

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

California Endangered Species Act



Petition Evaluation for Lime Ridge Navarretia (*Navarretia gowenii*)

Report to the Fish and Game Commission
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TABLE OF CONTENTS

List of Figures	iii
List of Abbreviations, Acronyms, and Terms	iii
Executive Summary.....	iv
1 Introduction.....	1
1.1 Petition Evaluation Overview.....	1
1.2 CESA Petition History	2
1.3 Federal Status	2
1.4 Additional Species Status Designations.....	2
1.4.1 NatureServe Conservation Status Ranks	2
1.4.2 California Rare Plant Rank.....	2
2 Species Description and Taxonomy	3
3 Summary of Petition Components	4
3.1 Life History	4
3.1.1 Department Assessment.....	5
3.2 Range and Distribution	5
3.2.1 Department Assessment.....	7
3.3 Habitat	7
3.3.1 Department Assessment.....	8
3.4 Abundance and Population Trend	8
3.4.1 Department Assessment.....	8
3.5 Threats	9
3.5.1 Department Assessment.....	10
3.6 Existing Management.....	11
3.6.1 Department Assessment.....	12
3.7 Future Management	12
3.7.1 Department Assessment.....	13
3.8 Availability and Sources of Information	13
3.8.1 Department Assessment.....	13
4 Other Relevant Information Available to the Department.....	14
5 Sufficiency of Scientific Information and Recommendation to the Commission	14

Literature Cited	15
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LIST OF FIGURES

Figure 1. Map of the range and distribution of Lime Ridge navarretia as provided in Figure 2 of the petition.....	6
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LIST OF ABBREVIATIONS, ACRONYMS, AND TERMS

CESA – California Endangered Species Act
 CNDDB – California Natural Diversity Database
 CNPS – California Native Plant Society
 Commission – California Fish and Game Commission
 CRPR – California Rare Plant Rank
 Department – California Department of Fish and Wildlife

EXECUTIVE SUMMARY

This petition evaluation for Lime Ridge navarretia (*Navarretia gowenii*) has been prepared by the California Department of Fish and Wildlife (Department) in response to the petition to list Lime Ridge navarretia as threatened under the California Endangered Species Act (CESA). The purpose of this petition evaluation is to provide a recommendation to the Fish and Game Commission (Commission) on whether the petition provides sufficient information to indicate the petitioned action may be warranted.

Lime Ridge navarretia is a small annual plant in the phlox family (Polemoniaceae) that blooms in May and June. The petition describes Lime Ridge navarretia as being known from three occurrences near the boundary of the San Joaquin Valley and San Francisco Bay Area and occurring in grasslands and on slopes and at the crest of a ridge. The petition provides an abundance estimate at two occurrences with population sizes ranging from less than 50 individuals to several hundred plants depending on moisture availability. The petition provides information to suggest a historically declining population trend but the current population trend is uncertain and may be decreasing or stable. The petition lists several threats to Lime Ridge navarretia including mining and developed land uses, recreational use, invasive species, and climate change. The petition mentions that extirpation from much of its range or extinction of the species may occur because: most occurrences are threatened and the severity of some threats is increasing, the species has been documented at only three sites that are also small in area and in population size, and no sites occupied by Lime Ridge navarretia are preserved and managed for conservation of the species. Existing management efforts were reviewed and suggestions for future management actions were discussed in the petition. Information sources and a distribution map were also provided in the petition.

The Department has determined that the petition does not sufficiently address each of the required petition components listed in Fish and Game Code section 2072.3 and California Code of Regulations, title 14, section 670.1, subdivision (d)(1):

- Life history
- Range
- Distribution
- Detailed distribution map
- Kind of habitat necessary for survival
- Abundance
- Population trend
- Factors affecting the ability to survive and reproduce
- Degree and immediacy of threat

- Impact of existing management efforts
- Suggestions for future management
- Availability and sources of information

In completing its petition evaluation, the Department considered the information in the petition and other relevant information the Department possesses. The Department has determined that there is not sufficient scientific information to indicate that the petitioned action to list Lime Ridge navarretia as threatened under CESA may be warranted. Therefore, the Department recommends that the Commission reject the petition for further consideration pursuant to CESA.

