C	ommenter Name, Format, Date	Comment	Department Response
Res	esponses to Comments received during the Public Notice period March 24 – May 8, 2017. Comments are paraphrased from the commenters for succinctnes		
1	John Reiss Professor of Zoology, Interim Curator Vertebrate Museum, Humboldt State University Email dated 3/25/2017	1-a. The commenter states the current process to add students via amendment is difficult and time intensive. He recommends adding an amendment type that would involve notification to CDFW for the name changes, and payment of a nominal fee. He recognizes this fee would be a separate and lower fee from an amendment type involving changes to the scope of the permitted work.	1-a. The California Department of Fish and Wildlife (CDFW) thanks Dr. Reiss for his comment. The addition of Authorized Individuals as names on the List of Authorized Individuals (LAI) would be covered under each of the two amendment types proposed by permit use level: a General Amendment (with flat fee listed as \$61.04 in subsection 703(c), and in the Second Amended Initial Statement of Reasons (ISOR)), and a Specific Amendment (with flat fee listed as \$89.28). Each Amendment type covers a suite of allowable changes, including adding or changing Authorized Individuals on the LAI, as well as specific changes allowed by permit use level, as detailed in the FSOR justifying subsection 650(l). CDFW had originally considered making a separate amendment fee for adding each Authorized Individuals to an LAI; however, CDFW determined that for simplicity, and time efficiency, it would be best for stakeholders to utilize a flat fee for each, which allows for the addition of more than one Authorized Individual per amendment, as well as changes to Authorizations for the General Use (or adjustments to the details under a Specific Use level permit). Both amendment fees are lower than the current 2017 SCP Amendment fee of \$105.83. Additional guidance as a FAQs would be forthcoming.
2	Marine Pollution Studies Lab, Moss Landing Marine Labs Email dated 3/28/2017	2-a. For the Specific Use level permit, the requirements for documenting qualifications, and list of references seems burdensome for scientists, who have specific education in their field. Why should CDFW add burden to their review to review qualifications, when a CV should suffice? Will CDFW use specific criteria to determine if someone is qualified? If so, the criteria should be noted.	2-a. Subsection 650(h) states that there are three elements for the required qualifications: 1) a standard resume or curriculum vitae (CV), 2) a statement of qualifications detailing relevant experience with the requested take activities described in the application (this level of detail pertinent to the application at hand is not generally included in a standard resume or CV, therefore is a necessary additional document), and 3) the names and contact info for two references is required for all proposed Principal Investigators (PIs) and Authorized Individuals. The latter is required, should the review programs (i.e., Inland Fisheries, Marine and Terrestrial Wildlife) staff have any questions about the experience or qualifications listed in the resume or CV, or statement qualifications. References are usually part of a standard CV or resume, and so to ensure consistency across all applicants is required in a separate field on all the application forms. These requirements ensure all review programs have to submit the same information for CDFW to determine eligibility for a SCP. Requiring this information up front streamlines, rather than burdens, CDFW's review of applications, because information about the applicant's experience and background that is pertinent to reviewing, conditioning, and approving the permit application is provided up-front, when in the past, CDFW would have to contact the applicant to obtain these details later, which creates extra burden both for CDFW and the applicant. CDFW reviews several hundred SCP applications a year from applicants with varying educational levels, field experience, and professional experience. Because of the amalgam of experience, an applicant can have that isn't conferred by a degree or formal education, as the commenter suggests, CDFW developed required qualifications proposed under subsection 650(h) to retain flexibility for how the applicant to demonstrate competency. Thus, there is no "formula" or standard set of criteria, because it may be different for each a

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
2	Marco Sigala, con't.	2-b. The amount of documentation for the Specific Use application is onerous, when a project summary, objectives, and planned work with species and locations should suffice. It seems the requested information (background, past findings, abstract, etc.) is more for a full report, or for a website, rather than for assessing approval and denial of an application. Many details of a study aren't know until a month before field work, but one has to submit a permit application at least 3 months ahead of time.	2-b. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple types of work, though this depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). Review of a Specific Use amendment, when additional details are available, would meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
2	Marco Sigala, con't.	2-c. The SCP process should be streamlined and efficient process. Qualification and data reporting should depend on the specific project. The proposed regulation changes would burden (time and money) applicants and CDFW. Please consider removing these onerous requirements so the application and review process can happen in a timely fashion (<1 month).	2-c. The proposed regulations are intended to facilitate a streamlined and efficient process, when implemented in an online system, as summarized under General Response 2 . Qualifications and data reporting requirements are specified in the regulations for all Specific Use permits in order to guide applicants and require consistent information from applicants across all review programs. Similarly, data reporting requirements are standardized in regulation to communicate the format and frequency of reporting to allow permitholders to plan accordingly. The designated timeframes for review (completeness and content) are required for the reviewing staff to accommodate the permitting needs of hundreds of applications for issuance of permits within the specified 90-100 days.
