

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

California Endangered Species Act



Petition Evaluation for Veiny Monardella (*Monardella venosa*)

Report to the Fish and Game Commission
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LIST OF ABBREVIATIONS, ACRONYMS, AND TERMS

CESA – California Endangered Species Act
 CNDDDB – 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
 subsp. – subspecies
 var. – variety

EXECUTIVE SUMMARY

This petition evaluation for veiny monardella (*Monardella venosa*) has been prepared by the California Department of Fish and Wildlife (Department) in response to the petition to list veiny monardella as endangered 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.

Veiny monardella is an annual plant in the mint family (Lamiaceae) that blooms May through July. The petition describes veiny monardella as being known from four occurrences with two of the occurrences extirpated. The petition describes veiny monardella as occurring in the northern and central Sierra Nevada Foothills in grasslands and oak woodlands on clay or clay-rich soils. At the two extant occurrences, the petition provides an abundance estimate of 2,500 individuals in 1998 at one occurrence and nearly 500,000 individuals in 2023 at the other occurrence. The petition provides information to suggest a declining population trend. The petition lists several threats to veiny monardella including agricultural and developed land uses, climate change, and invasive species. 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 is presumed extant at only two of four occurrences, and neither extant occurrence is preserved or 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 on its face 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

However, Fish and Game Code section 2073.5 states that “the Department shall evaluate the petition on its face and in relation to other relevant information the Department possesses or receives.” The Department has additional information in its possession related to veiny monardella which, when combined with the petition, provides sufficient information to indicate that the petitioned action may be warranted. Therefore, the Department recommends that the Commission accept 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 veiny monardella (*Monardella venosa*) as endangered 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 veiny monardella as endangered 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

Veiny monardella has no status under the Federal Endangered Species Act (16 U.S.C. § 1531 et seq.). In 1993, the U.S. Fish and Wildlife Service provided notice that it was possibly appropriate to propose listing veiny monardella as endangered or threatened, but sufficient data was not then available to support a listing proposal (58 Fed.Reg. 51144 (Sep. 30, 1993)).

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, G rank) describing the status of a given species over its entire distribution, and a subnational conservation status rank (subnational rank, S rank) describing the status of a given subspecies or variety over its state distribution (Master et al. 2012). NatureServe has assigned veiny monardella a global rank of G1 and a subnational rank of S1, indicating that the full 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 veiny monardella 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 (CNDDB 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 (CNDDB and CNPS 2020).

2 SPECIES DESCRIPTION AND TAXONOMY

2.1 Species Description

Veiny monardella is a member of the mint family (Lamiaceae). It is an annual plant that is 15 to 40 cm (5.9 to 15.7 in) tall with a stout stem (Elvin and Sanders 2009). Leaves are 15 to 50 mm (0.6 to 2 in) long, linear-oblong to lanceolate-oblong in shape, and hairy (Elvin and Sanders 2009). The inflorescence (grouping of flowers) is 20 to 30 mm (0.8 to 1.2 in) wide and is subtended by bracts that are the most diagnostic feature of the species (Elvin and Sanders 2009). Bracts are 15 to 30 mm (0.6 to 1.2 in) long and widely ovate in shape with slender purple veins separating transparent to translucent areas between the veins (Elvin and Sanders 2009). Hairs between veins are sparse or absent. Individual flowers are 11 to 12 mm (0.43 to 0.47 in), hairy, and purple with exserted stamens (Elvin and Sanders 2009).

2.2 Species Taxonomy

Veiny monardella was first collected by David Douglas in 1833 with the specimen record noting the collection location as simply “California” with no additional locality given (CCH 2025). Veiny monardella was formally described by John Torrey in 1856 as *Monardella candicans* var. *venosa* (Torrey 1856). In 1925, it was treated as part of *M. douglasii* but in 1943 was pulled out as a distinct variety of *M. douglasii*, named *M. douglasii* var. *venosa* (Epling 1925; Jokerst 1992). In 1992, *M. douglasii* var. *venosa* was reclassified as *M. douglasii* subsp. *venosa* before being elevated to a full species, *M. venosa*, by Mark Elvin and Andrew Sanders in 2009 (Jokerst 1992; Elvin and Sanders 2009). Elvin and Sanders recognized that there is a close relationship between *M. douglasii* and *M. venosa* but that *M. venosa* is morphologically distinct from *M. douglasii* (Elvin and Sanders 2009). In addition, Elvin and Sanders found that there have been no collections that had intermediate characters between *M. venosa*, *M. douglasii*, or *M. candicans* (Elvin and Sanders 2009). The currently accepted name for veiny monardella is *Monardella venosa* (Sanders et al. 2012).

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. 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 veiny monardella.

