

**State of California
Department of Fish and Wildlife**

Initial Statement of Reasons for Regulatory Action

**Amend Sections 650 and 703
Title 14, California Code of Regulations**

Re: Scientific Collecting Permits

**California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List
(TVPICP List)**

I. Date of Initial Statement of Reasons: July 16, 2024

II. Public Hearing:

Date: October 1, 2024, Tuesday, 11:00 a.m. – noon

Location: Teleconference

Instructions for participation in the webinar/teleconference hearing will be posted at <http://www.wildlife.ca.gov/Notices/Regulations/650> at least seven days in advance of the meeting.

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

The purpose of this proposed regulatory change is to provide applicants for Scientific Collecting Permits (SCP) an up-to-date list of at-risk terrestrial invertebrates in California. The Department of Fish and Wildlife (Department) has determined that scientific, education, and propagation-related take of these at-risk animals should be regulated through the SCP process. Currently these invertebrates are listed on the *California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List (TVPICP List)*, dated June 12, 2017. This regulation change updates the *TVPICP List*, of which Table 1 is incorporated by reference in Section 650, dated January 2, 2024 (Attachment B). The new list of species was developed using the same criteria used to create the original list.

BACKGROUND

Invertebrates (animals without backbones) such as insects, are responsible for key ecosystem functions and services including pollination, pest control, seed dispersal, and nutrient cycling (Kremen and Chaplin-Kramer 2007; Schowalter et al. 2018). Insects are a critical component of terrestrial and freshwater food webs (Scudder 2017; Tallamy and Schriver 2021), however, their populations are declining at alarming rates across continents (Goulson 2019; Hallmann et al. 2017; Sánchez-Bayo et al. 2019; Wagner 2020; Wagner et al. 2021). In California, a quarter of the state's bumble bees were assessed by the International Union for the Conservation of Nature as imperiled (Hatfield et al. 2015). Butterflies, including widespread formerly common species such as monarchs, have also been assessed to be in steep decline (Forister et al. 2021). Numerous invertebrate species are endemic to the state, have perilously low populations, have not been observed in decades, or have such little information available about their populations that it is challenging to assess their population status. The Department developed the *TVPICP List* for which a SCP is required from this set of species.

As the steward of the state's biodiversity, the Department issues SCPs to researchers, educators, and other groups studying the state's fauna to achieve research and education objectives without jeopardizing conservation outcomes. SCPs are only issued for species that are not listed as threatened or endangered under the California Endangered Species Act (CESA) nor candidates for state listing. CESA-listed and candidate species require alternate permitting mechanisms such as California Fish and Game Code Section 2081(a) Memorandums of Understanding or Incidental Take Permits.

The Department's Wildlife Diversity Program (part of the Wildlife Branch) is responsible for issuing SCPs involving terrestrial and vernal pool invertebrates as well as terrestrial vertebrates (birds, mammals, reptiles, and amphibians). Though the number fluctuates, the Wildlife Diversity Program currently approves approximately 200 SCPs annually, with approximately 25% covering activities involving terrestrial and vernal pool invertebrates. Approved SCPs condition the take (defined in California Fish and Game Code Section 86 as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of non-CESA listed species. Persons eligible (subsection 650(g)) for a permit include scientists, students at accredited scientific institutions, such as universities and colleges, state and federal scientists, and other individuals with the required qualifications (subsection 650(h)). Permits may be issued for science, education, or propagation (subsection 650(c)).

In 2018 the Department updated the SCP regulations (Section 650) to clarify when SCPs are required for certain terrestrial and vernal pool invertebrates. Recognizing that there are an estimated 27,000 – 100,000 invertebrates in California (Ballmer 1995; Kimsey 1996), the Department opted instead to only require SCPs for a set of 268 species assessed to be sensitive or at-risk. The Department's rationale was that this approach protects populations of the most sensitive species from potential impacts associated with research, education, and propagation while allowing these activities to continue to be conducted without permits with the majority of terrestrial and vernal pool invertebrates in the state. The Department used the *NatureServe* rankings (<https://www.natureserve.org/conservation-status-assessment>), state and federal listing status, and the expert opinion of Department staff to develop the set of species for which an SCP is required. These species were compiled into the *TVPICP List*, dated June 12, 2017.

