seral habitats, which can help rough popcornflower populations persist into the future (USFWS 2010, p. 27). Nonnative invasive plants appear to be less of a concern on private lands due to livestock grazing (USFWS 2020, p. 2). Strategic grazing by livestock, in

terms of seasonal grazing periods and intensity, when closely monitored, can benefit rough popcornflower populations by reducing plant competition and creating open ground that facilitates seed germination and enables population expansion (USFWS 2021, p. 24).

While competition with nonnative invasive plants remains an ongoing threat to rough popcornflower, this threat can be successfully managed through continued investments in the adaptive management practices that have resulted in flourishing populations across the species' range (USFWS 2021, appendices 3 and 4).

Fire

At the time of listing, fire was considered a natural event key to the formation and maintenance of rough popcornflower habitat (65 FR 3866 at 3867; January 25, 2000). In late September 2003, an accidental fire burned across the Soggy Bottoms rough popcornflower population at moderate intensity. The year following the burn, staff noted that individual rough popcornflower plants were much larger and robust, and the population had increased. The population dropped significantly during the following 5 years, although that was considered likely due to changed site hydrology. While the effects of fire in rough popcornflower habitat restoration are still unknown (USFWS 2010, p. 27), data collected after the 2003 fire suggest that low- to moderate-intensity fire can have at least short-term beneficial effects to the species.

Climate Change

The likely impacts of climate change on rough popcornflower's ecological processes are closely connected to the availability of water. Due to their shallow and ephemeral nature, wet swales in southwestern Oregon are particularly sensitive to increases in evaporation or reductions in rainfall. Strong climate variability is likely to persist in the Pacific Northwest, owing in part to the annual and decadal climate variability associated with the Pacific Ocean (May et al. 2018, p. 1,039). Models project

periods of prolonged drought interspersed with years featuring heavy rainfall driven by powerful atmospheric rivers and strong El Niño winters (May et al. 2018, p. 1,039). Even modest temperature increases could result in more water runoff in winter and less in spring and summer, more winter flooding, and drier summer soils, thereby altering the seasonality and duration of wetland hydration (Fleishman 2025, pp. 63-64, 75). Reduced soil moisture due to evaporation and transpiration may exacerbate drought effects (Fleishman 2025, pp. 74-75). Drought-mediated decreases in water depth and inundation periods could increase the frequency at which wetlands dry before rough popcornflower has completed its flowering and fruiting stages. However, Southern Oregon, along with other areas in the western United States, has been experiencing a prolonged drought for several years (Fleishman 2023, p. 52) and rough popcornflower continued to demonstrate stable or increasing population trends. Climate change could also cause temperatures to exceed those suitable for growth of the species (USFWS 2010, p. 28).

The impact of climate change on rough popcornflower will likely vary depending on site-specific conditions and annual precipitation variation. Rough popcornflower individuals are naturally adaptive to fall and winter inundation and depend on soil moisture until their seed has matured. An earlier warming trend may result in a limited seed set because the soil will dry out quicker and may benefit nonnative plants. Habitat management using herbicides and prescribed burning would likely increase with an increase in nonnative plants. However, if climate change in Oregon results in wetter winters and springs as predicted (Fleishman 2023, pp. 11–12), then the additional precipitation may lengthen seed set and favor rough popcornflower survival over competitors unable to adapt to saturated soils.

Conservation Efforts and Regulatory Mechanisms

Rough popcornflower is a conservation-reliant species, meaning that the species will require continued conservation efforts to remain viable (USFWS 2010, p. 30). Since

listing the species in 2000, we have coordinated with local, State, and Federal stakeholders on conservation actions for the species, some of which we supported with funding.

Mowing in rough popcornflower habitat to control competing nonnative invasive plant species, and subsequent outplanting of rough popcornflower, has occurred regularly at several sites. Other conservation actions include fencing to protect populations from anthropogenic disturbance; population reintroductions and augmentations; and stakeholder workshops in which species' needs, recovery targets, and habitat conservation were discussed to raise landowner awareness. Agencies and property owners who have made commitments to protect or manage rough popcornflower and its habitat are the City of Sutherlin, Oregon; Douglas Soil and Water Conservation District, Oregon; ODA, Native Plant Conservation Program; the BLM; the Native Plant Society of Oregon, Umpqua Valley Chapter; and TNC.

In the 2007 City of Sutherlin Conservation Agreement and Conservation Plan (ODA 2007, entire), the signatories (the Service, the City of Sutherlin, ODA, the Umpqua Valley Chapter of the Native Plant Society of Oregon, the Sutherlin Stampede Association, and the Sutherlin Blackberry Festival, Inc.) agreed to the following measures:

- Prohibit activities that would disturb or destroy existing populations of rough popcornflower, or their habitat, on land owned or managed by the City of Sutherlin;
- Contract or coordinate appropriately timed surveys for new populations of rough popcornflower on city-owned or -managed land prior to initiating ground-disturbing projects;
- Contact the ODA Native Plant Conservation Program if a new population of rough popcornflower is found during a pre-project survey and cooperate with the

ODA Native Plant Conservation Program to develop conservation-based alternatives to proposed projects that would impact rough popcornflower populations or their habitat; and

- Cooperate with the ODA Native Plant Conservation Program to implement a management plan promoting the conservation of the populations of rough popcornflower at the Red Rock Park (formerly Timber Days Grounds).

Since 2007, implementation of this Agreement has provided fencing to protect rough popcornflower populations, reduced competitive and nonnative invasive species, and increased population numbers. This agreement was updated in 2023. In the updated agreement, entitled “Conservation Agreement for Rough Popcornflower,” the City of Sutherlin agreed to continue to protect the plant and to extend the protection to Ford’s Pond, a property acquired after the original signing in 2007. The 2023 agreement also allows reintroduction of the species at Ford’s Pond (USFWS 2023c, p. 8).

The biological opinion on the North Bank Habitat Management Area issued by the Service in 2001 evaluated the effects of proposed management actions and conservation measures conducted by the BLM for three rough popcornflower populations occurring in the management area (USFWS 2001, p. 15). Proposed management actions included manual and mechanical removal of competitive vegetation and the use of integrated pest management techniques to control noxious weeds. Proposed conservation measures included retaining existing populations and introducing additional populations into suitable habitat. To date, the BLM has consistently implemented these management actions and conservation measures, and the BLM is expected to continue to maintain and enhance habitat for this species into the future.

