

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

California Endangered Species Act



Petition Evaluation for Guggolz's Harmonia (*Harmonia guggolziorum*)

Report to the Fish and Game Commission
June 2026

Suggested citation: California Department of Fish and Wildlife (CDFW). 2026. Petition evaluation for Guggolz's harmonia (*Harmonia guggolziorum*). A report to the Fish and Game Commission, California Natural Resources Agency, Sacramento, CA, USA.

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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 Guggolz's harmonia (*Harmonia guggolziorum*) has been prepared by the California Department of Fish and Wildlife (Department) in response to the petition to list Guggolz's harmonia 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.

Guggolz's harmonia is an annual plant in the sunflower family (Asteraceae) that blooms in April and May. The petition describes Guggolz's harmonia as being known from two occurrences at the eastern edge of the Outer North Coast Ranges in Mendocino County in openings in chaparral on serpentine soil. The petition provides an abundance estimate at one of the two occurrences with population sizes ranging from greater than 150 to 4,000 plants over three years of surveys and provides information to suggest a declining population trend. The petition lists several threats to Guggolz's harmonia including agricultural and developed land uses, climate change, and invasive species. The petition states that extirpation from much of its range or extinction of the species may occur because: both occurrences are threatened and the severity of some threats is increasing, both occurrences are small in area, and both sites occupied by the species are unprotected and not managed for the 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 Guggolz's harmonia as endangered 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 Guggolz's harmonia (*Harmonia guggolziorum*) 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 Guggolz's harmonia 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

Guggolz's harmonia 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, 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 Guggolz's harmonia 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 (CNDDDB 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 (CNDDDB and CNPS 2020). CNPS has assigned Guggolz's harmonia 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

Guggolz’s harmonia is a member of the sunflower family (Asteraceae). It is an erect annual plant that grows 10 to 30 cm (3.9 to 11.8 in) tall (Baldwin 2012). Its slender stems are mostly reddish-purple and are branched primarily in the upper half, with the unbranched portion of the stem longer than the branches supporting the flower heads (Baldwin 2001, 2012). The lower part of the stem is sparsely to densely covered in stiff hairs, and the upper part of the stem is covered with dense, stalked glands that are generally dark-purplish (sometimes yellow) (Baldwin 2001). The leaves of Guggolz’s harmonia are oppositely arranged on the lower stem and alternately arranged on the upper stem, with most of the leaves located on the lower stems or subtending the branches with flowering heads (Baldwin 2001). The leaves are linear to thread-like, 5 to 50 mm (0.2 to 2.0 in) long and 1 to 3 mm (0.04 to 0.12 in) wide, and have margins that are smooth or sparsely and shallowly toothed (Baldwin 2001).

Similar to most members of the sunflower family, Guggolz’s harmonia has many flowers clustered together in an inflorescence (group of flowers) to give the appearance of a single flower. Inflorescences in the sunflower family can be comprised of two different types of flowers, disk flowers and ray flowers. Disk flowers are generally bisexual (containing both female and male parts) and fertile, generally with a symmetrical five-lobed corolla (collective term for petals) (Baldwin 2012). Ray flowers are generally pistillate (containing only female reproductive parts) or sterile, with petals fused together to form a bilateral flower with a slender tube and a flattened appendage (Baldwin 2012). Guggolz’s harmonia inflorescences consist of both ray flowers and disk flowers arranged in radiate flower heads, with disk flowers arranged in the center surrounded by a peripheral ring of ray flowers (Baldwin 2001, 2012). Each flower head consists of 3 to 6 ray flowers that are bright yellow and 4 to 5 mm (0.16 to 0.20 in) long, and 8 to 13 bright yellow disk flowers, with some or all disk flowers bisexual (Baldwin 2012).

Guggolz’s harmonia produces a dry, indehiscent (not opening to release contents) one-seeded fruit that is 3 to 3.5 mm (0.12 to 0.14 in) long (Baldwin 2001). The fruits of the ray flowers have a pappus that consists of approximately 10 to 12 linear scales up to 0.5 mm (0.02 in) long, and the fruits of the disk flowers have a pappus of approximately 9 to 11 lanceolate (narrowly elongate with a wider base and a tapered, acute tip) to linear, fringed scales that are 0.6 to 0.8 mm (0.02 to 0.03 in) long (Baldwin 2001, 2012). A pappus is a group of structures such as awns, bristles, or scales that are attached to

seeds (Jepson Flora Project 2025) and protects the developing fruit and aids in its dispersal (Spellenberg and Zucker 2019).