Several years have elapsed since the *TVPICP List* was developed, and it no longer reflects the most up-to-date science related to the status of terrestrial invertebrates in California. Based on the criteria the Department used to develop the 2017 list, 47 species currently on the list would be removed while nine species would be added. Removing species that no longer need to be protected through SCPs allows greater flexibility to researchers, managers, and educators working with those species, while adding species that are of conservation concern adds protections in the form of take limits and other permit conditions that reduce harm. Updating the list periodically allows the Department to use current data to inform its activities instead of working from outdated information. The Department anticipates continuing to periodically update the list as needed to ensure we are balancing the need to protect terrestrial and vernal pool invertebrates from potential harm with the desire to minimize impacts on individuals engaged in activities that require a permit. The requirement for an SCP does not limit researcher, educator, or other interested parties' ability to conduct activities with species on the *TVPICP List*, but it does ensure they work with Department staff to develop and implement practices that minimize potential deleterious impacts.

With the update of the *TVPICP List*, the SCP application and amendment forms will also need to be updated as they reference the original *TVPICP List* and its publication date. The applications are incorporated by reference in subsection 703(c), DFW 1379GW, DFW 1379GWA, DFW 1374S and DFW 1379SA.

NECESSITY FOR CHANGES TO SUBSECTIONS OF SECTION 650

The “Table 1 - *California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List*” (*TVPICP List*) will be updated and maintain incorporation by reference in subsection 650(a)(9). The date of the revision must be changed wherever it appears. Similarly, the General and Specific Use SCP application and amendment forms (DFW 1379GW, 1379GWA, 1374S and 1379SA), which refer to the *TVPICP List* by publication date, are also incorporated by reference in Section 703. When incorporated by reference, the content of a document residing outside of the text of regulations becomes part of the regulation as if fully within Title 14 and equally enforceable. The document must be fully accessible to the public and may not be changed unless updated in the regulation.

THE PROPOSED CHANGES IN SECTION 650 ARE AS FOLLOWS:

- (a)(8) This subsection is added clarifying that SCP regulations do not apply to the take of any threatened, endangered, candidate, or fully protected species. The Department will not issue an SCP for any of these listed species, as they fall under different authorities.
- (a)(9) This subsection is added incorporating by reference the document “*Table 1 - California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List (TVPICP List)*”, with a revision date of January 2, 2024. By providing this reference, it clarifies that wherever else the *TVPICP List* may be mentioned in regulation, this is the document and version being referenced. It is further specified that the document is available to the public on the Department’s website <https://www.wildlife.ca.gov/Licensing/Scientific-Collecting>.
- (i)(1)(D) This subsection is amended to clarify that the Department “may” issue a General Permit for incidental take of species on the *TVPICP List*. The change from “is required” to “may be issued” is based on the Department’s determination that the routine field activities to be conditioned under a General Permit minimize potential deleterious impacts on listed invertebrates. Incidental take occurs when the permittee, while taking the target species (whether on the *TVPICP List* or not), could by proximity and chance unintentionally take (capture or kill) a species on the *TVPICP List*. The *TVPICP List* is also referenced consistent with subsection (a)(9).
- (i)(2)(D) *TVPICP List* is referenced consistent with subsection (a)(9).
- (u)(5) For clarity, a grammatical change from “if those invertebrates are not” to “unless the species are:”
- (u)(5)(A) *TVPICP List* is referenced consistent with subsection (a)(9).

Revise the *California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List*

- Refer to Attachment A for the current, unchanged list (June 12, 2017), and
- Attachment B for the proposed list, Revised January 2, 2024, Incorporated by Reference.

The amendments to the *TVPICP List* are specified as follows:

Table 1. Added invertebrates.