The ODOT has established the Special Management Areas program to protect State-listed and federally listed endangered and threatened plant species identified on ODOT rights-of-way (ODOT 2017, p. 4). Special Management Areas are marked with

signs that instruct ODOT maintenance crews on allowable activities. ODOT entered a statewide habitat conservation plan (HCP) with the Service in 2017 (USFWS 2017, entire). Under the HCP, the Special Management Areas identify the known populations of rare plants along ODOT rights-of-way that they have agreed to avoid impacting. In most cases, only periodic maintenance is necessary in Special Management Areas, and site-specific restrictions have been developed to protect listed species.

All federally listed plants in Oregon are also protected by State law under the Oregon Endangered Species Act (ORS 564.010-.994), and their protection and conservation are administered by the ODA. The Oregon Endangered Species Act protects many other plant species in addition to those protected under the Federal Endangered Species Act. All State and municipal agencies, including City of Sutherlin, Douglas County, Douglas Soil and Water Conservation Service, and ODOT must consult with ODA when a proposed action on land owned or leased by the State, or for which the State holds a recorded easement, has the potential to appreciably reduce the likelihood of the survival or recovery of any listed plant species.

While we do not have a specific agreement in place with TNC that guarantees a commitment to future management, they have actively managed the rough popcornflower habitat at their property (the TNC/ODOT Popcornswale Preserve) since 1995 by monitoring populations, controlling nonnative invasive species, and managing habitat by reducing tree cover, mowing, and augmenting the population with seeding. TNC has continued to manage the TNC/ODOT Popcornswale Preserve multiple times a year since 1995 and is expected to continue these efforts.

These and other conservation efforts by us and our partners, including surveys, have helped increase the number of protected sites and improve the number of plants in the overall population. Currently, 11 of the 18 known populations throughout the species' range are under Federal, State, municipal, or land trust protections offering indefinite

protection from habitat conversion to other uses. The remaining 7 populations (approximately 47 percent of the total number of individuals) do not have formal commitments for the long-term beneficial management of rough popcornflower but are benefitting from voluntary management practices employed by land management agencies and private landowners.

Cumulative Effects

We note that, by using the SSA framework to guide our analysis of the scientific information documented in the SSA report, we have analyzed the cumulative effects of identified threats and conservation actions on the species. To assess the current and future condition of the species, we evaluate the effects of all the relevant factors that may be influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative-effects analysis.

Current Condition

Resiliency

Resiliency, the ability of populations to withstand stochastic events, is commonly determined as a function of metrics such as population size, growth rate, or habitat quality and quantity. We evaluated the current resiliency of rough popcornflower populations based on the population size, habitat quantity, connectivity, habitat quality, management frequency, reproductive success, and the degree of protection afforded to each population (see tables 2 through 8, below). Populations with over 5,000 mature plants were determined to be in high condition based on the downlisting criteria outlined in the species' recovery plan. Populations of over 1,000 plants were considered to be in medium condition, and those with under 200 plants were considered to be in low condition. We then assigned numerical values to each of the condition category rankings

and added them together to arrive at an overall resiliency score of each rough popcornflower population, which we then parsed into high, moderate, and low categories (see table 9, below). A complete description of our analytical approach to current condition is available in the SSA report (USFWS 2021, pp. 34–37).

Table 2—Population Size Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Population size (# of plants)	Number of populations in 2021	Number of populations in 2024
High ($\geq 5,000$)	13	12
Medium (1,000–4,999)	2	1
Low (1–999)	3	5

Table 3—Habitat Quantity Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Habitat quantity (amount)	Number of populations in 2021	Number of populations in 2024
High ($> 500 \text{ m}^2/5,382 \text{ ft}^2$)	7	8
Medium ($76\text{--}500 \text{ m}^2/818\text{--}5,382 \text{ ft}^2$)	3	6
Low ($< 76 \text{ m}^2/818 \text{ ft}^2$)	8	4

Table 4—Connectivity Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Connectivity (proximity to next population)*	Number of populations in 2021	Number of populations in 2024
High ($< 950 \text{ m}/3,117 \text{ ft}$)	11	No change reported
Medium ($950\text{--}2,000 \text{ m}/3,117\text{--}6,562 \text{ ft}$)	3	No change reported
Low ($> 2,000 \text{ m}/6,562 \text{ ft}$)	4	No change reported

* Scores are not strictly distance-based if populations are separated by barriers such as development, roads, or expanses of unsuitable habitat.

Table 5—Habitat Quality Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Habitat quality (presence of nonnative invasive species)	Number of populations in 2021	Number of populations in 2024
High (no invasive species)	5	2
Medium (1–2 invasive species)	8	11
Low (dominated by invasive species)	5	5

Table 6—Management Frequency Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Management frequency (interval)	Number of populations in 2021	Number of populations in 2024
High (continuous, annual, or biennial)	10	No change reported
Medium (3–5 years)	5	No change reported
Low (>5 years)	3	No change reported

Table 7—Reproductive Success Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Reproductive success (measures)	Number of populations in 2021	Number of populations in 2024
High (>5,000 plants and 100 percent seed production)	15	11
Medium (3,000–5,000 plants, 75–99 percent seed production)	1	2
Low (<3,000 plants, 0–74 percent seed production)	2	5

Table 8—Protected Status Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Individuals protected or managed status	Number of populations in 2021	Number of populations in 2024
Yes	11	No change reported
No	7	No change reported

Table 9—Overall Resiliency Rankings of Rough Popcornflower Populations from the SSA Report and Subsequent Surveys

Overall resiliency	Number of populations in 2021	Number of populations in 2024
High	11	12
Moderate	3	1
Low	4	5

As shown above in table 9, at the time of the SSA report in 2021, 11 (61 percent) of the 18 rough popcornflower populations scored high for resiliency, 3 (17 percent) scored moderate, and 4 (22 percent) scored low. Changes in condition category rankings as a result of surveys conducted from 2021–2024 (USFWS 2022, entire; USFWS 2023a, entire; USFWS 2025, entire) resulted in overall resiliency rankings of 12 (67 percent) high, 1 (5 percent) moderate, and 5 (28 percent) low. Some changes in condition category rankings from 2021 to 2024 reflect variability in survey timing and optimal blooming for the rough popcornflower populations, which may be asynchronous. For example, some populations may reach optimal blooming in late May one year and mid-June in others,

and surveys may not capture all populations at their peak. Additionally, one population (Red Rock) underwent some mowing and clearing that impacted the growing area at that site. Nevertheless, the overall condition results demonstrate relatively high resiliency across the range of the rough popcornflower.