1 INTRODUCTION

1.1 Petition Evaluation Overview

This petition evaluation serves as the basis for the California Department of Fish and Wildlife's (Department) recommendation to the California Fish and Game Commission (Commission) on whether the petition to list Lime Ridge navarretia (*Navarretia gowenii*) as threatened under the California Endangered Species Act (CESA) should be accepted and considered. The recommendation is based on the sufficiency of scientific information in the petition, as well as other relevant information that was reviewed by the Department during the evaluation period.

A petition to list a species under CESA must include "information regarding the population trend, range, distribution, abundance, and life history of a species, the factors affecting the ability of the population to survive and reproduce, the degree and immediacy of the threat, the impact of existing management efforts, suggestions for future management, and the availability and sources of information. The petition shall also include information regarding the kind of habitat necessary for species survival, a detailed distribution map, and any other factors that the petitioner deems relevant" (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)).

Once a petition is submitted to the Commission, the Department has 90 days (120 days with extension) to prepare a petition evaluation that assesses each of the petition components and makes a recommendation to the Commission as to whether there is sufficient scientific information to indicate that the petitioned action to list the species under CESA may be warranted (Fish & G. Code, § 2073.5, subds. (a)-(b)). Once completed by the Department, the petition evaluation is delivered to the Commission and placed on the agenda for receipt at the next available meeting of the Commission. At that time, the petition evaluation will be made available to the public for a 30-day public comment period prior to the Commission taking any action on the petition. The Commission then considers the petition, the Department's petition evaluation and recommendation, written comments received, and oral testimony, and will then make a finding at the next available meeting of the Commission as to whether the petition provides "sufficient information to indicate that the petitioned action may be warranted" (Fish & G. Code, § 2074.2, subd. (e)(2)). The standard for accepting a petition for consideration and assessing sufficiency of information is addressed in *Center for Biological Diversity v. California Fish and Game Commission* (2008) 166 Cal.App.4th 597.

If the Commission determines that the petitioned action may be warranted, the species becomes a candidate for CESA listing and proceeds to the status review stage of the CESA listing process. The Department then prepares a peer-reviewed report that advises

the Commission on whether the petitioned action is warranted, based upon the best scientific information available (Fish & G. Code, § 2074.6). Finally, the Commission determines whether the petitioned action to list the species as threatened or endangered is warranted, based on the Department's status review and other information in the administrative record (Fish & G. Code, § 2075.5).

1.2 CESA Petition History

On August 29, 2025, Dr. John C. Hunter submitted a petition to the Commission to list Lime Ridge navarretia as threatened under CESA. On September 8, 2025, the Commission referred the petition to the Department for evaluation. At its meeting on October 8, 2025, the Commission officially acknowledged receipt of the petition. At its meeting on December 10, 2025, the Commission granted the Department's request for a 30-day extension of the period to review the petition and prepare this petition evaluation.

1.3 Federal Status

Lime Ridge navarretia has no status under the Federal Endangered Species Act (16 U.S.C. § 1531 et seq.).

1.4 Additional Species Status Designations

1.4.1 NatureServe Conservation Status Ranks

NatureServe's conservation status ranks consist of a global conservation status rank (global rank or G rank), describing the status of a given taxon over its entire global distribution, and a subnational conservation status rank (subnational rank or S rank), describing the status of a given taxon over its state distribution (Master et al. 2012). NatureServe has assigned Lime Ridge navarretia a global rank of G1 and a subnational rank of S1, indicating that the species is critically imperiled both globally and within California, with a very high risk of extinction due to one or more of the following: very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors (CNDDB 2020, 2025).

1.4.2 California Rare Plant Rank

The California Native Plant Society (CNPS) works in collaboration with botanical experts throughout the state, including Department biologists, to assign rare plants a California Rare Plant Rank (CRPR) reflective of their rarity status (CNDDB and CNPS 2020). CNPS has assigned Lime Ridge navarretia a CRPR of 1B.1 (CNPS 2025). Plants with a CRPR of 1B are considered rare, threatened, or endangered throughout their

range with the majority endemic to California (CNDDDB and CNPS 2020). The threat code extension of “.1” indicates that the species is seriously threatened in California, with over 80% of occurrences threatened and a high degree and immediacy of threat (CNDDDB and CNPS 2020).