Scientific name	Common name	Order	Taxonomic Group	S-Rank
<i>Palaeoxenus dohrni</i>	Dohrn's elegant eucnemid beetle	Coleoptera	Insects	S1S2
<i>Polyphylla morroensis</i>	Morro Bay June beetle	Coleoptera	Insects	S1
<i>Cophura hurdi</i>	Antioch cophuran robberfly	Diptera	Insects	SX
<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee	Hymenoptera	Insects	S1
<i>Perdita hirticeps luteocincta</i>	yellow-banded andrenid bee	Hymenoptera	Insects	SX
<i>Icaricia icarioides albihalos</i>	White Mountains icarioides blue butterfly	Lepidoptera	Insects	S1
<i>Icaricia icarioides pheres</i>	Pheres blue butterfly	Lepidoptera	Insects	SX
<i>Polites sabuleti albamontana</i>	White Mountains sandhill skipper	Lepidoptera	Insects	S1S2
<i>Noyo intersessa</i>	Ten Mile shoulderband	Gastropoda	Mollusks	S1S2

Table 2. Removed invertebrates.

Scientific name	Common name	Order	Taxonomic Group	Old S-Rank	New S-rank
<i>Meta dolloff</i>	Dolloff Cave spider	Arachnida	Arachnids	S1	S3
<i>Microcina homi (Microcinella homi)</i>	Hom's micro-blind harvestman	Arachnida	Arachnids	S1	S2
<i>Microcina tiburona</i>	Tiburon micro-blind harvestman	Arachnida	Arachnids	S1	S2
<i>Talanites moodyae</i>	Moody's gnaphosid spider	Arachnida	Arachnids	S1S2	S2S3
<i>Telema sp.</i>	Santa Cruz telemid spider	Arachnida	Arachnids	S1S2	NA
<i>Anthicus antiochensis</i>	Antioch Dunes anthicid beetle	Coleoptera	Insects	S1	S3
<i>Anthicus sacramento</i>	Sacramento anthicid beetle	Coleoptera	Insects	S1	S4
<i>Lytta hoppingi</i>	Hopping's blister beetle	Coleoptera	Insects	S1S2	S2
<i>Lytta morrisoni</i>	Morrison's blister beetle	Coleoptera	Insects	S1S2	S2
<i>Polyphylla anteronivea</i>	Saline Valley snow-front June beetle	Coleoptera	Insects	S1	S2
<i>Trigonoscuta sp.</i>	Doyen's trigonoscuta dune weevil	Coleoptera	Insects	S1	NA
<i>Prasinalia imperialis</i>	Algodones white wax jewel beetle	Coleoptera	Insects	S1S2	S2
<i>Vandykea tuberculata</i>	serpentine cypress long-horned beetle	Coleoptera	Insects	S1	S2
<i>Ablautus schlingeri</i>	Oso Flaco robber fly	Diptera	Insects	S1	S2
<i>Efferia macroxipha</i>	Glamis robberfly	Diptera	Insects	S1S2	S2S3
<i>Saldula usingeri</i>	Wilbur Springs shorebug	Hemiptera	Insects	S1	S2
<i>Argochrysis lassenaе</i>	Lassen cuckoo wasp	Hymenoptera	Insects	S1	S2
<i>Ceratochrysis menkei</i>	Menke's cuckoo wasp	Hymenoptera	Insects	S1	S2
<i>Chrysis tularensis</i>	Tulare cuckoo wasp	Hymenoptera	Insects	S1S2	S2