The petition provides a physical description of veiny monardella, with descriptions of its habit, stems, leaves, flowers, and fruits. The petition describes veiny monardella as an annual plant that blooms May through July and is capable of self-pollination but insect pollination results in greater reproductive output. The petition also states that the dispersal mechanisms of the species have not been documented but based on fruit and seed morphology, it is likely that seed dispersal is primarily by gravity with seeds dispersed short distances.

3.1.1 Department Assessment

The Department considers the information provided in the petition on the life history of veiny monardella 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 page 4 of the petition provides information on the range of veiny monardella. Section C on page 4 of the petition provides information on its distribution. Section L, Figure 2 on page 19 of the petition provides a distribution map, which has been provided as Figure 1 of this petition evaluation.

The petition describes veiny monardella as a California endemic of the northern and central Sierra Nevada Foothills. The petition states that veiny monardella's range comprises approximately 4,578 square kilometers (1,767 square miles), and that it occurs in Butte, Sutter, Tuolumne, and Yuba counties at elevations of 60 to 410 m (195 to 1,345 ft). The petition states that veiny monardella is known from four sites that were documented between 1854 and 1935, with two of those occurrences considered extirpated. Three occurrences are noted in the petition as being from the northern portion of its range between Marysville and Chico, with the fourth occurrence being from near New Melones Dam in Tuolumne County. The petition also mentions that there may be a few undocumented occurrences of veiny monardella but no additional occurrences have been found during the past 90 years.

3.2.1 Department Assessment

Range and distribution of veiny monardella 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.

The Department has some additional, readily available information not presented in the petition. The Department has been gathering information on veiny monardella since 2023 and as a result has detailed historical and current survey data on the single occurrence currently known to be extant. Department staff visited this population in 2023, 2025, and 2026 to assess the species distribution, abundance, habitat, and threats and reached out to botanists who observed the species in the 1990s to acquire past survey data. This additional, readily available information in the Department's possession compensates 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 adequate for assessing the range and distribution of veiny monardella.

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 page 7 of the petition provides information on the kind of habitat necessary for veiny monardella survival.

The petition states that veiny monardella occurs in grasslands and oak woodlands on clay or clay-rich soils. The petition also includes a list of plant species that grow with veiny monardella.

3.3.1 Department Assessment

The Department considers the information provided in the petition on the kind of habitat necessary for veiny monardella survival to be sufficient.