Redundancy

Redundancy is a species' ability to withstand catastrophic events and is a function of the number and resilience of populations, as well as their distribution and connectivity. At the time of listing, there were eight known rough popcornflower populations. Currently, there are 18 known populations. Some of this increase is due to newly discovered populations; however, since the time of listing, habitat restoration, reintroductions, and habitat protection have collectively improved the status of the species. Of the 18 known populations, 12 populations score high for overall resiliency and are distributed across the range of the species, with 6 in the Sutherlin Creek recovery unit, 2 in the Yoncalla Creek recovery unit, 1 in the Calapooya recovery unit, and 3 in the Umpqua Management Area. The six populations with moderate or low resiliency contribute to the species' redundancy to a lesser degree and are distributed across the Calapooya Creek and Sutherlin Creek recovery units. The distribution of 12 populations with high resiliency across all 3 recovery units and the management area demonstrates the species' ability to withstand catastrophic events.

Representation

Representation refers to the ability of a species to adapt to change, and is assessed using geographic, genetic, ecological, and niche diversity data. Ecological diversity and genetic variation based on habitat differences, differences in annual and biennial life histories, and differences in growth forms may be inferred from the rough popcornflower's distribution across different sub-watersheds. Multiple populations with high resiliency throughout the species' range, along with populations of lesser resiliency,

facilitate the preservation of the genetic diversity present within each recovery unit. Although populations with fewer than 5,000 plants may have lower genetic variation, rough popcornflower's wide variety of possible pollinators (Amsberry and Meinke 2001, pp. 12–13) assists in gene transfer and could boost the genetic variation of these populations.

Natural and reintroduced rough popcornflower populations are currently distributed in multiple subwatersheds across the species' historical range, and plants demonstrate diversity within and between populations, including different growth forms and flowering times. Additionally, rough popcornflower seeds do not all germinate every year, and a portion of the seed bank likely remains in the ground. The presence of a long-term seed bank allows rough popcornflower to persist through periods of adverse environmental conditions. In combination, these factors indicate that the species has the capacity to adapt to a variety of environmental conditions.

Future Condition

To assess the future viability of rough popcornflower, we considered the factors that will influence the species within the foreseeable future. We define the foreseeable future as 30 years, as we consider this a reasonable timeframe to make reliable predictions about the threats to this species and its response to those threats due to this plant's reproductive strategy as an annual or short-lived perennial. Our viability assessment is characterized in terms of the resiliency, redundancy, and representation of the species as projected under various future conditions that capture the range of plausible outcomes (Shaffer and Stein 2000 pp. 306–310; Wolf et al. 2015, entire; Smith et al. 2018, pp. 304, 306–307). We projected the viability of rough popcornflower from 2020 to 2050 under three plausible future scenarios based on potential trends with conservation partners, climate patterns, and population demographics. Scenario A represented improvements over current conditions. Scenario B represented the most

likely conditions if current trends continue. Scenario C represented conditions that are worse than current conditions.

Scenario A, the upper plausible limit, assumes continued conservation support for the rough popcornflower including from private landowners throughout the species' range, as well as additional funding for outplanting and nonnative invasive vegetation control. Scenario B is the most likely scenario for the rough popcornflower based on current Federal and State agency commitments, outplanting successes, the current ability to place conservation agreements, and species' population demographic trends. We discuss scenario B further below. Scenario C assumes diminished habitat conditions and a decreased level of management actions (e.g., mowing, manual or chemical control of nonnative invasive herbaceous plants, prescribed burning) from current levels, falling short of what is needed and resulting in the reduction of the species' resiliency, redundancy, and representation over the next 30 years. For further details on all three scenarios, see the SSA report (USFWS 2021, pp. 41–47).

We determined that rough popcornflower is expected to continue to be influenced by the factors that have historically influenced and are currently influencing the species, at rates most closely associated with scenario B. Therefore, scenario B represents the most likely conditions if current trends continue (USFWS 2021, pp. 44–45). In scenario B, we made several assumptions about ongoing conservation support within the foreseeable future. Several conservation partners (government agencies, nonprofit conservation organizations, academic institutions, and private landowners) have made significant contributions to recovery efforts for rough popcornflower. We assume that these partners will continue to collaborate and contribute conservation resources to rough popcornflower and its habitat based on current regulations and agency commitments, outplanting successes, and our ability to obtain conservation agreements. Continued outreach efforts are likely to support awareness of the species among private landowners

and the public and to generate support for conservation. We also assume that development projects will continue to be evaluated by the Service, the Oregon Department of State Lands, and the ODA, and be modified to minimize or mitigate impacts to rough popcornflower and its habitats.

Under a continually increasing greenhouse gas emission scenario, Oregon's annual average temperature is projected to increase by 2.8 degrees Celsius (°C) (5 degrees Fahrenheit (°F)) by 2074 (Fleishman 2025, p. 7). In this emission scenario, the amount of annual precipitation is projected to be highly uncertain. Summers are expected to warm more than the annual average and are likely to become drier. Extreme heat and precipitation events are expected to become more frequent (Dalton et al. 2017, p. 8). The effects of climate change on rough popcornflower populations are expected to be relatively moderate. Most rough popcornflower plants are expected to adjust to warmer temperatures by dispersal of seeds to moister habitats (via ungulates, other mammals, or birds), flowering earlier, and shortening their flowering period (USFWS 2021, p. 42). Climate change may limit rough popcornflower's growing season and habitat as well as moisture availability, though the species would likely continue to maintain viability within the three recovery units and the introduced populations at the Umpqua Management Area (USFWS 2021, p. 45). Given differences in microsites and management across populations, we expect some populations may fare better than others under future conditions.

For species resiliency in Scenario B, we expect there will be a total of 20 rough popcornflower populations, increasing from the current total of 18 populations due to recovery efforts such as reintroductions. At least 10 of those populations are anticipated to be in protected areas (reserves), contain populations that meet or exceed 5,000 plants, and exhibit stable or increasing population counts in 7 out of 10 years (see table 10, below). In terms of redundancy, protected rough popcornflower populations are expected

to continue to be distributed in all three recovery units. With a total of 20 populations widely distributed across the species' range, we do not anticipate a catastrophic event, such as extreme flooding, would impact all populations of rough popcornflower simultaneously. Thus, we find that the rough popcornflower will likely be able to withstand catastrophic events.