<i>Eucerceris ruficeps</i>	redheaded sphecid wasp	Hymenoptera	Insects	S1S2	S2
<i>Habropoda pallida</i>	white faced bee	Hymenoptera	Insects	S1S2	S3
<i>Lasioglossum channelense</i>	Channel Island sweat bee	Hymenoptera	Insects	S1	S3
<i>Perdita scitula antiochensis</i>	Antioch andrenid bee	Hymenoptera	Insects	S1	S2
<i>Philanthus nasalis</i>	Antioch sphecid wasp	Hymenoptera	Insects	S1	S2
<i>Areniscythis brachypteris</i>	Oso Flaco flightless moth	Lepidoptera	Insects	S1	S2
<i>Callophrys mossii bayensis</i>	Marin elfin butterfly	Lepidoptera	Insects	S1	S2
<i>Callophrys thornei</i>	Thorne's hairstreak	Lepidoptera	Insects	S1	S2
<i>Eugnosta busckana (Carolella busckana)</i>	Busck's gallmoth	Lepidoptera	Insects	SH	S2S3
<i>Carterocephalus palaemon magnus</i>	Sonoma arctic skipper	Lepidoptera	Insects	S1	S1S3
<i>Euchloe hyantis</i>	Andrew's marble butterfly	Lepidoptera	Insects	S1	S2
<i>Euphilotes mojave</i>	Mojave dotted-blue	Lepidoptera	Insects	S1S2	S3
<i>Macrobaenetes algodonensis</i>	Algodones sand treader cricket	Orthoptera	Insects	S1S2	S2
<i>Macrobaenetes valgum</i>	Coachella giant sand treader cricket	Orthoptera	Insects	S1S2	S2
<i>Stenopelmatus cahuilensis</i>	Coachella Valley jerusalem cricket	Orthoptera	Insects	S1S2	S2
<i>Trimerotropis occidentiloides</i>	Santa Monica grasshopper	Orthoptera	Insects	S1S2	S2
<i>Helminthoglypta greggi</i>	Mohave shoulderband	Gastropoda	Mollusks	S1	S2
<i>Helminthoglypta traskii traskii</i>	Trask shoulderband	Gastropoda	Mollusks	S1	S2S3
<i>Megomphix californicus</i>	Natural Bridge megomphix	Gastropoda	Mollusks	S1S2	S3
<i>Monadenia circumcarinata</i>	keeled sideband	Gastropoda	Mollusks	S1	S3
<i>Monadenia troglodytes troglodytes</i>	Shasta sideband	Gastropoda	Mollusks	S1S2	S2
<i>Monadenit troglodytes wintu</i>	Wintu sideband	Gastropoda	Mollusks	S1S2	S2
<i>Prophysaon coeruleum</i>	Blue-gray taildropper slug	Gastropoda	Mollusks	S1S2	S3
<i>Vespericola shasta</i>	Shasta hesperian	Gastropoda	Mollusks	S1	S3
<i>Cryptochia excella</i>	Kings Canyon cryptochian caddisfly	Trichoptera	Insects	S1S2	S2S3
<i>Ecclisomyia bilera</i>	Kings Creek ecclisomyian caddisfly	Trichoptera	Insects	S1S2	S2
<i>Neothremma genella</i>	golden-horned caddisfly	Trichoptera	Insects	S1S2	S2S3
<i>Rhyacophila spinata</i>	spiny rhyacophilan caddisfly	Trichoptera	Insects	S1S2	S3

The proposed changes in Section 703 subsection (c)(1)(A)1. are as follows:

- a. Add the revision date Rev 01/2024 to form DFW 1379GW and delete the old date.
- c. Add the revision date Rev 01/2024 to form DFW 1379S and delete the old date.

The proposed changes in Section 703 subsection (c)(1)(B)1. are as follows:

- a. Add the revision date Rev 01/2024 to form DFW 1379GWA and delete the old date.
- b. Add the revision date Rev 01/2024 to form DFW 1379SA and delete the old date.

Changes to the above subsections are necessary to allow the Department to use the best available science and other information to inform its scientific collecting permitting process. This ensures that species that no longer meet the criteria are removed from the *TVPICP List*. Others that have been found to be more imperiled since the publication of the list in 2017 will be listed in order to and provide them with necessary protections.

The proposed changes to forms, incorporated by reference, are as follows:

- Add the revision date Rev 01/2024 to form DFW 1379GW and delete the old date.
- Add the revision date Rev 01/2024 to form DFW 1379S and delete the old date.
- Add the revision date Rev 01/2024 to form DFW 1379GWA and delete the old date.
- Add the revision date Rev 01/2024 to form DFW 1379SA and delete the old date.