3	Shaun McCoshum	3-a. The commenter thanks CDFW for editing the permitting process, and commends many	3-a. Support for amendments to Sections 650 and 703 noted.
	Postdoctoral Scholar, Cornell University	of CDFW's proposed changes.	
	Email dated 3/21/2017		
3	Shaun McCoshum, con't.	3-b. The existing and proposed regulations are still insufficient for insect community research in California. While more accommodating than the existing regulations, the proposed regulations still make it impossible to obtain a permit because the proposed applications require a species-by-species account and justification in advance. This requirement has the potential to hinder numerous research initiatives, including	3-b. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Refer also to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each. The proposed regulations distinguish the invertebrate taxonomic groups that fall under each review program for both the General and Specific Use level permits. The Terrestrial Wildlife General Use level permit (form DFW 1379GW) Authorization W1 states only that certain listing status of terrestrial and vernal pool invertebrates are not eligible for coverage under a General permit, and neither invertebrate species, or broader taxa, need to be described or indicated on form DFW 1379GW. This works similarly for aquatic

С	Commenter Name, Format, Date	Comment	Department Response
		invasive species, pollination services, and pest management.	invertebrates under Authorization F1 of the Inland Fisheries General Use level permit (form DFW 1379GF), and for marine/ tidal invertebrates under Authorization M2 of the Marine General Use level permit (form DFW 1379GM). However, should the limit and disposition described in each General use permit not meet an applicant's needs for take activities, the applicant would need to apply for a Specific Use level permit (form DFW 1379S). In this application, it is anticipated that the online system would be able to accommodate take requests down to the species (and possibly further, e.g., subspecies) level, but also allow applicants to select broader taxonomic groups of wildlife (e.g., at the family, or order level).
3	Shaun McCoshum, con't.	3-c. The commenter cites qualifications requirements pursuant to subsection 650(h) that are replicated on General Use application form DFW 1379GW. While an improvement from the existing regulations, stating experience with "each wildlife species, or similar wildlife" does not meet insect collecting needs. Based on sampling methods (e.g., pollinator community studies), the species that will be taken is not known at the time of application, or would result in a list of over 500 species of insects that would be exhausting to compile, and for the agency to review. Insects are often not identified until after collection, preventing release of repeat specimens. A clause should be created in the applications for invertebrate wildlife taxon sampling, by including the term "invertebrate taxon," or other term the agency deems appropriate.	3-c. The language in subsection 650(h)(1)(A) has been revised to say "wildlife species, or similar wildlife taxonomic group, or by taxon (for invertebrates)." As stated above in Specific Response 3-b , the General Use application does not require identification down to a species level, and the Specific Use application, when implemented in an online format, will allow selection at broader taxonomic levels than species (e.g., Order, genus).
