

## STAFF SUMMARY FOR FEBRUARY 8-9, 2017

**9. FLAT-TAILED HORNED LIZARD (CONSENT)****Today's Item****Information** ☐**Action** ☒

Adopt findings for the Dec 8, 2016 decision to reject the petition to list flat-tailed horned lizard (*Phrynosoma mcallii*) as a threatened or endangered species pursuant to Section 2075.5, Fish and Game Code.

**Summary of Previous/Future Actions**

- |   |                                    |
|---|------------------------------------|
| • Receive petition                              | Jun 10, 2014                       |
| • FGC transmits petition to DFW                 | Jun 12, 2014                       |
| • Publish notice of receipt of petition         | Jul 11, 2014                       |
| • DFW requested 30-day extension for evaluation | Oct 8, 2014                        |
| • Received DFW's evaluation of petition         | Dec 3, 2014; Van Nuys              |
| • FGC determined listing may be warranted       | Feb 12, 2015; Sacramento           |
| • DFW's request for six month extension         | Feb 11, 2016; Sacramento           |
| • DFW's status report                           | Oct 19-20, 2016: Eureka            |
| • Determination that listing is not warranted   | Dec 7-8, 2016; San Diego           |
| • <b>Today adopt findings</b>                   | <b>Feb 8-9, 2017; Rohnert Park</b> |

**Background**

On Dec 8, 2016, FGC made a finding pursuant to Section 2075.5 of the Fish and Game Code, that the petitioned action to list flat-tailed horned lizard as threatened or endangered under the California Endangered Species Act is not warranted.

**Significant Public Comments**

1. Assemblymember Randy Voepel supports FGC's decision to not list flat-tailed horned lizard as a threatened or endangered species and requests that FGC swiftly produce findings so that recreation is allowed to resume as soon as possible (Exhibit 2).

**Recommendation**

**FGC staff:** Adopt staff's proposed notice of findings that listing flat-tailed horned lizard as threatened or endangered is not warranted pursuant to Section 2075.5 of the Fish and Game Code.

**Exhibits**

1. [Draft notice of findings](#)
2. [Letter from Assemblymember Randy Voepel, received Jan 23, 2017](#)

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the consent calendar, items 5-9.

**NOTICE OF FINDINGS**  
**Flat-Tailed Horned Lizard**  
**(*Phrynosoma mcallii*)**

**NOTICE IS HEREBY GIVEN** that the Fish and Game Commission (Commission), at its December 8, 2016 meeting in San Diego, California, made a finding pursuant to Fish and Game Code Section 2075.5, that the petitioned action to add the flat-tailed horned lizard (*Phrynosoma mcallii*) to the list of threatened or endangered species under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) is not warranted. (See also Cal. Code Regs., tit. 14, § 670.1, subd. (i)(1).)

NOTICE IS ALSO GIVEN that, at its February 8, 2017 meeting in Rohnert Park, California, the Commission adopted the following findings outlining the reasons for its rejection of the petition.

**I. BACKGROUND AND PROCEDURAL HISTORY**

**A. Petition History**

The Center for Biological Diversity (Petitioners) submitted a petition (Petition) to the Commission on June 10, 2014 to list the flat-tailed horned lizard (*Phrynosoma mcallii*) as an endangered species pursuant to CESA (“A Petition to List the Flat-tailed Horned Lizard (*Phrynosoma mcallii*) as Endangered under the California Endangered Species Act”). The Commission transmitted the Petition to the Department pursuant to Fish and Game Code Section 2073 on June 12, 2014, and published formal notice of receipt on July 11, 2014 (Cal. Reg. Notice Register 2014, No. 28-Z, p. 1238).

The Department evaluated the Petition, using the information in that document and other relevant information available at that time, and found that the scientific information presented in the Petition was sufficient to indicate that the petitioned action may be warranted. On September 30, 2014, the Department submitted to the Commission its evaluation of the Petition, “Evaluation of the Petition from the Center for Biological Diversity to List the Flat-Tailed Horned Lizard (*Phrynosoma mcallii*) as Endangered Under the California Endangered Species Act” (Petition Evaluation). The Department recommended that the Commission accept the Petition pursuant to Fish and Game Code Section 2073.5.