Table 10—Future Viability of Rough Popcornflower Under a Moderate Future Scenario

Viability elements	Expected condition
Population Resilience	Protected populations (≥ 10) meet or exceed criterion of $\geq 5,000$ individual stems and show stable or positive demographic trends. The total population number is 20. Stable or increasing population counts occur 7 out of 10 years.
Species Redundancy	Redundancy is provided by having 20 populations present across the range to withstand catastrophic events.
Species Representation	20 populations, distributed across the range of the species, would provide genetic and ecological diversity for the species. No evidence of inbreeding depression.
Overall Viability	Moderate: The species is able to adapt to climate change, and species receives adequate monitoring to inform management needs. Species requires continued management.

For species representation, rough popcornflower populations are expected to be well distributed across all three recovery units and the Umpqua Management Area. We expect genetic diversity will likely be maintained in the foreseeable future, as future projections show at least 10 populations will likely exceed the effective population size necessary to sustain genetic diversity over time. An increase in connectivity due to larger populations will also reduce the likelihood of population isolation.

Collectively, our analysis of the resiliency, redundancy, and representation under this scenario indicates that the viability of the rough popcornflower is not likely to be significantly reduced over the next 30 years. However, some populations remain genetically isolated, and competition with nonnative invasive plants remains an ongoing threat to the species. Rough popcornflower also has the potential to be negatively impacted by climate change in the foreseeable future, primarily due to increased

variability of precipitation leading to periods of prolonged drought interspersed with years of heavy rainfall.

Determination of Rough Popcornflower Status

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species meets the definition of an endangered species or a threatened species. The Act defines an “endangered species” as a species in danger of extinction throughout all or a significant portion of its range, and a “threatened species” as a species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether a species meets the definition of an endangered species or a threatened species because of any of the following factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

Status Throughout All of Its Range

After evaluating threats to the species and assessing the cumulative effect of the threats under the section 4(a)(1) factors, we found that the primary threats to rough popcornflower, since the time of listing, have been the destruction and/or alteration of habitat by development and hydrological changes (e.g., wetland fills, draining, construction), competition from nonnative invasive plant species, impacts due to climate change (e.g., winter flooding, drier summer soils, and decreased fruit production), and lack of regulatory mechanisms. The best available information does not indicate that overcollection (Factor B) or herbivory (Factor C) are threats to the viability of the rough popcornflower. Our current analysis also indicates that the habitat threats (Factor A) and threats from the inadequacy of regulatory mechanisms (Factor D) have decreased since

the time of listing, while climate change and competitive exclusion from nonnative invasive plants (Factor E) will likely require ongoing monitoring and management.

Habitat-related threats (destruction, alteration, or both of habitat and competition from nonnative invasive plant species), identified as drivers of the rough popcornflower's status, are still present on the landscape; however, their magnitude and scope have decreased from historical levels and have been offset by a variety of management and conservation measures by many conservation partners since the rough popcornflower was listed as an endangered species (see 65 FR 3866; January 25, 2000), and these conservation actions continue today (USFWS 2021, p. 25 and appendix 3). While there is still fluctuation in nonnative invasive plant species growth depending on factors such as changes to maintenance routines that include targeted herbicide application, mowing and clearing, improvements in habitat management practices and extensive habitat restoration have been implemented, which have improved population resiliency and redundancy at several sites. Increased public awareness of the species has resulted in increased stewardship across lands with rough popcornflower populations and improved regulatory compliance. Greater understanding and compliance along with improvements in habitat management practices and extensive habitat restoration have helped ameliorate threats to the species, resulting in population increases and greater distribution. A majority of the rough popcornflower population sites (11 of 18) are protected by public ownership or managed to benefit the species; with these site protections and increased public knowledge of the species, compliance with regulatory mechanisms has increased significantly.

At the time of listing, rough popcornflower was known to exist in only 8 populations totaling 7,000 plants. There are currently 18 known populations totaling more than 2,000,000 plants. Although almost half (1,000,000) of the plants are within a single population, there are 17 other populations comprising more than 1,000,000 rough

popcornflower plants distributed across the range of the species; 11 of these populations are considered protected or managed. Although the plants and populations are not distributed precisely as identified in downlisting criteria (USFWS 2019, pp. 4–6), the population size (both the number of plants and the physical area covered) in two of the three recovery units and the additional recovery management area exceed the target population size by unit/area. Our viability analysis determined that the species currently has high resiliency, good redundancy, and sufficient representation (USFWS 2021, pp. 32–41). Thus, after assessing the best scientific and commercial data available, we conclude that the rough popcornflower is not in danger of extinction throughout all of its range.

We therefore proceed with determining whether the rough popcornflower is likely to become endangered within the foreseeable future throughout all of its range.

The best available information indicates that, at the species level, the most influential factors affecting rough popcornflower into the future are habitat-related threats (destruction, alteration, or both of habitat and competition from nonnative invasive plant species) (Factor A) and climate change (Factor E), which will likely cause more winter flooding, drier summer soils, and decreased fruit production. In our analysis of future viability (USFWS 2021, pp. 41–47), under the moderate (Scenario B) and better than expected (Scenario A) scenarios, we predict the species' resiliency, redundancy, and representation to be stable or increasing within the next 30 years. While a continuation of current conservation efforts as modeled under our moderate scenario is most likely, 7 of the 18 known populations (approximately 47 percent of the total number of plants) do not have formal commitments for long-term beneficial management of rough popcornflower and continued beneficial management is not assured.

Additionally, under our worse than expected scenario, we predict the species' resiliency, redundancy, and representation to diminish within the next 30 years. Although

this scenario is considered the least likely to occur, diminished habitat conditions along with reduced management actions and agency commitments are plausible and would likely lead to long-term demographic declines, reductions in the number of populations, and reduced genetic diversity.

Thus, after assessing the best scientific and commercial data available, we conclude that the rough popcornflower is not in danger of extinction, but is likely to become in danger of extinction within the foreseeable future throughout all of its range.

Status Throughout a Significant Portion of Its Range

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so within the foreseeable future throughout all or a significant portion of its range. The court in *Center for Biological Diversity v. Everson*, 435 F. Supp. 3d 69 (D.D.C. 2020) (*Everson*), vacated the provision of the Final Policy on Interpretation of the Phrase “Significant Portion of Its Range” in the Endangered Species Act’s Definitions of “Endangered Species” and “Threatened Species” (hereafter Final Policy; 79 FR 37578; July 1, 2014) that provided that if the Service and National Marine Fisheries Service (together, the Services) determine that a species is threatened throughout all of its range, the Services will not analyze whether the species is endangered throughout a significant portion of its range.

Therefore, we proceed to evaluating whether the species is endangered throughout a significant portion of its range—that is, whether there is any portion of the species’ range for which both (1) the portion is “significant”; and (2) the species is in danger of extinction in that portion. We can choose to address either question first. Regardless of which question we address first, if we reach a negative answer with respect to the first question that we address, we do not need to evaluate the other question for that portion of the species’ range.