3	Shaun McCoshum, con't.	3-d. The commenter cites the Mandatory Wildlife Report (form DFW 1379a). The specified timeframe of submitting a report within 30 days following expiration of a permit is not possible for many insects, when several thousand specimens of hundreds of species are collected, and collections require identification, often by experts aside from the permitholder. Entomological researchers are often experts on a given taxon, requiring consultation from other experts for identification with the other 500,000 species of insects known. Insect reporting should allow for longer time frames, and/or less detailed	3-d. The current language in subsection 650(p)(1) states that reporting requirements default to the 30-day timeframe following permit expiration, upon permit renewal, or "as required by the Authorizations or conditions of the permit." Under the existing regulations, a longer reporting timeframe for invertebrates has been practiced in accordance with invertebrate collector needs. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		reporting for insect species. Commenter requests an insect-specific clause with a 12 month report, with a potential 12 month extension on reporting species of the researchers expertise, including an Order level summary of specimens the researcher is not familiar with.	
4	David Gutoff Email dated 4/3/2017	4-a. Many municipalities and businesses must perform regulated toxicity testing on a regular basis (e.g., EPA/600/R-95/136), as well as during storm water events. The individual and annual collection limits of species are too restrictive to perform these tests as regulated. None of the species referenced in the EPA document are rare or endangered. The commenter believes the limits can raised substantially.	4-a. CDFW presumes that the limits the commenter speaks of are those listed under "Disposition and Limit" in the Inland Fisheries General Use level application (Authorization F1) and under "Daily and Annual limits" under the Marine General Use (Authorizations M1-M3). The limits were developed in accordance with the sportfish and/or ocean fishing regulations. In many instances, daily limits were increased to a reasonable amount beyond sportfish limits, but annual limits were applied to ensure Permitholders remain within an acceptable range of tolerance of take when compared to the potential take allowed under a sport license, as explained on pages 44-45 of the Original Proposed ISOR. Thus the commenter would need to apply for a Specific Use level permit, instead of a General Use level permit, in order to specifically request higher limits needed to meet EPA or other regulatory needs that aren't provided for in the General Use. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each.
5	Christopher Clark Assistant Professor, UC Riverside Email dated 4/5/2017	5-a. The commenter generally supports the proposed changes, particularly based on justification in the ISOR. It appears that CDFW could benefit from organized internal digital system for tracking take, and could be a potential utility to researchers as well.	5-a. Support for amendments to Sections 650 and 703 noted. The planned online reporting and database is expected to increase utility of data gathered by SCPs, and through some data sharing resources, some data would be available for public viewing or use.
5	Christopher Clark, con't.	5-b. It seems the limit of eight (8) Authorized Individuals (AIs) per permit is arbitrary. The commenter questions if he needs multiple permits for the same project and same birds, just to be able to have more than 8 AIs per permit. He also questions that if he requests two permits, would he be granted double the take limit, and how would reporting work. If a limit is necessary on a LAI, the maximum number should be higher (e.g., 15 people).	5-b. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals. CDFW presumes that the commenter refers to the LAI limit in reference to the General Use level permit, Authorization W5 (Birds), based on his expertise in hummingbirds. A limit on the number of AIs is necessary owing to the requirement for the PI on an Entity permit for a General Use to be able to provide adequate supervision of all AIs that may work independently under that PI for species numbers, methods and activities that are not as heavily scrutinized as they are on the Specific Use level permit.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
5	Christopher Clark, con't.	5-c. There is no stated rationale as to why are hummingbirds are excluded from the General Use permit. They are easy to work with, none within the state are of conservation concern, and CDFW has no in-house hummingbird experts for whom special routing of permits is warranted. The only other consideration is that banding is slightly different from passerines, but small enough bands are not readily available. However, a person trained by the Bird Banding Laboratory standards would be prepared to band hummingbirds.	5-c. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each. Authorization W5 only grants certain activities (capture, handle, measure, mark, release) for birds by the specified taxonomic groups (i.e., at the level of the family). Thus, the commenter would need to apply for a Specific Use level permit, instead of a General Use level permit, in order to meet research needs. Refer also to Specific Response 36-m regarding consideration of hummingbirds (Family Trochilidae).