On February 12, 2015, at its meeting in Sacramento, California, the Commission considered the Petition, the Department’s Petition Evaluation, and received public comment. The Commission determined there was sufficient information in the Petition to indicate that the petitioned action may be warranted and accepted for consideration the

Petition. The flat-tailed horned lizard was designated a candidate species on March 6, 2015 (Cal. Reg. Notice Register 2015, No. 10-Z, p. 410).

The Department promptly notified affected parties by issuing a press release, posting notice on the Department's website, and sending targeted letters to stakeholder groups, including scientific researchers holding scientific collecting permits for flat-tailed horned lizard. (Fish & Game Code, § 2074.4).

Consistent with Fish and Game Code Section 2074.6 and its implementing regulations, the Department commenced a twelve-month status review of the flat-tailed horned lizard following published notice of its designation as a candidate species under CESA. As an integral part of that effort, the Department solicited data, comments, and other information from interested members of the public and the scientific and academic communities. The Department received fourteen pieces of correspondence during the public notice period ending September 14, 2015. Comments included those from members of the public without stated affiliation as well as comments on behalf of state and federal agencies, local governments, and special interest groups. Some comments provided additional scientific papers, other reports, GIS files, and photographs. At its scheduled public meeting on February 11, 2016, in Sacramento, California, the Commission granted the Department a six-month extension to facilitate external peer review.

On June 22, 2016, the Department submitted a preliminary draft of its status review for independent scientific peer review by a number of individuals acknowledged to be experts on flat-tailed horned lizard, possessing the knowledge and expertise to critique the scientific validity of the report. (Fish & G. Code, § 2074.8; Cal. Code Regs., tit. 14, § 670.1, subd. (f)(2).) On September 30, 2016, the Department submitted its final "Report to the Fish and Game Commission a Status Review of the Flat-tailed Horned Lizard (*Phrynosoma mcallii*) in California" (Status Review). Based on its Status Review and the best available science, the Department recommended to the Commission that designating flat-tailed horned lizard as threatened or endangered under CESA is not warranted (Fish & G. Code, § 2074.6; Cal. Code Regs., tit. 14, § 670.1, subd. (f).). Following receipt, the Commission made the Department's Status Review available to the public, inviting further review and input. (Cal. Code Regs., tit. 14, § 670.1, subd. (g).)

On December 8, 2016, at its meeting in San Diego, California, the Commission received public comment, accepted additional information from Petitioners and the public, and considered final action regarding the Petition to designate flat-tailed horned lizard as a threatened or endangered species under CESA. (Fish & G. Code, § 2075.5; Cal. Code Regs., tit. 14, § 670.1, subd. (i).) After receiving public comment, the Commission closed the administrative record of proceedings for the Petition. (Fish & G. Code,

§ 2075.5, subd. (a).) The Commission considered the petition, further information submitted by Petitioners, public comment, the Department's 2014 Petition Evaluation, the Department's 2016 Status Review, and other information included in the Commission's administrative record of proceedings. Following public comment and deliberation, the Commission determined, based on the best available science, that designating the flat-tailed horned lizard as a threatened or endangered species under CESA is not warranted. (Fish & G. Code, § 2075.5, subd. (e)(1); Cal. Code Regs., tit. 14, § 670.1, subd. (i)(2)). 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 February 8, 2017 meeting in Rohnert Park, California.

## **B. Species Description**

Flat-tailed horned lizards are typical of other horned lizards in the genus *Phrynosoma*, which are characterized by an ant-rich diet, squat dorsoventrally flattened bodies, cranial horns, body fringe, cryptic coloration, reluctance to run when approached, and a long active period. Flat-tailed horned lizards have a relatively low reproductive output compared to other horned lizards and rarely live beyond three years. Ants, primarily harvester ants, comprise 97% of their diet, higher than any other species of horned lizard, but they also can opportunistically consume large quantities of smaller ants and other invertebrates. They have relatively long active seasons compared to other horned lizards and large home ranges for their size.

The flat-tailed horned lizard has the smallest range of any horned lizard found within the United States and has among the smallest distributions of all horned lizards. The species is restricted to appropriate substrates within southeastern California, the extreme southwestern portion of Arizona, and the adjacent portions of northeastern Baja California and northwestern Sonora, Mexico. Approximately one-quarter of the species' range is within California, where it is confined to lower elevations throughout much of the Salton Trough, in sections of eastern San Diego County, central Riverside County, and western and southern Imperial County.

