

## NOTICE OF FINDINGS

### Livermore tarplant

#### *(Deinandra bacigalupii)*

**NOTICE IS HEREBY GIVEN** that the California Fish and Game Commission (Commission), at its meeting in Folsom, California on August 25, 2016, made a finding pursuant to Fish and Game Code Section 2075.5, that the petitioned action to add the Livermore tarplant (*Deinandra bacigalupii*) to the list of endangered species under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) is warranted. (See also Cal. Code Regs., tit. 14, § 670.1, subd. (i).)

NOTICE IS ALSO GIVEN that, at its October 20, 2016, meeting in Eureka, California, the Commission adopted the following findings outlining the reasons for its listing decision.

### I. Background and Procedural History

#### Petition History

On August 26, 2014, the Commission received the “A Petition to the State of California Fish and Game Commission” to list the species identified as the Livermore tarplant (*Deinandra bacigalupii*) as an endangered species (Petition). The Petition was submitted by Heath Bartosh (Petitioner).

Commission staff transmitted the Petition to the Department of Fish and Wildlife (Department) pursuant to Fish and Game Code Section 2073 on August 28, 2014, and the Commission published formal notice of receipt of the Petition on September 12, 2014 (Cal. Reg. Notice Register 2014, No. 37-Z, p. 1627). On October 8, 2014, Commission staff provided a copy of the Petition to the Commission pursuant to Title 14, California Code of Regulations, Section 670.1. On November 24, 2014, the Department requested a 30-day extension pursuant to Fish and Game Code Section 2073.5 to allow the Department to complete its analysis. After evaluating the Petition and other relevant information the Department possessed or received, the Department determined that based on the information in the Petition, there was sufficient scientific information to indicate that the petitioned action may be warranted, and recommended the Commission accept the Petition. On April 9, 2015, the Commission voted to accept the Petition and initiate a review of the species’ status in California. Upon publication of the Commission’s notice of determination, the Livermore tarplant was designated a candidate species on April 24, 2015 (Cal. Reg. Notice Register 2015, No. 17-Z, p. 656).

Following the Commission’s designation of the Livermore tarplant as a candidate species, the Department notified affected and interested parties and solicited data and comments on the petitioned action pursuant to Fish and Game Code Section 2074.4. (see also Cal. Code Regs., tit. 14, § 670.1(f)(2).) Subsequently, the Department reviewed the species’ status. On April 11, 2016, the Department Director delivered a report on the status review to the Commission

pursuant to Fish and Game Code Section 2074.6, including a recommendation that, based upon the best scientific information available to the Department, the petitioned action is warranted.

On August 25, 2016, at its meeting in Folsom, California, the Commission took up consideration of the Petition and received public testimony on the matter. The Commission voted to add the Livermore tarplant to the list of threatened species. The Commission directed its staff, in coordination with the Department, to prepare findings of fact consistent with the Commission's determination and to present those findings for consideration and ratification at the Commission's October 20, 2016, meeting in Eureka, California.

### **Species Description**

Livermore tarplant is an herbaceous plant of the sunflower family (*Asteraceae*) that grows to a height of 3.9 to 15.7 inches (10 to 40 centimeters). The Livermore tarplant was described as a new species in 1999. The leaves and parts of the stems, flowers, and flower heads of Livermore tarplant have minutely-stalked yellowish or clear glands that are sticky and give the plant a strong odor.

There are four known occurrences of Livermore tarplant, all restricted to the eastern portion of the Livermore Valley, within the City of Livermore and unincorporated Alameda County, California. Livermore tarplant grows in poorly-drained, seasonally-dry, alkaline meadows in the vicinity of barren alkali scalds, alkali vernal pools and playa-like pools.

### **Federal Status**

The Livermore tarplant is not protected pursuant to the federal Endangered Species Act (16 U.S.C. §§ 1531 et seq.).

## **II. STATUTORY AND LEGAL FRAMEWORK**

The Commission, as established by the California Constitution, has exclusive statutory authority under California law to designate endangered, threatened, and candidate species under CESA. (Cal. Const., art. IV, § 20, subd. (b); Fish & G. Code, § 2070.) The Commission has prepared these findings as part of its final action under CESA regarding the Petition to designate Livermore tarplant as an endangered species under CESA. As set forth above, the Commission's determination that listing Livermore tarplant is warranted marks the end of formal administrative proceedings under CESA. (See generally Fish & G. Code, § 2070 et seq.; Cal. Code Regs., tit. 14, § 670.1.)