(b) Goals and Benefits of the Regulation

The purpose of issuing SCPs is to reduce harm to populations of species that could be negatively impacted by research, collecting, or other activities related to scientific, educational, and/or propagation purposes as outlined in Section 650 (b and c). SCPs can help reduce impacts to sensitive species by reducing take from research and other activities. The 2017 *TVPICP List* is not up-to-date and does not reflect the most recent scientific information, which could lead to species being harmed or otherwise negatively impacted. Additionally, there are several species that would no longer be included on the *TVPICP List* based on our criteria. Maintaining the existing *TVPICP List* therefore adds an undue burden to researchers, educators, and others wanting to work with those species.

(c) Authority and Reference

Section 650:

Authority: Sections 702, 1002, 1002.5, 1003, 1050, 2860 and 4810, Fish and Game Code.

Reference: Sections 14, 22, 33, 45, 51, 54, 56, 79, 80, 86, 88, 89.5, 703.3, 710.5, 711.7, 713, 1001, 1002, 1006, 1008, 1017, 1050, 1050.1, 1050.3, 1050.5, 1052, 1054, 1054.2, 1603, 1700, 1755, 1764, 1801, 1802, 1907, 2000, 2000.5, 2002, 2010, 2012, 2013, 2021, 2080, 2081, 2353, 2582, 2583, 2835, 3007, 3503, 3503.5, 3511, 3960.4, 4004, 4150, 4155, 4700, 4810, 5050, 5515, 8598.3 and 12000, Fish and Game Code; Section 597, Penal Code; and Sections 36602 and 36710, Public Resources Code.

Section 703:

Authority: Sections 713, 1002, 1002.5, 1050, 1055, 2118, 2120, 2122, 2150, 2150.2, 2157 and 5060, Fish and Game Code. Reference: Sections 395, 396, 398, 713, 1002, 1002.5, 1050, 2116, 2116.5, 2117, 2118, 2120, 2125, 2150, 2150.2, 2150.4, 2151, 2157, 2190, 2193, 2271, 3005.5, 3007, 3503, 3503.5, 3511, 3513, 3950, 5060, 5061, 10500, 12000 and 12002, Fish and Game Code; and Title 50, Code of Federal Regulations, Parts 21.29 and 21.30.

(d) Specific Technology or Equipment Required by Regulatory Change: None.

(e) Identification of Reports or Documents Supporting Regulation Change

Laband, D.N. and M. Nieswiadomy. 2006. Factors affecting species' risk of extinction: an empirical analysis of ESA and NatureServe listings. *Contemporary Economic Policy*, 24(1): 160-171.

Master, L. L., D. Faber-Langendoen, R. Bittman, G. A. Hammerson, B. Heidel, L. Ramsay, K. Snow, A. Teucher, and A. Tomaino. 2012. NatureServe Conservation Status Assessments: Factors for Evaluating Species and Ecosystem Risk. NatureServe, Arlington, VA.

Regan, T.J., L.L. Master, and G.A. Hammerson. 2004. Capturing expert knowledge for threatened species assessments: a case study using NatureServe conservation status ranks. *Acta Oecologica*, 26(2): 95-107.

(f) Documents providing background information

Ballmer, G. 1995. Sidebar: Nation's riches insect diversity in California. *California Agriculture*, 49: 51-52.

Forister, M.L., C.A. Halsch, C.C. Nice, J.A. Fordyce, T.E. Dilts, J.C. Oliver, K.L. Prudic, A.M. Shapiro, J.K. Wilson, and J. Glassberg. 2021. Fewer butterflies seen by community scientists across the warming and drying landscapes of the American West. *Science*, 371(6533): 1042-1045.

Goulson, D. 2019. The insect apocalypse, and why it matters. *Current Biology*, 29(19): R967-R971.

Hallmann, C.A., M. Sorg, E. Jongejans, H. Siepel, N. Hofland, H. Schwan, W. Stenmans, A. Müller, H. Sumser, T. Hörrén, and D. Goulson. 2017. More than 75 percent decline over 27 years in total flying insect biomass in protected areas. *PloS one*, 12(10): e0185809.

Hatfield, R., S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S. Foltz Jordan. 2015. IUCN Assessments for North American *Bombus* spp. for the North American IUCN Bumble Bee Specialist Group. The Xerces Society for Invertebrate Conservation, Portland, OR, USA.