2 SPECIES DESCRIPTION AND TAXONOMY

A summary of Lime Ridge navarretia’s appearance and physical attributes was compiled from a botanical manual (Johnson 2013) and the original species description (Johnson 2007).

Lime Ridge navarretia is a member of the phlox family (Polemoniaceae). It is an upright annual plant that is 5 to 30 cm (2 to 12 in) tall that generally has one dominant primary stem that is tan to red-brown in color. Branches near the top of the plant have glands. Plants produce a taproot. Leaves are glandular-hairy and pinnately lobed, with those lobes also pinnately lobed, and many-toothed. The lowermost leaves are arranged oppositely and wither with age. Leaf arrangement becomes alternate higher up the stem, and these leaves are typically below branches and 3 to 4 cm (1 to 1.5 in) long.

Lime Ridge navarretia has spiny-looking inflorescences (grouping of flowers) at the ends of its primary and secondary stems that are 10 mm (0.4 in) or occasionally up to 15 mm (0.6 in) wide, and even wider if the outer extent of the inflorescent bracts are considered. Inflorescences have 8 to 24 flowers, and glandular hairs on their bracts and flower calyces (outermost whorl of flower parts). The calyx is 6 to 7 mm (0.25 in), with unequal lobes that are entire, or the longest lobe may be toothed. Flower corollas (collection of petals) are 8 to 10 mm (0.3 to 0.4 in) and stick out from the calyces. The corollas are white (drying cream) with purple dots at the base of the corolla lobes and purple streaks in the throat. There are glands on the outside of the corolla, and no hairs or glands on the inside of the corolla. There are five stamens attached to the inside of the corolla evenly at the same level and the pollen is white. The ovary sits on a nectary disk inside the flower. The style (stalk-like structure that connects the ovary to the stigma) does not extend outside of the corolla and has two minute stigmas (pollen-receiving structures). The fruit is a capsule (dry fruit that opens to release its seeds) with one chamber containing one or two brown seeds. After seed germination plants produce 2 or 3 cotyledons (modified leaves present in the seed) that are each divided to near the base into 2 lobes.

Lime Ridge navarretia was first collected by David Gowen in 2005, and described as *Navarretia gowenii* by Johnson in 2007 (Johnson 2007). The currently accepted name for Lime Ridge navarretia is *Navarretia gowenii* (Johnson 2013).

3 SUMMARY OF PETITION COMPONENTS

Pursuant to Fish and Game Code section 2072.3 and California Code of Regulations, title 14, section 670.1, subdivision (d)(1), the Department evaluated whether the petition contained information on each of the following petition components:

- Life history
- Range
- Distribution
- Detailed distribution map
- Kind of habitat necessary for survival
- Abundance
- Population trend
- Factors affecting the ability to survive and reproduce
- Degree and immediacy of threat
- Impact of existing management efforts
- Suggestions for future management
- Availability and sources of information

The Department did not receive new information from the public during the petition evaluation period (Fish & G. Code, § 2073.4). Pursuant to Fish and Game Code section 2073.5, the Department evaluated the petition to determine whether there is, or is not, sufficient information to indicate that the petitioned action may be warranted. A summary of the relevant information from the petition for each of the petition components is presented below. For each petition component, the Department has also presented an assessment of the information provided in the petition and a summary of any relevant information in the Department's possession. Overall sufficiency of the petition is determined by looking at the information in the petition as a whole and is further discussed in the "Sufficiency of Scientific Information and Recommendation to the Commission" section of this petition evaluation. In this petition evaluation, the Department has grouped similar petition components together and renamed components to create a more cohesive and readable document.

3.1 Life History

This section summarizes the information in the petition regarding the species' life history (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). Section E on pages 5 and 6 of the petition provides information on the life history of Lime Ridge navarretia.

The petition provides a physical description of Lime Ridge navarretia, with descriptions of its habit, stem, leaves, flowers, inflorescence, fruits, and seeds. The petition contrasts Lime Ridge navarretia with the physical properties of a similar species, downy pincushionplant (*Navarretia pubescens*). The petition describes Lime Ridge navarretia as an annual plant that blooms in May and June and is pollinated by insects. The petition also states that the species' dispersal, germination, and growth have not been studied but notes that Lime Ridge navarretia's seed coat becomes mucilaginous when wet, which may affect dispersal, germination, or seedling establishment.