Following the court's holding in *Everson*, we now consider whether the species is in danger of extinction throughout a significant portion of its range. In undertaking this analysis for rough popcornflower, we choose to address the status question first—we consider information pertaining to the geographic distribution of both the species and the threats that the species faces to identify portions of the range where the species may be endangered.

We evaluated the range of the rough popcornflower to determine if the species is in danger of extinction throughout any portion of its range. The range of a species can theoretically be divided in an infinite number of ways. We focused our analysis on portions of the species' range that may meet the Act's definition of an endangered species. For rough popcornflower, we considered whether the threats or their effects on the species are greater in any biologically meaningful portion of the species' range than in other portions such that the species is in danger of extinction in that portion. We divided the range of the rough popcornflower in several ways (e.g., populations, recovery units) for the purposes of our viability analyses in the SSA report (Service 2021, entire). For the purpose of evaluating significant portion of the range, we divided the range into three recovery units (Sutherlin Creek, Yoncalla Creek, and Calapooya Creek) that correspond to drainage basins within the Lower North Umpqua system and represent groups of populations which share phenotypic similarities and are potentially genetically similar to one another. This scale is appropriate for considering whether the species may be in danger of extinction in any portion of the range.

We examined the following threats: habitat loss and fragmentation, small population size, nonnative invasive plant encroachment, fire, and climate change, including cumulative effects. We considered the effects of these threats on the rough popcornflower within each of the three recovery units.

As discussed above, thanks in part to recovery efforts from multiple stakeholders, the rough popcornflower has increased to over 2,000,000 plants in 18 populations. In two of the three recovery units there are at least two populations that meet or exceed the resiliency criterion size of 5,000 individuals surpassing a patch size of 500 m² (5,382 ft²), indicating they have a high probability of persistence over the next 30 years. The remaining recovery unit has a population well over 5,000 individuals that does not yet meet the area requirement but is also expected to persist.

The rough popcornflower has a current distribution that is analogous to its historical range in all three recovery units (USFWS 2021, p. 39). Near-term threats are similar for all populations distributed throughout the recovery units. The rough popcornflower is a conservation reliant species, and in each recovery unit populations receive some form of habitat management in the form of mowing, grazing, prescribed burning, or nonnative invasive plant control to address the near-term threats (USFWS 2021, p. 38).

Given the distribution of resilient populations across recovery units, the uniformity of the near-term threats to the species within each unit and ongoing conservation measures addressing those threats, there is no one recovery unit that has a different status from its range-wide status. In summary, we found no portion of the rough popcornflower range where threats are impacting individuals differently from how they are affecting the species elsewhere in its range, or where the biological condition of the species differs from its condition elsewhere in its range such that the status of the species in that portion does not differ from any other portion of the species' range.

Therefore, no portion of the species' range provides a basis for determining that the species is in danger of extinction throughout a significant portion of its range, and we determine that the species is likely to become in danger of extinction within the foreseeable future throughout all of its range. This does not conflict with the courts'

holdings in *Desert Survivors v. U.S. Department of the Interior*, 321 F. Supp. 3d 1011, 1070-74 (N.D. Cal. 2018) and *Center for Biological Diversity v. Jewell*, 248 F. Supp. 3d 946, 959 (D. Ariz. 2017) because, in reaching this conclusion, we did not apply the aspects of the Final Policy, including the definition of “significant” that those court decisions held were invalid.

Determination of Status

Based on the best scientific and commercial data available, we determine that the rough popcornflower no longer meets the Act's definition of an endangered species but does meet the Act's definition of a threatened species, because it is likely to become in danger of extinction within the foreseeable future throughout all of its range. Therefore, we are reclassifying the rough popcornflower from an endangered species to a threatened species in accordance with sections 3(20) and 4(a)(1) of the Act.

Available Conservation Measures

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Once we have downlisted the rough popcornflower, conservation measures continue to be provided to species listed as threatened species under the Act including recognition as a listed species, planning and implementation of recovery actions, requirements for Federal protection, and prohibitions against certain practices. As discussed above, we developed a strategy in our rough popcornflower recovery plan (USFWS 2003b and 2019a) to downlist the species by conserving populations throughout its range by augmenting existing populations, seeding, and through the use of formal habitat restoration agreements. In addition, section 7(a)(1) and 7(a)(2) responsibilities of Federal agencies remain.

Section 7 of the Act is titled, “Interagency Cooperation,” and it mandates all Federal action agencies to use their existing authorities to further the conservation purposes of the Act and to ensure that their actions are not likely to jeopardize the continued existence of listed species or adversely modify critical habitat. Regulations implementing section 7 are codified at 50 CFR part 402.

Section 7(a)(2) states that each Federal action agency shall, in consultation with the Secretary, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Each Federal agency shall review its action at the earliest possible time to determine whether it may affect listed species or critical habitat. If a determination is made that the action may affect listed species or critical habitat, formal consultation is required (50 CFR 402.14(a)), unless the Service concurs in writing that the action is not likely to adversely affect listed species or critical habitat. At the end of a formal consultation, the Service issues a biological opinion, containing its determination of whether the federal action is likely to result in jeopardy or adverse modification.

Examples of discretionary actions for the rough popcornflower that may be subject to consultation procedures under section 7 are management of Federal lands administered by the BLM, as well as actions that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 et seq.)) or actions funded by Federal agencies, such as the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency. Federal actions not affecting listed species or critical habitat—and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency—do not require section 7 consultation. Federal agencies should coordinate with the local Service Field Office (see **FOR FURTHER**

INFORMATION CONTACT) with any specific questions on Section 7 consultation and conference requirements.

Please let us know if you are interested in participating in recovery efforts for the rough popcornflower. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery implementation purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 9 of the Act provides a specific list of prohibitions for endangered species but does not provide these same prohibitions for threatened species. Instead, pursuant to section 4(d) of the Act, for any species listed as a threatened species, the Secretary must issue protective regulations that are “necessary and advisable to provide for the conservation of such species” (these are referred to as “4(d) rules”). Additional measures for the rough popcornflower are described below (see **Protective Regulations Under Section 4(d) of the Act**, below).

We may issue permits to carry out otherwise prohibited activities involving threatened plants under certain circumstances. Service regulations governing permits for threatened plants are codified at 50 CFR 17.72, and general Service permitting regulations are codified at 50 CFR part 13. With regard to threatened plants, a permit may be issued for scientific purposes or for enhancing the propagation or survival of the species. The statute also contains certain exemptions from the prohibitions, which are found in sections 9 and 10 of the Act.