Kimsey, L.S. 1996. Status of terrestrial insects. In *Sierra Nevada Ecosystems Project: Final Report to Congress Vol 2.*: 735-741.

Kremen, C. and R. Chaplin-Kramer. 2007. Insects as providers of ecosystem services: crop pollination and pest control.

Sánchez-Bayo, F. and K.A. Wyckhuys. 2019. Worldwide decline of the entomofauna: A review of its drivers. *Biological conservation*, 232: 8-27.

Schowalter, T.D., J.A. Noriega, and T. Tscharrntke. 2018. Insect effects on ecosystem services—Introduction. *Basic and Applied Ecology*, 26: 1-7.

Scudder, G.G., 2017. The importance of insects. *Insect biodiversity: science and society*: 9-43.

Tallamy, D.W. and W.G. Shriver. 2021. Are declines in insects and insectivorous birds related?. *The Condor*, 123(1): duaa059.

Wagner, D.L. 2020. Insect declines in the Anthropocene. *Annual review of entomology*, 65: 457-480.

Wagner, D.L., E.M. Grames, M.L. Forister, M.R. Berenbaum, and D. Stopak. 2021. Insect decline in the Anthropocene. *Proceedings of the National Academy of Sciences of the United States of America*, 118(2): 1-10.

(g) Public Discussions of Proposed Regulations Prior to Notice Publication

The Department sent an email to all current SCP holders— 1070 emails— soliciting feedback on this proposed change on March 12, 2024. Department staff received no comments by March 29, 2024 when feedback was requested to be returned, nor as of publication of this Initial Statement of Reasons.

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

No alternatives were identified by or brought to the attention of Department staff that would have the same desired regulatory effect.

(b) No Change Alternative

If the regulation remains unchanged the discrepancy between the *TVPICP List* and both NatureServe rankings and Federal listing status will increase over time. The Department would then continue to rely on a list that is not reflective of the most up-to-date science related to setting criteria for the protection of terrestrial invertebrates. Ultimately, a no change scenario would impede the Department's ability to provide the best protection for imperiled terrestrial invertebrate species. Additionally, researchers would likely be required to get SCPs for species that would not otherwise require a permit, causing them to spend unnecessary time and resources.

V. Mitigation Measures Required by Regulatory Action: None

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The Department does not anticipate significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states because the proposed regulation is largely administrative in nature to improve the clarity and consistency of existing regulations that will not affect the demand for goods and services related to the collection of species for scientific research in California.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

The Department does not anticipate any impacts on the creation or elimination of jobs, the creation of new business, the elimination of existing businesses or the expansion of businesses in California because the proposed regulation is largely administrative in nature to improve the clarity and consistency of existing regulations that that will not affect the demand for goods and services related to the collection of species for scientific research in California. The Commission anticipates general benefits to the health and welfare of California residents, and no impacts to worker safety, and benefits to the state's environment.

(c) Cost Impacts on a Representative Private Person or Business

The Department is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State

No costs or savings to state agencies or costs/savings in federal funding to the state is anticipated. Department program implementation costs are projected to be unchanged.

(e) Nondiscretionary Costs/Savings to Local Agencies: None.

(f) Programs Mandated on Local Agencies or School Districts: None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(h) Effect on Housing Costs: None.

VII. Economic Impact Assessment

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The Department does not anticipate any impacts on the creation or elimination of jobs within the state because the proposed action is to improve the clarity and consistency of existing regulations that that will not affect the demand for jobs related to the collection of species for scientific research in California.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The Department does not anticipate any impacts on the creation of new businesses or the elimination of existing businesses within the state because this action will not affect the demand for goods and services related to the collection of species for scientific research within the state.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The Department does not anticipate any impacts on the expansion of businesses in California because this action will not affect the demand for goods and services related to the collection of species for scientific research within the state.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

None. The cumulative effects of the changes statewide are expected to be neutral regarding the health and welfare of California residents.

(e) Benefits of the Regulation to Worker Safety

The Department does not anticipate any benefits to worker safety in California because this action will not affect working conditions.