3.1.1 Department Assessment

The Department considers the information provided in the petition on the life history of Lime Ridge navarretia to be adequate for assessing this petition component.

3.2 Range and Distribution

This section summarizes the information in the petition regarding the species' range and distribution and provides a detailed distribution map (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). A species' range for the purposes of CESA and this petition evaluation is the species' range within California (Cal. Forestry Assn. v. Cal. Fish and Game Com. (2007) 156 Cal.App.4th 1535, 1551). Range describes the general geographical area in which a species occurs. Distribution describes the actual sites where individuals and populations of the species occur within the species' range. Section B on pages 3 and 4 of the petition provides information on the range of Lime Ridge navarretia. Section C on page 4 of the petition provides information on its distribution. Section L, Figure 2 on page 18 of the petition provides a distribution map, which has been provided as Figure 1 of this petition evaluation.

The petition describes Lime Ridge navarretia as a California endemic with a small range near the boundary of the San Joaquin Valley and San Francisco Bay Area. The petition states that Lime Ridge navarretia's range comprises approximately 79 square kilometers (29 square miles), and that it occurs in Contra Costa and Stanislaus counties at elevations of 180 to 305 m (590 to 1,000 ft). The petition states that Lime Ridge navarretia is known from three sites that were documented between 1995 and 2004. The petition states that two of these sites are less than one kilometer (0.6 mile) apart in Contra Costa County and the third site is more than 210 kilometers (130 miles) away in southwestern Stanislaus County. One occurrence is noted in the petition as being a nonspecific occurrence in which the precise location and boundary of the species has not been documented. The petition also mentions that Lime Ridge navarretia may occupy some additional, undocumented sites.