High quality flat-tailed horned lizard habitat is characterized as areas of low relief with finely packed sandy soils that are covered with loose, fine, wind-blown sands. Favorable habitat is typically associated with the creosote bush shrub community, especially a creosote-bursage assemblage. Flat-tailed horned lizards have been recorded in a broad range of habitats in California, including sandy flats and hills, badlands, salt flats, and gravelly soils. They have also been found on rocky slopes at lower elevations, along the vegetated edges of active sand dunes, on stabilized sand fields, and, less frequently, within active dunes themselves. The species has also been observed in low densities using fallowed agricultural fields dominated by non-native weedy species.

Flat-tailed horned lizards have lost a substantial amount of habitat within their historical range in California due primarily to flooding of the Salton Sea in the early 1900s and urban and agricultural development in the Imperial, Coachella, and Borrego Valleys. The exact amount of habitat loss is difficult to determine as the species' current and historic range boundaries are not well-understood, a common problem for cryptic species. However, habitat loss has been estimated at approximately 60% in Imperial County, greater than 90% in Riverside County, and 10% in San Diego County.

Historically flat-tailed horned lizards were considered rare and uncommon in many places, while simultaneously being considered the most common reptile in others, the former potentially owing to the species' cryptic coloration and low detectability. Loss of habitat and accounts of localized declines led to concern for the status of flat-tailed horned lizards in the 1970s. Rangewide surveys in California were conducted in the late 1970s to determine the species' distribution and abundance, and population monitoring has occurred regularly since then. These surveys have revealed that flat-tailed horned lizard abundance can fluctuate significantly over short periods of time, most often in response to precipitation and commensurate availability of resources. The species' low detectability and variable annual abundance makes identifying population declines challenging; however, the data available suggest the species is still relatively widespread, and significant, ongoing declines in abundance have not been reported over much of the species' range. The exception is the Coachella Valley, where the species has been extirpated from many of the locations it once inhabited as recently as the 1980s, and the remaining populations are small and isolated.

### **C. Current Regulatory Status**

The flat-tailed horned lizard is designated as a Priority 2 Species of Special Concern by the Department and as Sensitive Species by the Bureau of Land Management (BLM). The species was previously petitioned for listing as endangered under the California Endangered Species Act (CESA) in 1988. In 1989, the Department recommended the Commission list the flat-tailed horned lizard as a threatened species under CESA, but the Commission voted against listing, citing insufficient scientific information on population densities. In 1993, the United States Fish and Wildlife Service (USFWS) published a proposed rule to list the flat-tailed horned lizard as threatened under the federal Endangered Species Act (ESA). In 1997, multiple State and federal agencies entered into an Interagency Conservation Agreement to implement a Rangewide Management Strategy (RMS) aimed at maintaining self-sustaining populations of flat-tailed horned lizards in perpetuity. That year, the USFWS withdrew its proposed listing rule. Subsequently, multiple court decisions led to the USFWS re-instating the proposed rule and re-evaluating the available data. After each reconsideration of the best science available, the agency determined that listing under the ESA was not warranted in 2003,

2006, and most recently in 2011. The flat-tailed horned lizard is a covered species under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).

Approximately 77% of the flat-tailed horned lizard's range in California is managed by public entities, and approximately 99% of those public lands are managed by agencies that implement the flat-tailed horned lizard RMS. Approximately 60% of the species' range in California is managed by the BLM. Four flat-tailed horned lizard Management Areas, comprising approximately 21% of the species' range in California, and one Research Area (5%) have been designated in California under the RMS. There are several conservation measures in the RMS, including population monitoring and research conducted in these areas. Additionally, within the Management Areas, there is a 1% cap on permanent habitat disturbance and a requirement for mitigation in the form of financial compensation for lost habitat. These funds are primarily used to acquire private inholdings within the Management Areas to ensure there are large areas of relatively intact habitat available for the species.

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

The Commission has prepared these findings as part of its final action under CESA regarding the Petition to designate the flat-tailed horned lizard as a threatened or endangered species under CESA. As set forth above, the Commission's determination that listing flat-tailed horned lizard is not 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 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 CESA listing process for flat-tailed horned lizard began in the present case with Petitioners' submittal of their Petition to the Commission in June 10, 2014 (Cal. Reg. Notice Register 2014, No. 28-Z, p. 1238). The regulatory process that ensued is described above in some detail, 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.4th 105, 114-116;
- *California Forestry Association v. California Fish and Game Commission* (2007) 156 Cal.App.4th 1535, 1541-1542;
- *Center for Biological Diversity v. California Fish and Game Commission* (2008) 166 Cal.App.4th 597, 600; and
- *Natural Resources Defense Council v. California Fish and Game Commission* (1994) 28 Cal.App.4th 1104, 1111-1116.