It is the policy of the Services, as published in the *Federal Register* on July 1, 1994 (59 FR 34272), to identify to the extent known at the time a species is listed, specific activities that will not be considered likely to result in violation of section 9 of the Act. To the extent possible, activities that will be considered likely to result in violation will also be identified in as specific a manner as possible. The intent of this policy is to increase public awareness of the effect of a listing on proposed and ongoing

activities within the range of the species. Although most of the prohibitions in section 9 of the Act apply to endangered species, sections 9(a)(1)(G) and 9(a)(2)(E) of the Act prohibit the violation of any regulation under section 4(d) pertaining to any threatened species of fish or wildlife, or threatened species of plant, respectively. Section 4(d) of the Act directs the Secretary to promulgate protective regulations that are necessary and advisable for the conservation of threatened species. As a result, when we list a species as a threatened species, to the extent possible, we identify activities that will or will not be considered likely to result in violation of the protective regulations under section 4(d) for that species.

At this time, we are unable to identify specific activities that will or will not be considered likely to result in violation of section 9 of the Act beyond what is already clear from the descriptions of prohibitions and exceptions established by protective regulation under section 4(d) of the Act.

Questions regarding whether specific activities would constitute violation of section 9 of the Act should be directed to the Oregon Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

II. Protective Regulations Under Section 4(d) of the Act

Background

As discussed in **Available Conservation Measures**, section 9 of the Act provides a specific list of prohibitions for endangered species but does not provide these same prohibitions for threatened species. Instead, pursuant to section 4(d) of the Act, for any species listed as a threatened species, the Secretary must issue protective regulations that are “necessary and advisable to provide for the conservation of such species” (these are referred to as “4(d) rules”). Section 4(d) of the Act contains two sentences. The first sentence states that the Secretary shall issue such regulations as they deem necessary and advisable to provide for the conservation of species listed as threatened species.

Conservation is defined in the Act to mean the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Additionally, the second sentence of section 4(d) of the Act states that the Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1), in the case of fish or wildlife, or section 9(a)(2), in the case of plants. With these two sentences in section 4(d), Congress delegated broad authority to the Secretary to determine what protections would be necessary and advisable to provide for the conservation of threatened species, and even broader authority to put in place any of the section 9 prohibitions, for a given species.

Courts have recognized the extent of the Secretary's discretion under section 4(d) to develop regulations that are appropriate for the conservation of threatened species. For example, courts have upheld, as a valid exercise of agency authority, rules developed under section 4(d) that included limited prohibitions against takings (see *Alsea Valley Alliance v. Lautenbacher*, 2007 WL 2344927 (D. Or. 2007); *Washington Environmental Council v. National Marine Fisheries Service*, 2002 WL 511479 (W.D. Wash. 2002)). Courts have also upheld 4(d) rules that do not address all of the threats a species faces (see *State of Louisiana v. Verity*, 853 F.2d 322 (5th Cir. 1988)). As noted in the legislative history when the Act was initially enacted, "once an animal is on the threatened list, the Secretary has an almost infinite number of options available to [them] with regard to the permitted activities for those species. [They] may, for example, permit taking, but not importation of such species, or [they] may choose to forbid both taking and importation but allow the transportation of such species" (H.R. Rep. No. 412, 93rd Cong., 1st Sess. 1973).

Under our section 4(d) authorities, we put in place protections intended to both prevent a threatened species from becoming an endangered species and to promote its

recovery. Section 4(d) rules explain what is prohibited for a threatened species, thus making the activity unlawful without a permit or authorization under the Act for the prohibited activity unless otherwise excepted in the 4(d) rule and may also include affirmative requirements. Section 4(d) rules are therefore directly related to what actions may require permits in the future. As discussed in **Available Conservation Measures**, permits may be issued for purposes described in our threatened plant species permitting regulations at 50 CFR 17.72, including for recovery actions, conservation benefit agreements (previously referred to as candidate conservation agreements with assurances and safe harbor agreements), or habitat conservation plans. We may also except otherwise prohibited activities through a 4(d) rule itself, in which case threatened species permits would not be required for those activities. For example, there are two categories of exceptions that we frequently include in 4(d) rules, and these are for otherwise prohibited acts or forms or amounts of “take” that are: (1) unavoidable while conducting beneficial actions for the species, or (2) considered inconsequential (de minimis) to the conservation of the species. For otherwise prohibited take activities that require section 10 permits, programmatic approaches—such as general conservation plans and template habitat conservation plans—may be available as another way for project proponents to comply with take prohibitions or requirements applicable to one or more species while reducing the time that would otherwise be associated with developing individual permit applications. In addition, the Service and project proponents can reduce the need for such permits by developing standardized conservation measures that avoid the risk of “take.”

The provisions of this species’ protective regulations under section 4(d) of the Act are one of many tools that we will use to promote the conservation of the rough popcornflower. Nothing in 4(d) rules changes in any way the recovery planning provisions of section 4(f) of the Act or the consultation requirements under section 7 of the Act. As mentioned previously in **Available Conservation Measures**, Section 7(a)(2)

of the Act requires Federal agencies, including the Service, to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. These requirements are the same for a threatened species regardless of what is included in a 4(d) rule.

Section 4(d) rules do not alter section 7 obligations, including the criteria for informal or formal consultations or the analytical process used for biological opinions or concurrence letters. Section 7 consultation is required for Federal actions that “may affect” a listed species regardless of whether take caused by the activity is prohibited or excepted by a 4(d) rule. For example, as with an endangered species, if a Federal agency determines that an action is “not likely to adversely affect” a threatened species, this will require the Service’s written concurrence (50 CFR 402.13(c)). Similarly, if a Federal agency determines that an action is “likely to adversely affect” a threatened species, the action will require formal consultation with the Service and the formulation of a biological opinion (50 CFR 402.14(a)). Because consultation obligations and processes are unaffected by 4(d) rules, we may consider developing tools to streamline future intra-Service and inter-Agency consultations for actions that result in forms of take that are not prohibited by the 4(d) rule (but that still require consultation). These tools may include consultation guidance, online consultation processes via the Service’s digital project planning tool (Information for Planning and Consultation; <https://ipac.ecosphere.fws.gov/>), template language for biological opinions, or programmatic consultations.