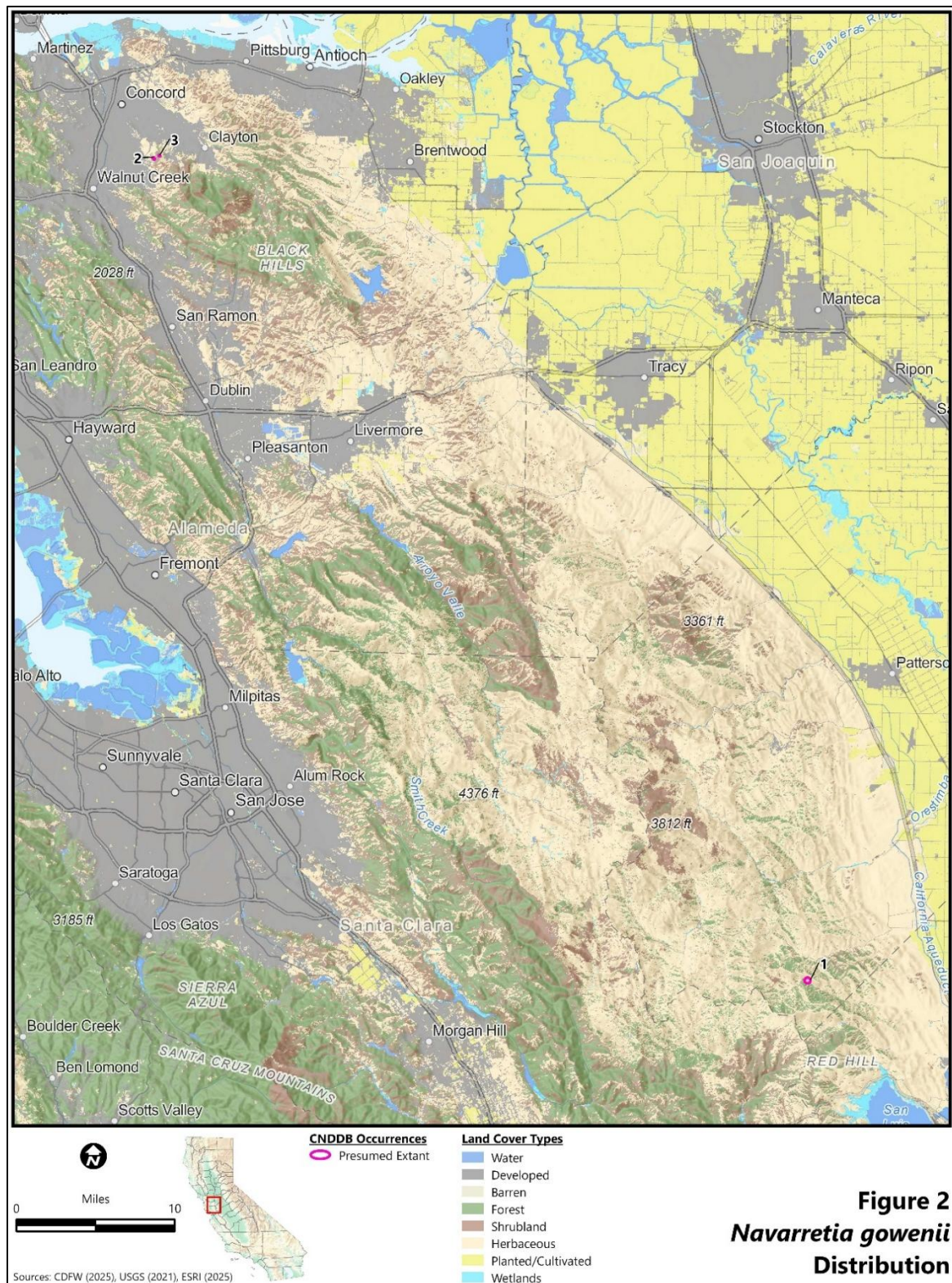


Figure 1. Map of the range and distribution of Lime Ridge *navarretia* as provided in Figure 2 of the petition. Occurrences from the California Natural Diversity Database (CNDDDB) are labeled with CNDDDB occurrence numbers.

3.2.1 Department Assessment

Range and distribution of Lime Ridge navarretia are presented in the petition based primarily on data from the California Natural Diversity Database (CNDDB); however, no discussion is provided on the completeness of the information presented including whether the CNDDB data represents the complete range and distribution of the species, whether additional information on range and distribution is available for the species that is not reflected in the CNDDB data, or whether any survey efforts have been made to confirm or ascertain the full range and distribution of the species. Without further discussion explaining why the information provided in the petition is a scientifically defensible assessment of the range and distribution of the species, the Department is unable to properly determine whether the petition provides a reasonable explanation of the range and distribution of the species, or whether other petition components that rely on knowing the range and distribution of the species have been properly assessed.

The Department has supplemental information on Lime Ridge navarretia provided by the petitioner via email in which the petitioner states that there are probably more occurrences of Lime Ridge navarretia because of the extent of its habitat and lack of access/low level survey effort in portions of its range. The petitioner also mentions that there may be three additional sites not in the CNDDB or mentioned in the petition, but the identifications of those plants should be confirmed. This supplemental information from the petitioner does not compensate for deficiencies in data in the petition for these topics. The information presented in the petition, considered alongside readily available information from the Department, is not adequate for assessing the range and distribution of Lime Ridge navarretia.

3.3 Habitat

This section summarizes the information in the petition regarding the kind of habitat necessary for species survival (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). Section F on pages 6 and 7 of the petition provides information on the kind of habitat necessary for Lime Ridge navarretia survival.

The petition states that Lime Ridge navarretia occurs in grasslands and on slopes and at the crest of a ridge. The petition provides information on soils the species grows in, and notes that the species grows in sparsely vegetated areas near chaparral. The petition also includes a list of plant species that grow with Lime Ridge navarretia.

3.3.1 Department Assessment

The Department considers the information provided in the petition on the kind of habitat necessary for Lime Ridge navarretia survival to be adequate for assessing this petition component.

3.4 Abundance and Population Trend

This section summarizes the information in the petition regarding the species' abundance and population trend (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). Section D on pages 4 and 5 of the petition provides information on the abundance of Lime Ridge navarretia. Section A on page 3 of the petition provides information on the population trend of Lime Ridge navarretia.

The petition summarizes information on the abundance of Lime Ridge navarretia at two CNDDDB occurrences with population sizes ranging from less than 50 individuals to several hundred plants depending on moisture availability. The petition states that range-wide, multi-year monitoring of Lime Ridge navarretia has not been conducted and, thus, a rigorous estimate of the total number of plants cannot be made. The petition estimates the area of occupied habitat to be less than 9 hectares (22 acres) based on CNDDDB polygon data.