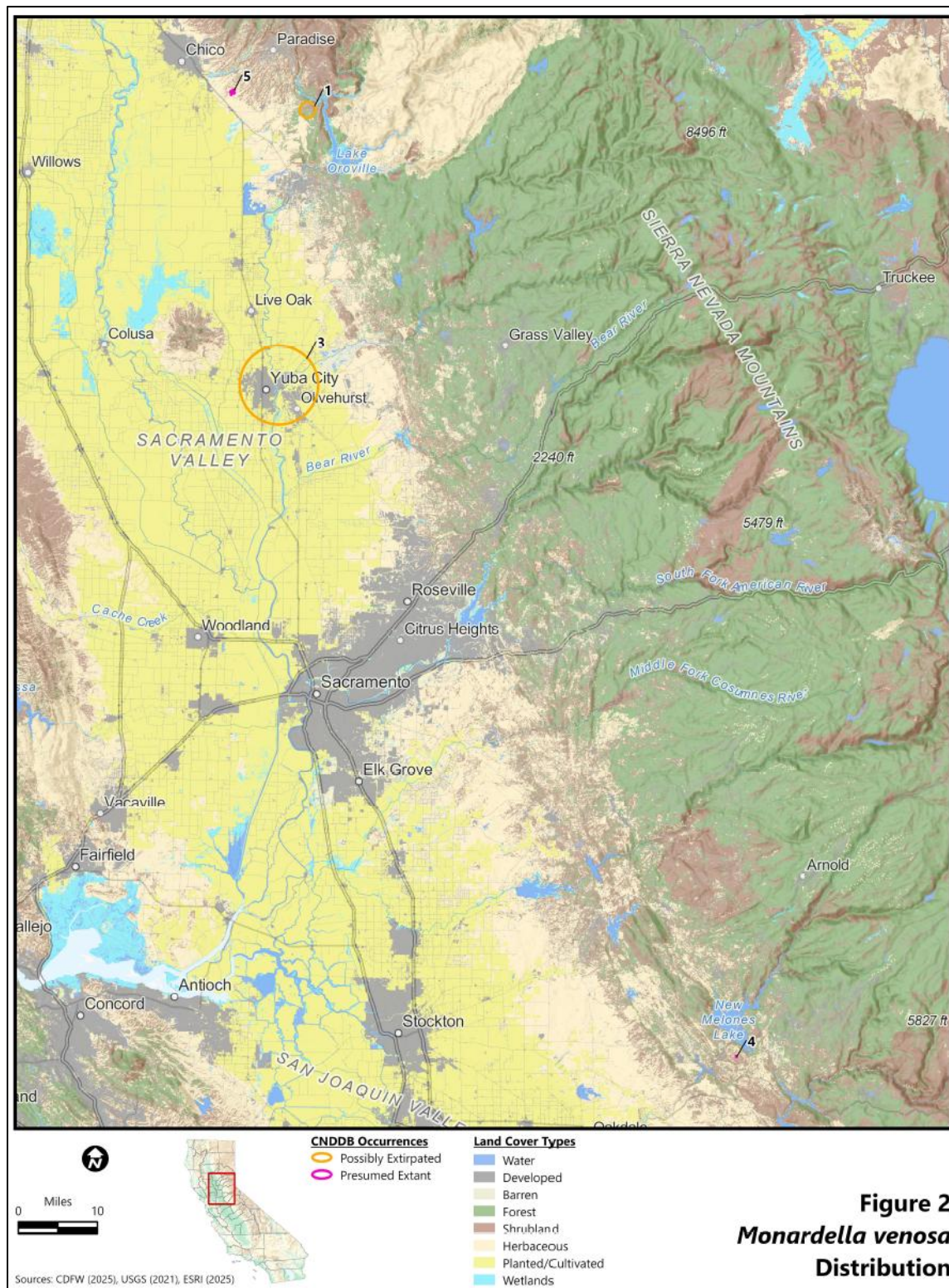


Figure 1. Map of the range and distribution of veiny monardella as provided in Figure 2 of the petition. Occurrences from the California Natural Diversity Database (CNDDDB) are labeled with CNDDDB occurrence numbers. Some occurrences consist of multiple polygons.

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 page 4 and 5 of the petition provides information on the abundance of veiny monardella. Section A on page 3 of the petition provides information on the population trend of veiny monardella.

The petition summarizes information on the abundance of veiny monardella at two CNDDDB occurrences and indicates that one of the occurrences had 2,500 individuals in 1998 and the other occurrence had nearly 500,000 individuals in 2023. The occurrences are approximately 2 hectares (5 acres) and 18 hectares (43 acres) in size based on CNDDDB polygon data. The petition states that based on information from the CNDDDB, land cover mapping from the U.S. Geological Survey, and aerial imagery from Google Earth, veiny monardella has had a decreasing population trend because of loss and degradation of occupied habitat at three or more of the four sites where the species has been observed. The petition lists two occurrences that are possibly extirpated in the CNDDDB, one occurrence that is likely extirpated based on land cover mapping, and another occurrence that is likely decreasing based on aerial imagery. The petition states that the species may have had additional, undocumented habitat losses, population reductions, or both that occurred before the distribution of veiny monardella was well documented.

3.4.1 Department Assessment

Abundance of veiny monardella is provided in the petition based primarily on population estimates reported in the CNDDDB; however, no discussion is provided on the completeness of the information including whether there have been efforts to estimate population sizes at all occurrences 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 should not be used to determine area occupied by the species.

Population trend of veiny monardella is determined in the petition to be declining based on: 1) the number of CNDDDB occurrences that are designated as possibly extirpated; 2) the use of CNDDDB polygon data overlayed on land cover mapping to report the extent of any overlap between the CNDDDB polygon data with development or agriculture, and 3) the historical and ongoing changes to grasslands and woodlands. No discussion is provided on the completeness of the information including whether any recent efforts have been made to update information on the presence and condition of veiny

monardella occurrences or how many of those possible extirpations and likely degradation/loss of habitat were historical or recent. The petition uses CNDDDB polygon data overlaid on land cover mapping to report on the extent of overlap between CNDDDB polygons with development or agriculture to determine additional occurrences that may be experiencing a declining population trend. CNDDDB polygons are typically mapped to include a buffer that represents the locational accuracy of the data, and the petition does not indicate if development or agriculture 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. In addition, the statements in the petition about changes to grasslands and woodlands likely causing additional, undocumented habitat losses, population reductions, or both to veiny monardella are too general and do not specifically identify impacts to habitat likely to have contained veiny monardella.

The Department has some additional, readily available information not presented in the petition. The Department has been gathering information on veiny monardella since 2023 and as a result has detailed historical and current survey data on the single occurrence currently known to be extant. Department staff visited this population in 2023, 2025, and 2026 to assess the species distribution, abundance, habitat, and threats and reached out to botanists who observed the species in the 1990s to acquire past survey data. This additional, readily available information in the Department's possession compensates 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 sufficient for assessing the abundance and population trend of veiny monardella.