Guggolz's harmonia was first collected near Hopland in Mendocino County by Jack and Betty Guggolz in April 2000 (Baldwin 2001; CCH 2025) and was formally described by Bruce Baldwin in 2001 (Baldwin 2001). The currently accepted name for Guggolz's harmonia is *Harmonia guggolziorum* (Baldwin 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. 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 Guggolz's harmonia.

The petition provides a physical description of Guggolz's harmonia, with descriptions of its habit, stems, leaves, flowers, and fruits. The petition contrasts Guggolz's harmonia with the physical properties of a similar species, Hall's harmonia (*Harmonia hallii*). The petition describes Guggolz's harmonia as an annual herb that blooms in April and May and is pollinated by insects. The petition also states that the dispersal mechanisms of the species, as well as important pollinators, seed dormancy, and most other aspects of its ecology are not known.

3.1.1 Department Assessment

The Department considers the information provided in the petition on the life history of Guggolz's harmonia 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 3 of the petition provides information on the range of Guggolz's harmonia. Section C on page 4 of the petition provides information on its distribution. Section L, Figure 2 on page 17 of the petition provides a distribution map, which has been provided as Figure 1 of this petition evaluation.

The petition describes Guggolz's harmonia as a California endemic with a very small range at the eastern edge of the Outer North Coast Ranges. The petition states that Guggolz's harmonia's range comprises less than one square kilometer (0.4 square miles), and that it occurs in Mendocino County at elevations of 160 to 195 meters (525 to 640 feet). The petition states that Guggolz's harmonia is known from only two sites that were documented in 2000 and 2001. The petition also mentions that Guggolz's harmonia may have few or no extant, undocumented occurrences since Guggolz's

harmonia has a very small known range in a relatively well-surveyed area, and it is restricted to a specific substrate (serpentine).