The CESA listing process for Livermore tarplant began in the present case with the Petitioner's submittal of the Petition to the Commission on August 26, 2014 (Cal. Reg. Notice Register 2014, No. 37-Z, p. 1627). Pursuant to Fish and Game Code Section 2073, on August 28, 2014, the Commission transmitted the petition to the Department for review pursuant to Fish and Game Code Section 2073.5. The regulatory process that ensued is described in some detail in the preceding section above, along with related references to the Fish and Game Code and

controlling regulation. The CESA listing process generally is also described in some detail in published appellate case law in California, including:

- *Mountain Lion Foundation v. California Fish and Game Commission* (1997) 16 Cal.4<sup>th</sup> 105, 114-116;
- *California Forestry Association v. California Fish and Game Commission* (2007) 156 Cal.App.4<sup>th</sup> 1535, 1541-1542;
- *Center for Biological Diversity v. California Fish and Game Commission* (2008) 166 Cal.App.4<sup>th</sup> 597, 600; and
- *Natural Resources Defense Council v. California Fish and Game Commission* (1994) 28 Cal.App.4<sup>th</sup> 1104, 1111-1116.

The “is warranted” determination at issue here for Livermore tarplant stems from Commission obligations established by Fish and Game Code Section 2075.5(e). Under this provision, the Commission is required to make one of two findings for a candidate species at the end of the CESA listing process; namely, whether the petitioned action is warranted or is not warranted. Here, with respect to Livermore tarplant, the Commission made the finding under Section 2075.5(e)(2) that the petitioned action is warranted.

The Commission was guided in making these determinations by statutory provisions and other controlling law. The Fish and Game Code, for example, defines an endangered species under CESA as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, over exploitation, predation, competition, or disease.” (Fish & G. Code, § 2062.) Similarly, the Fish and Game Code defines a threatened species under CESA as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter.” (*Id.*, § 2067.)

The Commission also considered Title 14, Section 670.1, subdivision (i)(1)(A), of the California Code of Regulations in making its determination regarding Livermore tarplant. This provision provides, in pertinent part, that a species shall be listed as endangered or threatened under CESA if the Commission determines that the species’ continued existence is in serious danger or is threatened by any one or any combination of the following factors:

1. Present or threatened modification or destruction of its habitat;
2. Overexploitation;
3. Predation;
4. Competition;
5. Disease; or
6. Other natural occurrences or human-related activities.

Fish and Game Code Section 2070 provides similar guidance. This section provides that the Commission shall add or remove species from the list of endangered and threatened species under CESA only upon receipt of sufficient scientific information that the action is warranted. Similarly, CESA provides policy direction not specific to the Commission per se, indicating that all state agencies, boards, and commissions shall seek to conserve endangered and threatened species and shall utilize their authority in furtherance of the purposes of CESA. (Fish & G. Code, § 2055.) This policy direction does not compel a particular determination by the Commission in the CESA listing context. Nevertheless, “[l]aws providing for the conservation of natural resources’ such as the CESA ‘are of great remedial and public importance and thus should be construed liberally.’” (*California Forestry Association v. California Fish and Game Commission*, supra, 156 Cal. App.4th at pp. 1545-1546, citing *San Bernardino Valley Audubon Society v. City of Moreno Valley* (1996) 44 Cal.App.4th 593, 601; Fish & G. Code, §§ 2051, 2052.)

Finally in considering these factors, CESA and controlling regulations require the Commission to actively seek and consider related input from the public and any interested party. (See, e.g., Id., §§ 2071, 2074.4, 2078; Cal. Code Regs., tit. 14, § 670.1, subd. (h).) The related notice obligations and public hearing opportunities before the Commission are also considerable. (Fish & G. Code, §§ 2073.3, 2074, 2074.2, 2075, 2075.5, 2078; Cal. Code Regs., tit. 14, § 670.1, subds. (c), (e), (g), (i); see also Gov. Code, § 11120 et seq.) All of these obligations are in addition to the requirements prescribed for the Department in the CESA listing process, including an initial evaluation of the petition and a related recommendation regarding candidacy, and a 12-month status review of the candidate species culminating with a report and recommendation to the Commission as to whether listing is warranted based on the best available science. (Fish & G. Code, §§ 2073.4, 2073.5, 2074.4, 2074.6; Cal. Code Regs., tit. 14, § 670.1, subds. (d), (f), (h).)

### **III. Factual and Scientific Bases for the Commission’s Final Determination**

The factual and scientific bases for the Commission’s determination that designating the Livermore tarplant as an endangered species under CESA is warranted are set forth in detail in the Commission’s record of proceedings. The evidence in the administrative record in support of the Commission’s determination includes, but is not limited to, the Petition, the Department’s Petition Evaluation Report, the Department’s status review, and other evidence included in the Commission’s administrative record as it exists up to and including the Commission meeting in Folsom, California on August 25, 2016. The administrative record also includes these findings.