The petition states that Lime Ridge navarretia has likely had a historically decreasing population trend because of loss and degradation of occupied habitat. The petition states that available information indicates potential loss of habitat from historical mining and development, recreational activities, and invasive plant infestations. The petition notes that the species' current population trend is uncertain and may be decreasing or stable. The petition states that the number of plants observed at two occurrences has fluctuated substantially from year to year. The petition states that the species may have had additional, undocumented reductions in its populations that occurred before the distribution of Lime Ridge navarretia was well documented.

3.4.1 Department Assessment

Abundance of Lime Ridge navarretia is provided in the petition based on population estimates reported in the CNDDDB and a 2007 publication; however, no discussion is provided on the completeness of the information including whether there have been efforts to estimate population sizes at all occurrences, whether the population estimates are historical or recent, and whether the population estimates are based on complete or partial surveys of the occurrences. Area of occupied habitat is estimated in the petition as an indicator of abundance using CNDDDB polygon data which the Department considers to be an inappropriate use of CNDDDB data. CNDDDB polygons are typically

mapped to include a buffer that represents the locational accuracy of the data and therefore should not be used to determine area occupied by the species.

Population trend of Lime Ridge *navarretia* is determined in the petition to be historically decreasing but currently uncertain based primarily on data reported in the CNDDDB and a 2007 publication. The petition discusses how two occurrences have abundance estimates reported for multiple years, but the number of plants fluctuated substantially from year to year. The petition also notes that historical mining and development, recreational activities, and invasive plants have contributed to a historical decrease in population size and recreation activities and invasive plants are currently impacting two occurrences. No discussion is provided in the petition on the completeness of the information, including whether any recent efforts have been made to update information on the presence and condition of Lime Ridge *navarretia* occurrences or whether population declines at some occurrences have resulted in a population decline throughout the species' range. In addition, the statements in the petition about changes to grasslands likely causing additional, undocumented habitat losses, population declines, or both to Lime Ridge *navarretia* are too general and do not specifically identify impacts to habitat likely to have contained Lime Ridge *navarretia*.

The Department does not have additional, readily available information in its possession that compensates for deficiencies in data for these topics. The information presented in the petition is not adequate for evaluating the abundance and population trend of Lime Ridge *navarretia*.

3.5 Threats

This section summarizes the information in the petition regarding the factors affecting the ability of the species to survive and reproduce, and the degree and immediacy of threats (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). Section G on pages 7 through 9 of the petition provides information on factors affecting the ability of Lime Ridge *navarretia* to survive and reproduce (threats). Section H on pages 10 and 11 of the petition provides information on the degree and immediacy of threats to Lime Ridge *navarretia*.

The petition lists several prominent range-wide threats to Lime Ridge *navarretia*: mining and developed land uses, recreational use, invasive species, and climate change. The petition also mentions that utility (radio tower) maintenance and fuel reduction activities have been observed by botanists as additional threats affecting occurrences based on CNDDDB data.

The petition describes historical mining impacts to Lime Ridge *navarretia* from an extensive quarry that is no longer operational and from a mine that has had its structures removed based on aerial imagery. The petition states that these historical

mining impacts likely eliminated or degraded habitat. The petition mentions that a road, transmission tower, gas pipeline, and recreational trails have been constructed in Lime Ridge navarretia occurrences based on information in the CNDDDB, interpretation of land cover mapping, and a map from the City of Concord, and these construction activities have caused loss and degradation of habitat. The petition also states that the transmission tower has recently been removed, but maintaining the remaining infrastructure will likely cause additional impacts.

The petition describes impacts from recreational trail use at two Lime Ridge navarretia occurrences including soil damage and invasive species. The petition states that invasive species have not been identified as a threat to Lime Ridge navarretia in the CNDDDB, but invasive species are likely a significant, range-wide threat to the species. The petition notes that Lime Ridge navarretia occurs with two invasive grass species and that dozens of invasive species are spreading in the species' range. The petition states that infestations of invasive species can directly affect the conditions or resources Lime Ridge navarretia relies on, thereby reducing abundance and making the species more vulnerable to extirpation from other causes.

The petition states that climate change directly and indirectly threatens Lime Ridge navarretia by altering growing conditions, water availability, and frequency and intensity of disturbances. The petition also notes that climate change can alter interactions of the plant with pollinators, dispersers, fungal symbionts, seed predators, herbivores, and competitors. The petition states that the magnitude of climate change impacts on Lime Ridge navarretia is uncertain but may be substantial, particularly because of the species' limited range, rarity, habitat specificity, and distribution in relatively small and isolated areas that will be exposed to dramatic changes.