(f) Benefits of the Regulation to the State's Environment

The purpose of the regulation is to protect wildlife resources that may be substantially

adversely affected by the project or activities authorized by the Scientific Collection Permit

The cumulative effects of the changes statewide are expected to be minimal regarding the state's environment.

Informative Digest/Policy Statement Overview

In accordance with Section 650, Title 14, CCR, the Department of Fish and Wildlife (Department) currently requires a Scientific Collecting Permit (SCP) for scientific, educational, and propagation related activities that involve terrestrial and vernal pool invertebrates that are listed on the *California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List* (“*TVPICP List*”, dated June 12, 2017). The proposed amendments to Section 650 update the species specified on the list, removing species that no longer meet the criteria for inclusion and adding species that do meet the criteria. In total, 47 species will be removed and 9 added to the *TVPICP List*.

The purpose of this proposed regulatory change is to provide applicants for SCPs an up-to-date list of at-risk terrestrial invertebrates in California. The criteria to develop the list remain unchanged, they still relate to the species’ NatureServe rankings as well as their Federal endangered, threatened, or candidate status. When the regulation was first adopted in 2018, the Department determined that the at-risk animals on the *TVPICP List* are subject to limited take for scientific research, education, or propagation and an SCP is required for any of these activities involving listed species. This regulation change updates the *TVPICP List* (dated January 2, 2024).

Regulatory Proposal

- A new subsection 650(a)(8) clarifies that SCP regulations do not apply to the take of any threatened, endangered, candidate, or fully protected species. The Department will not issue an SCP for any of these listed species.
- A new subsection 650(a)(9) updates the document “*Table 1 - California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List (TVPICP List)*”, incorporated by reference, with a revision date of January 2, 2024.
- Changes throughout Section 650 and Section 703 updating the revision dates of the *TVPICP List* and of forms related to SCP.
- Subsection 650(i)(1)(D) clarifies that the Department “may” issue a General Permit for incidental take of species on the *TVPICP List*.
- Other minor grammatical changes are made in Section 650 to clarify the regulatory text.
- Section 703 is amended so that the SCP application and amendment forms (DFW 1379GW, DFW 1379GWA, DFW 1374S and DFW 1379SA), incorporated by reference in section 703, would also be updated to reference the new *TVPIVP List*.

These changes ensure the Department uses the most up-to-date science to protect vulnerable terrestrial invertebrate populations while ensuring that researchers do not have to apply for SCPs for non-sensitive species whose risk status is no longer considered imperiled at the state level or that were either not federally listed or were downlisted. The change will help enhance the Department’s ability to conserve California’s terrestrial and vernal pool invertebrates, which perform essential functions like nutrient cycling and pollination, as well as form the basis for food webs for other terrestrial and aquatic wildlife.

Benefits of the Proposed Regulations

The purpose of an SCP is to protect wildlife resources that may be substantially adversely affected by research, education, or propagation related activities. By adding species that have been identified by NatureServe as more imperiled or that are listed under the federal Endangered

Species Act, the list will better encompass at-risk invertebrates in the state. By removing species no longer considered at high risk, this change reduces the burden on researchers, educators, and others working on these species such that they may no longer need an SCP for their work.

Consistency and Compatibility with Existing Regulations

The Legislature has given the Department authority to issue SCPs for the take or possession of any plant or animal life, for scientific, educational, or propagation purposes, by an appropriate public, private, or nonprofit entity, or a person (Fish and Game code sections 1002 and 1002.5). Department staff have conducted a review of the California Code of Regulations and have not identified any other State regulations that are inconsistent with the Department's authority to permit the take of wildlife for the above purposes, in any part of the State. Other State entities may require permission to take wildlife under their respective authorities. However, receiving permission from those State entities does not preclude the need for a Department issued SCP, nor would the Department's permitting program conflict with other state entities managing the take of wildlife under their respective authorities. The Department has reviewed its existing regulations in Title 14 of the California Code of Regulations and finds that the proposed regulation is neither inconsistent nor incompatible with the existing regulations in Title 14.