The “is not warranted” determination at issue here for the flat-tailed horned lizard 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: whether the petitioned action is warranted or is not warranted. Here with respect to the flat-tailed horned lizard, the Commission made the finding under Section 2075.5(e) that the petitioned action is not warranted.

The Commission was guided in making this determination by various 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.)

As established by published appellate case law in California, the term “range” for purposes of CESA means the range of the species within California (*California Forestry Association v. California Fish and Game Commission*, *supra*, 156 Cal. App.4th at p. 1540, 1549-1551.).

The Commission was also guided in making its determination regarding the flat-tailed horned lizard by Title 14, Section 670.1, subdivision (i)(1)(A), of the California Code of Regulations. This provision provides, in pertinent part, that a species shall be listed as endangered or threatened under CESA if the Commission determines that the continued existence of the species 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 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. Yet, the Commission made its determination regarding flat-tailed horned lizard mindful of this policy direction, acknowledging that “[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 BASIS FOR THE COMMISSION’S FINDINGS**

The factual and scientific bases for the Commission’s finding that designating the flat-tailed horned lizard as a threatened or endangered species under CESA is not warranted are set forth in detail in the Commission’s administrative record of proceedings. The evidence in the administrative record in support of the Commission’s determination includes, but is not limited to, the Department’s 2014 Petition Evaluation and 2016 Status Review, and other information specifically presented to the Commission and otherwise included in the Commission’s administrative record as it exists up to and including the Commission meeting in San Diego, California on December 8, 2016. The administrative record also includes these findings.

The Commission finds the substantial evidence highlighted in the preceding paragraph, along with other evidence in the administrative record, supports the Commission’s determination that the continued existence of the flat-tailed horned lizard in the State of California is not in serious danger of becoming extinct or threatened by on or a 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.

The Commission also finds that the same evidence constitutes sufficient scientific information to establish that designating the flat-tailed horned lizard as a threatened or endangered species under CESA is not warranted. The Commission finds in this respect that the flat-tailed horned lizard is not in serious danger of becoming extinct throughout all, or a significant portion, of its range in California. Similarly, the Commission finds that the flat-tailed horned lizard is not presently threatened and it is unlikely to become an endangered species in the foreseeable future in the absence of special protection and management efforts required by CESA.

The following Commission findings highlight in more detail some of the scientific and factual information and other evidence in the administrative record of proceedings that support the Commission's determination that designating the flat-tailed horned lizard as a threatened or endangered species under CESA is not warranted:

1. Flat-tailed lizards are sometimes difficult to detect due to the species' cryptic coloration and low detectability. Accounts of localized declines led to initial concerns on the status of the species in the 1970s, and range wide surveys in California were conducted to determine the species' distribution and abundance. Population monitoring since then has shown that flat-tailed horned lizard abundance can fluctuate significantly over short periods of time, but data suggests the species is still relatively widespread and significant, ongoing declines in abundance have not been reported over the majority of the species' range.
2. Although expansion of urban and renewable energy development is expected to continue within the flat-tailed horned lizard's range, the Desert Renewable Energy Conservation Plan (the BLM Land Use Plan Amendment) is expected to reduce impacts to the species by focusing most development on or near existing disturbed areas and existing transmission lines as opposed to relatively undisturbed open desert. Approximately 60% of the species' range in California is managed by the BLM. Existing conservation measures under the RMS put a 1% cap on permanent habitat disturbance and include a requirement for mitigation in the form of financial compensation for lost habitat.
3. The areas available for mineral extraction in Imperial County is largely depleted, and oil, gas, and hold exploration have proved unprofitable.