The petition explains that without additional management actions, there is a moderate to high likelihood that Lime Ridge navarretia will be extirpated from a large portion of its range or become extinct. The petition mentions that this may occur because: most occurrences are threatened and the severity of some threats is increasing, the species has been documented at only three sites that are also small in area and in population size, and no sites occupied by Lime Ridge navarretia are preserved and managed for conservation of the species.

3.5.1 Department Assessment

Factors affecting the ability of Lime Ridge navarretia to survive and reproduce, and the degree and immediacy of threats, are presented in the petition based mainly on threat data reported in the CNDDDB. Threats listed in the CNDDDB can be representative of various types of threat data, including current threats, future threats, past threats, threats affecting a small portion of the site, threats in one year but not another, etc. The

petition also presents climate change and invasive species as threats to Lime Ridge navarretia that are not listed in the CNDDDB. None of these threats are described in adequate detail in relation to Lime Ridge navarretia and the petition does not provide information on the degree and immediacy of these threats for the species.

The petition uses CNDDDB polygon data overlaid on land cover mapping to see if there is any overlap between the CNDDDB polygon data with mining structures, developed land uses, or recreational impacts to determine additional threats that may be affecting occurrences. CNDDDB polygons are typically mapped to include a buffer that represents the locational accuracy of the data, and the petition does not indicate if the land uses shown on aerial imagery overlapped with the portion of the CNDDDB polygon that was previously occupied by the species or within areas that were once appropriate habitat for the species. Further discussion is needed on the use of aerial imagery to provide an accurate reflection of the degree of threat that Lime Ridge navarretia occurrences are experiencing.

The petition also mentions small number and size of occupied sites, and lack of protection and management, as additional reasons why Lime Ridge navarretia is likely to be extirpated from much of its range or become extinct. The petition has not shown that Lime Ridge navarretia's distribution and number of sites have been fully assessed and has not accurately represented the size of the occupied sites. The petition also does not discuss what the unprotected lands with Lime Ridge navarretia are being used for and how that land use is threatening, or potentially threatening, the species.

The Department does not have additional, readily available information in its possession that compensates for deficiencies in data for these topics. The information presented in the petition is not adequate for evaluating the factors affecting the ability of Lime Ridge navarretia to survive and reproduce, or the degree and immediacy of threats to Lime Ridge navarretia.

3.6 Existing Management

This section summarizes the information in the petition regarding the impact of existing management efforts on the species (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). Section I on pages 11 through 13 of the petition provides information on the impact of existing management efforts on Lime Ridge navarretia.

The petition states that management of Lime Ridge navarretia has been very limited, has not sufficiently addressed threats to the species, and consequently has not resulted in significant conservation of the species. The petition describes the impact of several management categories including legal protection, preservation and seed banking, management and monitoring, restoration, and surveys and research.

The petition describes Lime Ridge navarretia as having no legal protections but notes that the species has a CRPR of 1B.1 and should be treated as a special-status species during environmental review under the California Environmental Quality Act.

The petition states that two of the three occurrences of Lime Ridge navarretia are on land managed for multiple purposes that include resource protection, but no occurrences of the species have been preserved. The petition mentions that seeds of Lime Ridge navarretia have been collected and placed in long-term storage at the University of California Botanical Garden at Berkeley.

The petition notes that two occurrences of Lime Ridge navarretia experience management that is focused on providing recreation and reducing fire risks but management priorities at these occurrences may conflict with conservation of Lime Ridge navarretia. The petition mentions that none of the Lime Ridge navarretia occurrences are the subject of formal monitoring.

The petition states that removal of a communication tower may have restored habitat for Lime Ridge navarretia because it was adjacent to occupied habitat. The petition states that surveys have not been conducted to more precisely map the location of the nonspecific Lime Ridge navarretia occurrence and that range-wide surveys of potential habitat have not been conducted to determine if Lime Ridge navarretia occupies any additional, undocumented sites. The petition states that research has not been conducted on the species' genetic diversity, pollination, dispersal, establishment, growth, mortality, interactions with other species, population dynamics, habitat requirements, or other aspects of its ecology.