Provisions of the 4(d) Rule

Exercising the Secretary’s authority under section 4(d) of the Act, we have developed a rule that is designed to address the rough popcornflower’s conservation needs. As discussed previously in Summary of Biological Status and Threats, we have

concluded that rough popcornflower is likely to become in danger of extinction within the foreseeable future primarily due to habitat loss and fragmentation, nonnative invasive plant encroachment, and impacts due to climate change (e.g., winter flooding, drier summer soils, and decreased fruit production). Section 4(d) requires the Secretary to issue such regulations as they deem necessary and advisable to provide for the conservation of each threatened species and authorizes the Secretary to include among those protective regulations any of the prohibitions that section 9(a)(2) of the Act prescribes for endangered species (*In re: Polar Bear Endangered Species Act Listing and 4(d) Rule Litigation*, 818 F. Supp. 2d 214, 228 (D.D.C. 2011) (citing *Sweet Home Chapter of Cmty. for a Great Or. v. Babbitt*, 1 F.3d 1, 8 (D.C. Cir. 1993), *rev'd on other grounds*, 515 U.S. 687 (1995))). Our necessary and advisable determination includes consideration of conservation and economic impacts (*Kansas Natural Resources Coalition, et al. v. USFWS, et al.* No. 23-CV-00159-DC-RCG (W.D. Tex. 2025)). We explain below why we find that the prohibitions and exceptions in this final rule as a whole satisfy the requirement in section 4(d) of the Act to issue regulations deemed necessary and advisable to provide for the conservation of rough popcornflower.

The protective regulations for rough popcornflower incorporate prohibitions from section 9(a)(2) to address the threats to the species. We include the following prohibitions of section 9(a)(2) of the Act, and implementing regulations codified at 50 CFR 17.61, which make it illegal for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit or to cause to be committed any of the following acts with regard to any endangered plant: (1) import into, or export from, the United States; (2) remove and reduce to possession from areas under Federal jurisdiction; maliciously damage or destroy on any such area; or remove, cut, dig up, or damage or destroy on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law; (3) deliver,

receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity; or (4) sell or offer for sale in interstate or foreign commerce. These protective regulations include these prohibitions for the rough popcornflower because the rough popcornflower is likely to become endangered within the foreseeable future and putting these prohibitions in place will help to prevent declines and preserve the species' remaining populations.

As discussed above in Summary of Biological Status and Threats, habitat loss and fragmentation, nonnative invasive plant encroachment, and impacts due to climate change (e.g., winter flooding, drier summer soils, and decreased fruit production), are affecting the status of the rough popcornflower. Almost 63,000 rough popcornflower plants are known to occur on lands owned and managed by the BLM. Regulating activities on lands under Federal jurisdiction (e.g., lands managed by BLM) and on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law through our application of 50 CFR 17.61(c)(1) would help reduce the severity of the threat of habitat loss and fragmentation. As discussed above, all federally listed plants in Oregon are also protected by State law under the Oregon Endangered Species Act (ORS 564.010-.994), and their protection and conservation are administered by the ODA. All State and municipal agencies, including City of Sutherlin, Douglas County, Douglas Soil and Water Conservation District, and ODOT must consult with ODA when a proposed action on land owned or leased by the State, or for which the State holds a recorded easement, has the potential to appreciably reduce the likelihood of the survival or recovery of any listed plant species. The 4(d) rule makes any known violation of these laws when removing, cutting, digging up, or damaging or destroying the species a violation of the Act.

In addition, we are regulating import, export, and intrastate or foreign commerce of rough popcornflower (50 CFR 17.61 (b), (d), and (e)). While collection and associated

commerce of the species is not known to pose a threat to the species, regulating these activities will reduce the potential for this becoming a threat in the future. Collection of the species for ornamental purposes could exacerbate the ongoing threat to the species due to its limited range and small population size. These activities are currently regulated for rough popcornflower, and permits are currently available for these otherwise prohibited activities according to section 10 of the Act and regulations for endangered plants at 50 CFR 17.62. Should anyone wish to engage in these activities going forward, the permitting requirements at 50 CFR 17.72 are less than those currently required and we therefore anticipate reduced regulatory costs associated with these prohibitions.

The 4(d) rule will also provide for the conservation of the species by allowing exceptions that are intended to incentivize conservation actions or actions that are not expected to rise to the level that would have a negative impact (i.e., would have only de minimis impacts) on the species' conservation.

Exceptions to the prohibitions include those set forth in 50 CFR 17.71(b). To further the conservation of the species, any employee or agent of the Service, any other Federal land management agency, federally recognized Tribe, or a State conservation agency, who is designated by their agency or Tribe for such purposes, may, when acting in the course of official duties, remove and reduce to possession threatened plants from areas under Federal jurisdiction without a permit if such action is necessary to: (i) Care for a damaged or diseased specimen; (ii) dispose of a dead specimen; or (iii) salvage a dead specimen that may be useful for scientific study. Any removal and reduction to possession must be reported in writing to the Office of Law Enforcement, via contact methods listed at <https://www.fws.gov>, within 5 calendar days. The specimen may only be retained, disposed of, or salvaged under directions from the Office of Law Enforcement.

We recognize the special and unique relationship that we have with our State natural resource agency partners in contributing to conservation of listed species. State agencies often possess scientific data and valuable expertise on the status and distribution of endangered, threatened, and candidate species of wildlife and plants. State agencies, because of their authorities and their close working relationships with local governments and landowners, are in a unique position to assist us in implementing all aspects of the Act. In this regard, section 6 of the Act provides that we must cooperate to the maximum extent practicable with the States in carrying out programs authorized by the Act. Therefore, any qualified employee or agent of a State conservation agency that is a party to a cooperative agreement with us in accordance with section 6(c) of the Act, who is designated by their agency for such purposes, will be able to conduct activities designed to conserve rough popcornflower that may result in otherwise prohibited activities without additional authorization.

In addition, any employee or agent of the Service, who is designated by their agency for such purposes, may, when acting in the course of official duties, remove and reduce to possession from areas under Federal jurisdiction rough popcornflower plants.

We recognize the beneficial and educational aspects of activities with seeds of cultivated plants, which generally enhance the propagation of the species and, therefore, would satisfy permit requirements under the Act. We intend to monitor the interstate and foreign commerce and import and export of these specimens in a manner that will not inhibit such activities, providing the activities do not represent a threat to the survival of the species in the wild. In this regard, seeds of cultivated specimens would not be subject to the prohibitions above, provided that a statement that the seeds are of “cultivated origin” accompanies the seeds or their container (e.g., the seeds could be moved across State lines for purposes of seed banking or use for outplanting without additional regulations).