4. Although off-highway vehicle (OHV) activity can degrade habitat quality and directly kill flat-tailed horned lizards, there is little evidence of significant population declines as a result of OHV activity.
5. Illegal activities along the California-Mexico border and the operations of U.S. Customs and Border Protection may degrade flat-tailed horned lizard habitat near the border and may fragment populations. However, increased border security can also benefit the species by reducing the amount of illegal border crossings and associated trash and cross-country pursuits.
6. While roads may pose a localized threat to flat-tailed horned lizards through habitat fragmentation and edge effects associated with road mortality, the severity of the threat depends on the vulnerability of the flat-tailed horned lizard population and the surrounding land use. Areas where this is likely a problem are relatively concentrated within the Coachella and Imperial Valleys, and this area comprises only a small fraction of the flat-tailed horned lizard's range.
7. Invasive species like Sahara mustard may be playing a role in flat-tailed horned lizard declines in certain portions of the species' range; however the degree to which invasive plants are having widespread population-level impacts is unknown.
8. Because flat-tailed horned lizards live in a highly arid environment and have evolved with drought, large and healthy populations are expected to rebound.

#### **IV. ADDITIONAL CONSIDERATIONS INFORMING THE COMMISSION'S FINAL DETERMINATION**

The Commission's determination that designating flat-tailed horned lizard as a threatened or endangered species under CESA is not warranted; it is informed by various additional considerations. In general, the Fish and Game Code contemplates a roughly twelve-month long CESA listing process before the Commission, including multiple opportunities for public and Department review and input and peer review (See generally Fish & G. Code, § 2070 et seq.; Cal. Code Regs., tit. 14, § 670.1.). From the initial receipt of the Petition in June 2014 through the Commission's decision on December 8, 2016, that listing is not warranted, the Department and the Commission received numerous comments and other significant public input regarding the status of flat-tailed horned lizard from a biological and scientific standpoint and with respect to the petitioned action under CESA. The Commission, as highlighted below, was informed by and considered all of these issues, among others, in making its final determination that designating flat-tailed horned lizard as a threatened or endangered species under CESA is not warranted (Fish & G. Code, § 2075.5, subd. (e)(1); Cal. Code Regs., tit. 14, § 670.1, subd. (i)(2).).

## **V. SCIENTIFIC DETERMINATIONS REGARDING THE STATUS OF THE FLAT-TAILED HORNED LIZARD**

CESA defines an endangered species as one “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.). CESA defines a threatened species as one “that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts required by [CESA]” (Id., § 2067).

Pursuant to CESA’s implementing regulations, a “species shall be listed as endangered or threatened ... if the Commission determines that its continued existence is in serious danger or is threatened by anyone 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” (Cal. Code Regs., tit. 14, § 670.1, subd. (i)(1)(A)).

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

- Impacts from agricultural development are fairly concentrated and are not expected to increase significantly in the future. Threats from urban development impact a relatively small area compared to the species’ range. Agricultural and urban development are not considered a significant threat to the flat-tailed horned lizard at this time.
- Renewable energy development is expected to continue within the flat-tailed horned lizard’s range, but current development plans are expected to focus impacts on or near existing disturbed areas and existing transmission lines as opposed to relatively undisturbed open desert. Renewable energy development does not appear to pose a threat to flat-tailed horned lizard at this time.
- While there is potential for mining activities with the flat-tailed horned lizard’s range, the area available for mineral extraction are largely depleted or have proven unprofitable. Therefore, the threat to flat-tailed horned lizard posed by mining is considered relatively small.
- It is reasonable to expect that where off-road vehicle use substantially reduces native shrubs or prey, it could pose a threat to flat-tailed horned lizard. However, few focused studies have found a demonstrable connection between OHV and population –level adverse impacts on flat-tailed horned lizards. OHV activated does not seem to pose a threat to flat-tailed horned lizards at this time.
- Although activities on the United States-Mexican border likely cause adverse effects from road mortality and potentially increased avian predation, as well as

mortality and habitat degradation associated with cross-country travel by Border Patrol agents, there are also benefits to increased security such as reduced habitat damage from illegal border crossings. Overall, border activities do not pose a serious threat to flat-tailed horned lizards at this time.

- Flat-tailed horned lizard habitat on military land is protected through the Sikes Act and managed in a way to conserve the species, so military activities do not appear to pose a significant threat to the species at present.
- Based on the best scientific information available, the Commission finds that the continued existence of the flat-tailed horned lizard is not in serious danger or threatened by present or threatened modification or destruction of habitat.

#### **B. Overexploitation**

- Collecting for the pet trade does not appear to be a current threat, and horned lizards are notably difficult to keep alive in captivity due to their specialized diet.
- Research activities take place over a very small portion of the species' range.
- Based on the best scientific information available, the Commission finds that the continued existence of the flat-tailed horned lizard is not in serious danger or threatened by overexploitation.