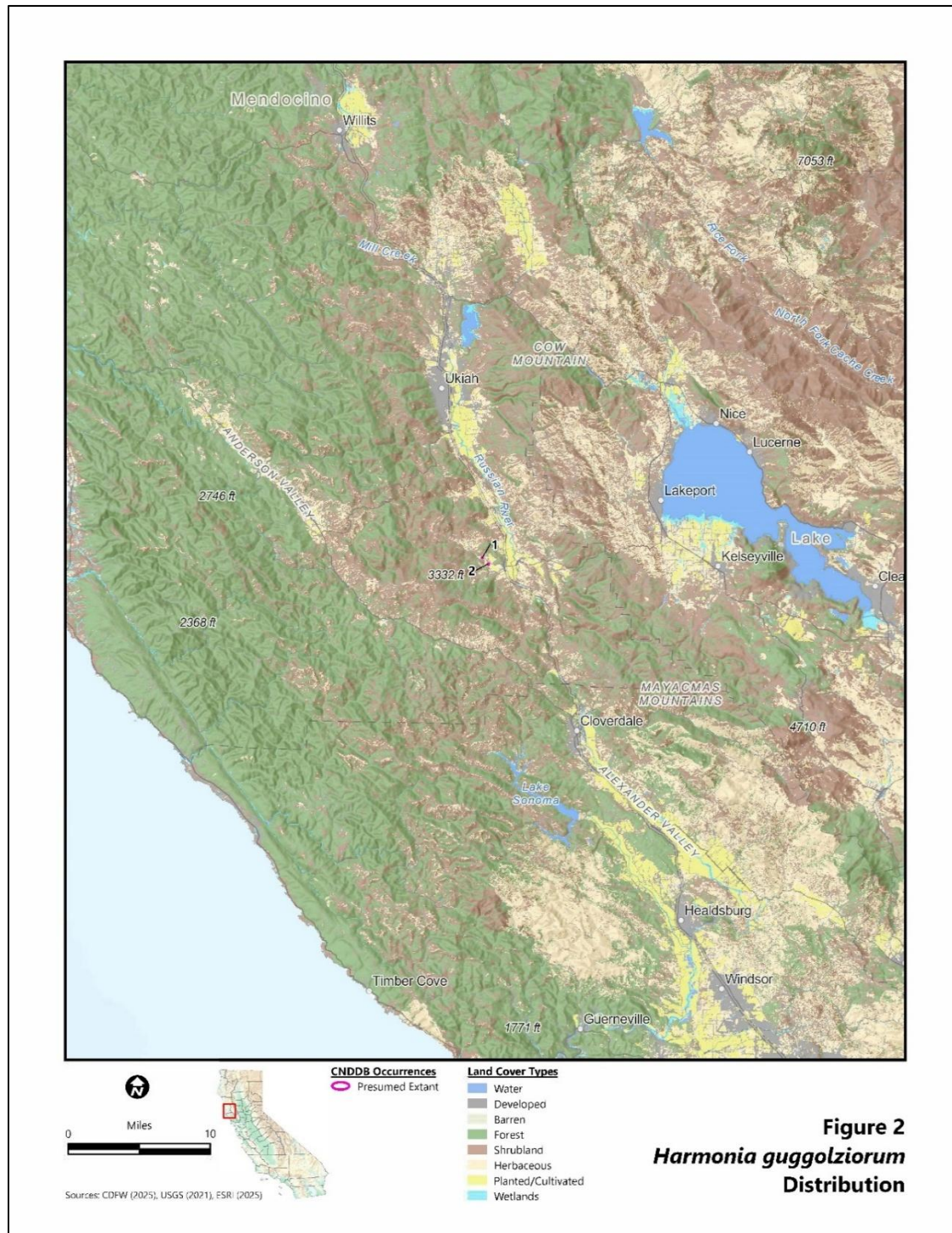


Figure 1. Map of the range and distribution of Guggolz's harmonia as provided in Figure 2 of the petition. Occurrences from the California Natural Diversity Database (CNDDDB) are labeled with CNDDDB occurrence numbers. Some occurrences consist of multiple polygons.

3.2.1 Department Assessment

Range and distribution of Guggolz's harmonia 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 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 assessing the range and distribution of Guggolz's harmonia.

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 6 of the petition provides information on the kind of habitat necessary for Guggolz's harmonia's survival.

The petition states that Guggolz's harmonia occurs in openings in chaparral on serpentinite, and the species is considered endemic to serpentine soils. The petition also includes a list of plant species that grow with Guggolz's harmonia.

3.3.1 Department Assessment

The Department considers the information provided in the petition on the kind of habitat necessary for Guggolz's harmonia 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 Guggolz's harmonia. Section A on page 3 of the petition provides information on the population trend of Guggolz's harmonia.

The petition summarizes information on the abundance of Guggolz's harmonia at one of the two CNDDDB occurrences with population estimates ranging from greater than 150 to 4,000 plants over three years of surveys. The petition states that range-wide monitoring of Guggolz's harmonia 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 1.3 hectares (3.4 acres) based on CNDDDB polygon data.

The petition states that, based on information from the CNDDDB and land cover mapping from the U.S. Geological Survey, Guggolz's harmonia has had a decreasing population trend because of loss and degradation of occupied habitat at both occurrences where the species has been observed. The petition states that the species may have had additional, undocumented habitat losses, population reductions, or both that occurred before the distribution of Guggolz's harmonia was well documented.

3.4.1 Department Assessment

Abundance of Guggolz's harmonia is provided in the petition based 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, 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 Guggolz's harmonia is determined in the petition to be declining based on: 1) the use of CNDDDB polygon data overlaid on land cover mapping to report the extent of any overlap between the CNDDDB polygon data with development or agriculture, and 2) the historical and ongoing changes to chaparral habitat. 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 Guggolz's harmonia occurrences. The petition uses CNDDDB polygon data overlaid on land cover mapping to report that both documented occurrences of Guggolz's harmonia are experiencing a decreasing population trend due to the presence of agriculture and a road within portions of the CNDDDB polygons. CNDDDB polygons are typically mapped to include a buffer that represents 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 chaparral likely causing additional, undocumented habitat losses, population reductions, or both to Guggolz's harmonia are too general and do not specifically identify impacts to habitat likely to have contained Guggolz's harmonia.