The Commission determines that the continued existence of Livermore tarplant in the State of California is in serious danger or threatened by one or a combination of the following factors as required by the California Code of Regulations, Title 14, Section 670.1, subdivision (i)(1)(A):

1. Present or threatened modification or destruction of its habitat;
2. Competition; or
3. Other natural occurrences or human-related activities.

The Commission also determines that the information in the Commission's record constitutes the best scientific information available and establishes that designating the Livermore tarplant as an endangered species under CESA is warranted.

The items highlighted here and detailed in the following section represent only a portion of the complex issues aired and considered by the Commission during the CESA listing process for Livermore tarplant. Similarly, the issues addressed in these findings represent some, but not all of the evidence, issues, and considerations affecting the Commission's final determination. Other issues aired before and considered by the Commission are addressed in detail in the record before the Commission, which record is incorporated herein by reference.

All populations of Livermore tarplant occur within the immediate vicinity of urban development. Livermore tarplant is threatened, both directly and indirectly, by recent and ongoing development and changes in land use, impacts from invasive species, recreation activities, and herbicide use. Ground-disturbing impacts from grazing and impacts from thatch accumulation in areas that are not grazed are also potential threats to Livermore tarplant. It is unclear how climate change will affect Livermore tarplant. Livermore tarplant is also vulnerable to extinction due to the small number of Livermore tarplant populations and the relatively small sizes of those populations. Because of the rarity of Livermore tarplant, the loss of all or a significant portion of any Livermore tarplant population would represent the loss of a significant portion of Livermore tarplant's total range.

## **Threats**

### **Present or Threatened Modification or Destruction of Habitat**

The habitats in the Livermore Valley have been impacted by a history of modification and destruction from development, grazing, and other land use. Evaluation of soil maps and aerial imagery show that these activities have almost certainly resulted in the loss of Livermore tarplant habitat. Current land use practices, zoning, and designations have led to recent and severe habitat modification and destruction that is likely to lead to the extirpation of a significant portion of Livermore tarplant's range, and the modification and destruction of habitat is likely to continue into the future. In addition, recreation activities within and in the vicinity of Livermore tarplant populations have resulted in habitat degradation that is evident on the ground and visible from aerial imagery. The modification and destruction of habitat is a significant threat to the continued existence of Livermore tarplant.

## **Competition**

Invasive plant species have been documented to pose serious threats to biodiversity around the world, and are a particularly pervasive problem in Mediterranean-type habitats like those in California. Invasive thatch-forming grasses, and other invasive plants such as perennial pepperweed, occur within and in close proximity to all Livermore tarplant populations. Invasive plant species are a significant threat to the continued existence of Livermore tarplant.

## **Other Natural Occurrences or Human-related Activities**

The climate of California is certain to change due to warming of the global climate system; however, it is unclear how such changes will affect Livermore tarplant. Livermore tarplant has a narrow distribution and few populations, with three of the four known populations occupying relatively small areas. Livermore tarplant's rarity and extremely limited distribution, and its occurrence only in and near developed areas, make the species very vulnerable to stochastic (chance) events such as droughts, wildfires, and accidents, and to all other threats. Therefore, the loss of all or a significant portion of any Livermore tarplant population would represent the loss of a significant portion of Livermore tarplant's total range. Livermore tarplant is also threatened by herbicide application and other right-of-way maintenance activities.

## **IV. FINAL DETERMINATION BY THE COMMISSION**

The Commission has weighed and evaluated the information for and against designating Livermore tarplant as an endangered species under CESA. This information includes scientific and other general evidence in the Petition, the Department's Petition Evaluation Report, the Department's 2016 peer-reviewed Status Review, the Department's related recommendations, and other evidence included in the Commission's record of proceedings.

Based upon the evidence in the record the Commission has determined that the best scientific information available indicates that the continued existence of Livermore tarplant is in serious danger or threatened by present or threatened modifications or destruction of the species' habitat, predation, competition, disease, or other natural occurrences or human-related activities, where such factors are considered individually or in combination. (See generally Cal. Code Regs., tit. 14, § 670.1, subd. (i)(1)(A); Fish & G. Code, §§ 2062, 2067.) The Commission determines that there is sufficient scientific information to indicate that designating Livermore tarplant as an endangered species under CESA is warranted at this time and that with adoption and publication of these findings Livermore tarplant for purposes of its legal status under CESA and further proceedings under the California Administrative Procedure Act, shall be listed as endangered.