#### **C. Predation**

- To the extent increases in predation exist, they are likely concentrated to development within the Imperial, Coachella, and Borrego Valleys, an area which comprises a small fraction of the flat-tailed horned lizard's range.
- Based on the best scientific information available, the Commission finds that the continued existence of the flat-tailed horned lizard is not in serious danger or threatened by predation.

#### **D. Competition**

- There is no evidence to suggest that competition threatens Flat-tailed Horned Lizards.
- Based on the best scientific information available, the Commission finds that the continued existence of the flat-tailed horned lizard is not in serious danger or threatened by competition.

#### **E. Disease**

- There is no evidence to suggest that disease threatens Flat-tailed Horned Lizards.

- Based on the best scientific information available, the Commission finds that the continued existence of the flat-tailed horned lizard is not in serious danger or threatened by disease.

#### **F. Other Natural Occurrences or Human-Related Activities**

- While habitat fragmentation, edge effects, and small population sizes may pose threats to flat-tailed horned lizards in some portions of their California range, the degree to which this adversely impacts the species as a whole is uncertain. Outside of the Coachella Valley, there are large expanses of relatively intact habitat. As long as the RMS is implemented, a substantial portion of the species' range in California will remain relatively undisturbed in that area.
- Major roads, canals, and railroads may cause habitat fragmentation and/or edge effects. Additionally, major roads causing mortality could lead to a population sink, while minor lightly traveled roads and OHV trails likely contribute to a lesser degree. However, the degree to which flat-tailed horned lizards are affected by these features is largely unknown throughout most of the species' range.
- There is no evidence to suggest that herbicides, pesticides, or other contaminants pose a significant threat to flat-tailed horned lizard.
- Although invasive species like Sahara mustard appear to be playing a role in localized declines of flat-tailed horned lizard, the degree to which invasive plants are having widespread population-level impacts is unknown. Additionally, populations in management areas appear stable over time. Non-native ants do not appear to pose a threat to flat-tailed horned lizards.
- While small, isolated populations of flat-tailed horned lizards may be threatened by drought, on the whole the species evolved with drought and should rebound.
- The potential threat from climate change is uncertain and the degree to which it will threaten the continued survival of the species is unknown.
- Based on the best scientific information available, the Commission finds that the continued existence of the flat-tailed horned lizard is not in serious danger or threatened by other natural occurrences or human-related activities.

#### **G. Summary of Key Findings**

Based on the criteria described above, the best scientific information available to the Commission indicates that the flat-tailed horned lizard is not currently in serious danger of becoming extinct in California within the next few decades, nor in the foreseeable future in the absence of special protection and management under CESA.

The current size of the population is uncertain, and any recent trends showing a decline in population size may be a normal fluctuation in response to drought or other

environmental conditions. Studies underway may provide additional insights into the status of the flat-tailed horned lizard in California. However, at this time the Department does not feel the population levels are such that would require listing.

The Department evaluated other factors, such as habitat loss, degradation, and fragmentation associated with urban and renewable energy development; mining; off-highway vehicle use and border activities; habitat fragmentation and mortality associated with heavily traveled roads; human subsidized predation; invasive species; and climate change. Based on the Department's analysis, none of these factors is considered to be a serious threat to the continued existence of the flat-tailed horned lizard. Additionally, overexploitation, competition, and disease are not considered threats to the species at this time.

Based on the best scientific information available, the Department concluded the continued existence of the flat-tailed horned lizard is not in serious danger or threatened. Further, the Department generated the following recommendations to prioritize conservation, research, regulation and monitoring activities.

- Revisit flat-tailed horned lizard status in three to five years. Several efforts are underway that should provide additional insights into the status of flat-tailed horned lizard in California. Additionally, the next three to five years will likely reveal whether the species can rebound from prolonged drought in light of the current stresses it is facing. If the data indicate a change in status is warranted, the Department should prepare appropriate document to address the newly acquired data.
- Increase Department participation in the RMS implementation through identifying outside funding opportunities and providing staff to assist with population monitoring, habitat restoration, education and outreach, and international coordination and collaboration.
- Work on multiple fronts to improve population and habitat monitoring
  - Encourage agencies to dedicate funding sufficient to fully implement the occupancy and demography survey protocols on all RMS lands.
  - Expand monitoring to sites outside RMS lands to obtain a more complete range-wide status assessment.
  - Collect and analyze data on environmental covariates, such as habitat quality, predators and prey, and anthropogenic threats so that an informed adaptive management strategy can be developed if population declines cannot be attributed primarily to weather
- Actions to increase habitat quality and quantity:
  - Restore areas degraded by OHVs, mining, or agriculture. Additionally, increased patrols of areas and cite illegal cross-country OHV or other

public trespass in closed or limited use areas to minimize habitat degradation and mortality.