3.6.1 Department Assessment

The Department considers the information provided in the petition on impact of existing management efforts on Lime Ridge navarretia to be adequate for assessing this petition component.

3.7 Future Management

This section summarizes the information in the petition regarding suggestions for future management (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). Section J on pages 13 and 14 of the petition provides suggestions for future management of Lime Ridge navarretia.

The petition provides a list of suggestions for future management including:

- list the species under CESA and prepare a recovery plan for it,

- include the species as a focal species in regional conservation investment strategies and as a covered species in natural community conservation plans,
- preserve occupied sites in perpetuity,
- develop and implement site-specific monitoring and management plans,
- manage extant populations to prevent the spread of invasive species and eradicate existing infestations,
- implement compatible grazing practices,
- implement compatible fuel reduction treatments,
- implement measures to prevent impacts from recreational activities,
- establish a memorandum of understanding with Pacific Gas & Electric Company regarding maintenance activities potentially affecting occupied habitat
- coordinate and share information among organizations working to conserve the species,
- coordinate with and support private landowners implementing conservation practices in occupied habitat,
- restore degraded, occupied habitat,
- establish additional populations,
- conduct surveys to improve data on distribution and abundance,
- document genetic diversity, and
- investigate the species' ecology to inform conservation and management.

3.7.1 Department Assessment

The Department considers the information provided in the petition on suggestions for future management of Lime Ridge navarretia to be adequate for assessing this petition component.

3.8 Availability and Sources of Information

This section summarizes the information in the petition regarding availability and sources of information (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). Section K on pages 14 through 17 of the petition provides the sources of information used in the Lime Ridge navarretia petition. Digital copies of references cited were also provided to the Commission and Department.

3.8.1 Department Assessment

The Department received digital copies of references cited in the petition and considers this to be adequate to address the availability and sources of information mentioned in the petition for Lime Ridge navarretia.

4 OTHER RELEVANT INFORMATION AVAILABLE TO THE DEPARTMENT

Pursuant to Fish and Game Code section 2073.5, the Department also evaluates petitions in relation to other relevant information the Department possesses or receives. The Department evaluated readily available information relating to Lime Ridge navarretia that is available from the Department's document library and the CNDDDB, including data housed in the CNDDDB's unprocessed data layer. Regional Department staff were contacted to determine if additional information on the species was readily available and in the possession of Department staff. In addition, the petitioner submitted supplemental information for the species via email on September 7, 2025. Any relevant information from these sources is mentioned within the "Department Assessment" section for each petition component.

To the extent the Department was able to review other relevant information in its possession as it relates to the petition, the Department concluded that none of the additional information compensates for data deficiencies in the petition. If the Commission accepts the petition for consideration, regardless of the Department's recommendation, all reasonable attempts will be made by the Department to notify affected and interested parties and to solicit data and comments on the petitioned action (Fish & G. Code, § 2074.4). At that time, the Department will commence a review of the status of the species and produce a written peer-reviewed report, based upon the best scientific information available to the Department, which indicates whether the petitioned action is warranted (Fish & G. Code, § 2074.6).

5 SUFFICIENCY OF SCIENTIFIC INFORMATION AND RECOMMENDATION TO THE COMMISSION

The Department evaluated the petition components set forth in Fish and Game Code section 2072.3 and California Code of Regulations, title 14, section 670.1, subdivision (d)(1) for sufficiency of information pursuant to Fish and Game Code section 2073.5. Based upon the information contained in the petition and other relevant information, the Department determined there is not sufficient information to indicate that the petitioned action may be warranted (Fish & G. Code § 2073.5).

In this petition evaluation, the Department has assessed the information in the petition for each petition component individually; however, sufficiency of the petition as a whole is ultimately determined by looking at all petition components taken together. The Department considers scientifically defensible information on range and distribution to be critical for determining sufficiency of the petition. For Lime Ridge navarretia, the Department has determined that information is lacking for the following petition components: range, distribution, abundance, population trend, factors affecting the

ability of the species to survive and reproduce (threats), and the degree and immediacy of threats. Due to the lack of adequate information on these petition components, the Department does not consider the information in the petition to be sufficient as a whole for assessing whether listing Lime Ridge navarretia under CESA may be warranted and recommends the Commission reject the petition, and not consider it further under CESA.

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