Finally, we may under certain circumstances issue permits to carry out one or more otherwise-prohibited activities, including those described above. The regulations that govern permits for threatened plants state that the Director may issue a permit authorizing any activity otherwise prohibited with regard to threatened species. A permit may be issued for the following purposes: for scientific purposes, to enhance propagation or survival, for economic hardship, for botanical or horticultural exhibition, for educational purposes, or for other purposes consistent with the purposes and policy of the Act (50 CFR 17.72). As mentioned above, the permitting requirements for threatened species are less than those for endangered species. Additional statutory exemptions from the prohibitions are found in sections 9 and 10 of the Act.

The 4(d) rule provides for the conservation of rough popcornflower because it will regulate activities that pose a threat to the species or that may become a threat in the future. This 4(d) rule provides increased flexibilities in management for rough popcornflower through additional exceptions at 50 CFR 17.71(b) instead of current exceptions at 50 CFR 17.61(c)(2-4). The 4(d) rule also provides for reduced permitting requirements for otherwise prohibited activities through permitting regulations at 50 CFR 17.72 instead of requirements under section 10(c) of the Act and regulations at 50 CFR 17.62 (current permitting as an endangered species). Please see our November 25, 2025 “Consideration of Economic Impacts for the Proposed 4(d) Rule for the Rough Popcornflower” on <https://www.regulations.gov> for our consideration of economic impacts. The 4(d) rule’s increased flexibilities and reduced permitting requirements result in an overall reduction in any potential economic impacts due to these reduced regulatory requirements. Where there is a Federal nexus, the 4(d) rule does not change any obligations under section 7 of the Act. Therefore, after considering the conservation needs of the species and the economic impacts of the 4(d) rule, we have determined that the 4(d) rule is necessary and advisable to provide for the conservation of the species.

Required Determinations

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 et seq.), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; title II of Pub. L. 104–121, March 29, 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

While we do not conduct RFA analyses on our classification determinations under the Act, in accordance with recent caselaw (*Kansas Natural Resources Coalition, et al. v. USFWS, et al.* No. 23-CV-00159-DC-RCG (W.D. Tex. 2025)) we comply with RFA through consideration of conservation and economic impacts when promulgating 4(d) rules.

During the development of this final rule, we reviewed and evaluated all information submitted during the comment period on the proposed rule (89 FR 99811; December 11, 2024) that may pertain to our consideration of the probable impacts of the 4(d) rule. As discussed above, there are no new regulatory requirements due to the 4(d) rule. Prior to the effective date of this final rule, the rough popcornflower was an endangered species and all section 9(a)(2) prohibitions applied with limited exceptions. This final 4(d) rule provides increased flexibilities in management and reduced permitting requirements for the rough popcornflower. Please see our November 25,

2025 “Consideration of Economic Impacts for the 4(d) Rule for the Rough Popcornflower” on <https://www.regulations.gov> for our consideration of economic impacts. We certify that this 4(d) rule will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

Regulations adopted pursuant to section 4(a) of the Act are exempt from the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) and do not require an environmental analysis under NEPA. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244). This includes listing, delisting, and reclassification rules, as well as critical habitat designations and species-specific protective regulations promulgated concurrently with a decision to list or reclassify a species as threatened. The courts have upheld this position (e.g., *Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995) (critical habitat); *Center for Biological Diversity v. U.S. Fish and Wildlife Service.*, 2005 WL 2000928 (N.D. Cal. Aug. 19, 2005) (concurrent 4(d) rule)).

Government-to-Government Relationship with Tribes

In accordance with the President’s memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951, May 4, 1994), E.O. 13175 (Consultation and Coordination with Indian Tribal Governments), the President’s memorandum of November 30, 2022 (Uniform Standards for Tribal Consultation; 87 FR 74479, December 5, 2022), and the Department of the Interior’s manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with federally-recognized Tribes and Alaska Native Corporations on a government-to-government basis. In accordance with Secretary’s Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly

with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We have determined that no Tribes will be affected by this rule because there are no Tribal lands or interests within or adjacent to rough popcornflower habitat.

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <https://www.regulations.gov> and upon request from the Oregon Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

2. In § 17.12, in paragraph (h), amend the List of Endangered and Threatened Plants by revising an entry for “*Plagiobothrys hirtus*” in alphabetical order under FLOWERING PLANTS to read as follows:

§ 17.12 Endangered and threatened plants

* * * * *

(h) * * *

Scientific name	Common name	Where listed	Status	Listing citations and applicable rules
FLOWERING PLANTS				
* * * * *				
<i>Plagiobothrys hirtus</i>	Rough popcornflower	Wherever found	T	91 FR [INSERT <i>FEDERAL REGISTER</i> PAGE WHERE THE DOCUMENT BEGINS], [INSERT DATE OF PUBLICATION IN THE <i>FEDERAL REGISTER</i>]; 50 CFR 17.73(k) ^{4d} .
* * * * *				

3. Amend § 17.73 by adding paragraph (k) to read as follows:

* * * * *

§ 17.73 Species-specific rules—flowering plants

* * * * *

(k) Threatened flowering plants —

(l) The prohibitions and exceptions in this paragraph (k) apply to the following species:

(i) *Plagiobothrys hirtus* (rough popcornflower)

(ii) Reserved.

(2) *Prohibitions.* The following prohibitions that apply to endangered plants also apply to the species identified under paragraph (k)(l). Except as provided under paragraph (k)(3) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or cause to be committed, any of the following acts in regard to this species:

(i) Import or export, as set forth at § 17.61(b) for endangered plants.

(ii) Remove and reduce to possession from areas under Federal jurisdiction, maliciously damage or destroy the species on any such area; or remove, cut, dig up, or damage or destroy the species on any other area in knowing violation of any law or

regulation of any State or in the course of any violation of a State criminal trespass law, as set forth at § 17.61(c)(1) for endangered plants.

(iii) Interstate or foreign commerce in the course of commercial activity, as set forth at § 17.61(d) for endangered plants

(iv) Sale or offer for sale, as set forth at § 17.61(e) for endangered plants.

(3) ***Exceptions from prohibitions.*** In regard to the species identified in paragraph (k)(1) above, you may:

(i) Conduct activities as authorized by permit under § 17.72.

(ii) Remove and reduce to possession from areas under Federal jurisdiction, as set forth at § 17.71(b).

(iii) Engage in any act prohibited under paragraph (k)(2) of this section with seeds of cultivated specimens, provided that a statement that the seeds are of “cultivated origin” accompanies the seeds or their container.

* * * * *

Brian R. Nesvik,

Director,

U.S. Fish and Wildlife Service.

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