- Decommission unnecessary powerlines or other anthropogenic structures that provide perches for avian predators, and remove or trim hedgerows along roads that attract avian predators and investigate perch deterrents
- Clean up illegally dumped material as quickly as possible
- Remove or reduce the abundance and extent of non-native grasses, Sahara mustard, and other invasive species, particularly highly imperiled areas like the Coachella Valley
- In order to reduce habitat fragmentation and its effects, investigate how barriers may be limiting gene flow across the species' range. This information can be used to protect important habitat linkages and movement corridors such as Yuha Basin to West Mesa and East Mesa to Dos Palmas. Broken linkages can be improved by creating effective road and canal crossings
- Continue to purchase private inholdings within the larger public land matrix.
- Encourage the siting of renewable energy development outside of the desert completely, or, if within the flat-tailed horned lizard's range, ensure it is located on compatible lands. Bury transmission whenever possible.
- Further investigate the impacts and potential uses of translocation, which is currently not well understood to develop more well informed translocation plans. Results of translocations should be monitored to determine if the reintroduction were successful.

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

The Commission has weighed and evaluated all information and inferences for and against designating flat-tailed horned lizard as a threatened or endangered species under CESA. This information includes scientific and other general evidence in the Petition, the Department's 2014 Petition Evaluation, the Department's 2016 peer-reviewed Status Review, and the Department's related recommendations based on the best available science, written and oral comments received from the public and the scientific community, and other evidence included in the Commission's administrative record of proceedings. Based on the evidence in the administrative record, the Commission has determined that the best scientific information available indicates that the continued existence of flat-tailed horned lizard in California is not in serious danger or threatened in the foreseeable future by present or threatened modifications or destruction of flat-tailed horned lizard habitat, overexploitation, predation, competition, disease, or other natural occurrences or human-related activities (See generally Fish & G. Code, §§ 2062, 2067; Cal. Code Regs., tit. 14, § 670.1, subd. (i)(1)(A).). The Commission finds, for the same reason, that there is not sufficient scientific information at this time to indicate that the petitioned action is warranted (Fish & G. Code, §§ 2070,

2075.5.). The Commission finds that designating flat-tailed horned lizard as a threatened or endangered species under CESA is not warranted and that, with adoption of these findings, for purposes of its legal status under CESA shall revert to its status prior to the filing of the Petition (Fish & G. Code, § 2075.5, subd. (e)(1); Cal. Code Regs., tit. 14, § 670.1, subd., (i)(2).)

Valerie Termini  
Executive Director  
Fish and Game Commission  
Dated: \_\_\_\_\_, 2017

DRAFT



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# Assembly California Legislature



**RANDY VOEPEL**  
ASSEMBLYMEMBER, SEVENTY-FIRST DISTRICT

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January 12, 2017

Ms. Valerie Termini  
Executive Director, Fish and Game Commission  
1416 9<sup>th</sup> Street, 12<sup>th</sup> Floor  
Sacramento, CA 95814

RE: CDFW Vote as it pertains to the Flat Tailed Horned Lizard

Dear Ms. Termini:

I would like to thank the Commission and commend you on voting to uphold the CDFW Recommendation that the Flat Tailed Horned Lizard (FTHL) NOT be listed as endangered or threatened. Furthermore, I would like to request that the Commission swiftly produce the written findings and that recreation is allowed to resume as soon as possible. The multi-agency effort will remain committed to ongoing research and conservation, which should satisfy the concerns of those that initiated the petition.

I would like to thank the Commission and the Commissioners for accepting the findings and would sincerely appreciate you completing the process that would substantiate that the Flat Tailed Horned Lizard not be listed as endangered or threatened.

Sincerely,

A large, stylized handwritten signature in blue ink, appearing to read "Randy Voepel".

RANDY VOEPEL

Assemblyman, 71<sup>st</sup> District

Cc: Fish and Game Commissioners  
John Laird, Secretary, Natural Resources Agency  
Mat Fuzie, Deputy Director, OHV Division  
Lisa Mangat, Director California State Parks