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 assessing the abundance and population trend of Guggolz's harmonia.

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 Guggolz's harmonia to survive and reproduce (threats). Section H on pages 9 and 10 of the petition provides information on the degree and immediacy of threats to Guggolz's harmonia.

The petition lists several prominent range-wide threats to Guggolz's harmonia: agricultural and developed land uses, climate change, and invasive species. The petition also mentions that grazing and road/trail construction/maintenance 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 Guggolz's harmonia 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 the interpretation of land cover mapping in the petition showing agriculture and development in relation to CNDDDB occurrences of Guggolz's harmonia, both occurrences are threatened by agriculture and development.

The petition states that climate change directly and indirectly threatens Guggolz's harmonia 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 Guggolz's harmonia is uncertain but may be substantial, particularly because of the species' limited range, rarity, habitat specificity, and distribution in relatively small areas. The petition states that invasive species are likely a significant, range-wide threat to Guggolz's harmonia. The petition lists two invasive plant species that co-occur with

Guggolz's harmonia or that are spreading in the species range. The petition states that infestations of invasive species can directly affect the conditions or resources Guggolz's harmonia relies on, thereby reducing abundance and making the species more vulnerable to extirpation from other causes.

The petition states that without additional management actions, there is a moderate to high likelihood that Guggolz's harmonia will be extirpated from much of its range or become extinct. The petition mentions that this may occur because: both occurrences are threatened and the severity of some threats is increasing, both occurrences are small in area, and both sites occupied by the species are unprotected and not managed for the conservation of the species.

3.5.1 Department Assessment

Factors affecting the ability of Guggolz's harmonia 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 as a threat to Guggolz's harmonia that is not listed in the CNDDDB. None of these threats are described in adequate detail in relation to Guggolz's harmonia 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 Guggolz's harmonia.

The petition also mentions small number and size of occupied sites, and lack of protection and management, as additional reasons why Guggolz's harmonia is likely to be extirpated from much of its range or become extinct. The petition has not shown that Guggolz's harmonia 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 how land use on the unprotected lands with Guggolz's harmonia 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 Guggolz's harmonia to survive and reproduce, or the degree and immediacy of threats to Guggolz's harmonia.

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 10 through 12 of the petition provides information on the impact of existing management efforts on Guggolz's harmonia.

The petition states that management of Guggolz's harmonia 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 Guggolz's harmonia 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 neither known occurrence of Guggolz's harmonia has been preserved. The petition mentions that seeds of Guggolz's harmonia have been collected and placed in long-term storage at the University of California Santa Cruz.

The petition notes that neither known occurrence of Guggolz's harmonia is being managed for biodiversity or multiple uses. The petition mentions that none of the Guggolz's harmonia occurrences are the subject of systematic, formal monitoring.

The petition states that no efforts have been made to restore or create habitat occupied by Guggolz's harmonia. The petition discusses how surveys have been conducted at both occurrences of Guggolz's harmonia during the past 20 years, with several years of observations recorded in the CNDDDB for one occurrence, most recently in 2019. The petition mentions that range-wide surveys of potential habitat have not been conducted to search for additional, undocumented populations. The petition states that research has not been conducted on the species' pollination, dispersal, establishment, growth, mortality, interactions with other species, population dynamics, habitat requirements, or other aspects of its ecology, and therefore understanding of the species' ecology is based primarily 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 Guggolz's harmonia 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 12 and 13 of the petition provides suggestions for future management of Guggolz's harmonia.

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,
- establish a memorandum of understanding with Mendocino County's Department of Transportation 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,
- conduct surveys to improve data on abundance and search for additional populations, 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 Guggolz's harmonia 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 13 through 16 of the petition provides the sources of information used in the Guggolz's harmonia 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 Guggolz's harmonia.

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 Guggolz's harmonia 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 *Guggolz's harmonia*, 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 *Guggolz's harmonia* under CESA may be warranted and recommends the Commission reject the petition and not consider it further under CESA.

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