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 10 of the petition provides information on factors affecting the ability of veiny monardella to survive and reproduce (threats). Section H on pages 10 through 12 of the petition provides information on the degree and immediacy of threats to veiny monardella.

The petition lists several prominent range-wide threats to veiny monardella: agricultural and developed land uses, climate change, and invasive species. The petition also mentions that dam/inundation, grazing, and mining have been observed by botanists as additional threats affecting occurrences based on CNDDDB data. The petition describes agricultural and developed land uses as major threats to veiny monardella because these land uses have been directly eliminating, fragmenting, and increasing threats to the

remaining habitat. The petition notes that according to the CNDDDB and according to the petitioner's interpretation of land cover mapping showing agriculture and development in relation to CNDDDB occurrences of veiny monardella, two of the four occurrences have been impacted by agriculture and development with another occurrence threatened by these activities.

The petition states that climate change directly and indirectly threatens veiny monardella 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 veiny monardella is uncertain but may be substantial, particularly because of the species' rarity, habitat specificity, and distribution in relatively small and isolated areas that will be exposed to dramatic changes.

The petition states that invasive species have not been identified as a threat to veiny monardella in the CNDDDB, but invasive species are likely a significant, range-wide threat to the species. The petition lists several invasive plant species that co-occur with veiny monardella and mentions an experiment where invasive species were removed from an area with veiny monardella resulting in increased veiny monardella seed production. The petition states that infestations of invasive species can directly affect the conditions or resources veiny monardella relies on, thereby reducing abundance and making the species more vulnerable to extirpation from other causes.

3.5.1 Department Assessment

Factors affecting the ability of veiny monardella to survive and reproduce, and the degree and immediacy of threats, are presented in the petition based primarily 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 veiny monardella that are not listed in the CNDDDB. None of these threats are described in adequate detail in relation to veiny monardella 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 development or agriculture to determine additional occurrences that may be experiencing threats. CNDDDB polygons are typically mapped to include a buffer that represents the locational accuracy of the data, and the petition does not indicate if development or agriculture 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 development and agriculture are currently having on veiny monardella.

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

The Department has some additional, readily available information not presented in the petition. The Department has been gathering information on veiny monardella since 2023 and as a result has detailed historical and current survey data on the single occurrence currently known to be extant. Department staff visited this population in 2023, 2025, and 2026 to assess the species distribution, abundance, habitat, and threats and reached out to botanists who observed the species in the 1990s to acquire past survey data. This additional, readily available information in the Department's possession compensates 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 sufficient for assessing the factors affecting the ability of veiny monardella to survive and reproduce (threats) and the degree and immediacy of threats.

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 12 through 14 of the petition provides information on the impact of existing management efforts on veiny monardella.

The petition states that management of veiny monardella 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 veiny monardella 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 no occurrences of veiny monardella are on land managed for biodiversity. The petition mentions that seeds of veiny monardella have been collected and placed in long-term storage at California/Rancho Santa Ana Botanic Garden and at University of California Botanical Garden at Berkeley.

The petition notes that a portion of one occurrence of veiny monardella is on land managed by the U.S. Bureau of Reclamation for multiple uses, and that land managers often seek to maintain habitats and routinely implement avoidance and minimization measures for the habitats. The petition mentions another occurrence of veiny monardella that has been monitored over multiple years by botanists.

The petition states that no efforts have been made to restore or create habitat occupied by veiny monardella. The petition discusses how surveys have been conducted to confirm the continued existence of one occurrence in the last 20 years. The petition also states that some research has been conducted on the species pollination, interactions with other species, and habitat requirements, but not on other aspects of its ecology or on its genetic diversity, and therefore understanding of the species' ecology is partially based on observations by botanists and understanding of the ecology of related and similar species.

3.6.1 Department Assessment

The Department considers the information provided in the petition on impact of existing management efforts on veiny monardella 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 14 and 15 of the petition provides suggestions for future management of veiny monardella.

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 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,
- coordinate and share information among organizations working to conserve the species,
- coordinate with and support private landowners implementing conservation practices in occupied habitat,
- establish additional populations,
- conduct surveys to improve data on distribution and abundance,
- document genetic diversity, and
- investigate the species' population 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 veiny monardella 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 15 through 18 of the petition provides the sources of information used in the veiny monardella 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 veiny monardella.

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 veiny monardella that is available from the Department's Native Plant Program, 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. Any relevant information from these sources is mentioned within the sufficiency 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 constitutes countervailing information that wholly undercuts the conclusions in the petition at this juncture in the listing process. If the Commission accepts the petition for consideration, 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 sufficient information to indicate that the petitioned action may be warranted (Fish & G. Code § 2073.5).

LITERATURE CITED

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