6	John Olson Assistant Professor, CSU Monterey Bay Email dated 4/5/2017	6-a. Implementation of a general use permit is great improvement over the old system. Decreases in fees are also appreciated, and are now reasonable. Adaption of the form for on line use is also a great improvement.	6-a. Support for amendments to Sections 650 and 703 noted.
6	John Olson, con't	6-b. To better support education, the methods authorized in section F1 (Inland Aquatic Invertebrates) of the General Use permit should be broadened to include other common invertebrate sampling methods besides dip nets and minnow traps. This should include drift nets, surber/Hess samplers, and substrate type samplers (e.g., Hester Dendy, leaf pack, or similar). Excluding these techniques would prevent teaching of quantitative methods and leaf decomposition studies, or require a Specific Use permit, just to teach common collection methods.	6-b. Methods to include those requested capture methods and sampling techniques have been added to the General Use application for Inland Fisheries (form DFW 1379GF), under Authorization F1 (Inland Aquatic Invertebrates), as well as to the respective amendment form (DFW 1379GFA).
6	John Olson, con't	6-c. The limit on sacrifice of native and non- native invertebrates to just voucher specimens does not allow for sacrifice for education and training. As worded, a General Use permit could not be used to collect and sacrifice invertebrates to teach taxonomy.	6-c. Additional flexibility has been added to each of the three General Use permits (Inland Fisheries – form DFW 1379GF, Marine – form DFW 1379GM, and Terrestrial Wildlife – form DFW 1379GW) to account for teaching collections within the stated limits on take and/or possession numbers of each Authorization of each permit.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
6	John Olson, con't	6-d. What is the reference for "equipment marked per Standard Conditions for SCPs, Standard Condition M."	6-d. Refer to form DFW 1379d, "Standard Conditions for all Permits" to view the language of Standard Condition M (Labeling of Vessels, Vehicles, and Capture Equipment).
7	Sophie Beukelaer Monterey Bay National Marine Sanctuary National Ocean Atmospheric Administration, National Marine Sanctuaries Email dated 4/17/2017	7-a. There are four National Marine Sanctuaries in California. Please include adding either the National Marine Sanctuaries Act in a separate block, or adding "National Marine Sanctuaries" with the other examples in the "Other" block for Section 5, Other Permits and Environmental Documents, subsection 5a, Federal Permits (form DFW 1379GMA) - Scientific Collecting Permit, General Use – Amendment (Marine).	 7-a. CDFW has added this recommended checkbox to include mention of NOAA National Marine Sanctuaries permits and authorizations to subsection 5a, Federal Permits under Section 5 for the eight application and amendment forms: Four application forms: Scientific Collecting Permit, General Use – Application (Inland Fisheries, form DFW 1379GF; Marine, form DFW 1379GM, Terrestrial Wildlife, form DFW 1379GW), as well as Scientific Collecting Permit, Specific Use – Application (form DFW 1379S); Four respective amendment forms: (Inland Fisheries, form DFW 1379GFA; Marine, form DFW 1379GMA, Terrestrial Wildlife, form DFW 1379GWA, and Specific Use amendment, form DFW 1379SA).
8	Perry Hampton Vice President of Husbandry, Aquarium of the Pacific Letter dated 4/14/2017	8-a. The commenter thanks CDFW for creating the new General Use level permits. These will greatly simplify the unique needs of collecting specimens for live animal displays at public aquariums.	8-a. Support for amendments to Sections 650 and 703 creating the General Use level permit noted.
8	Perry Hampton, con't	8-b. The commenter requests removing the requirement for personal references for individuals (Section 3 of General Use and Specific Use application forms) for Entity applicants that are accredited by the Association of Zoos and Aquariums (AZA).	8-b. Refer to Specific Response 2-a regarding how CDFW weighs qualifications information. Qualifications and data reporting requirements are specified in the regulations for all applicants in order to guide applicants and require consistent information from applicants across all review programs. Much of what is requested for a PI and any Authorized Individuals, as clarified in the justification for subsection 650(h), pages 21-22 of the Amended ISOR, is standard information (i.e., CV or resume, and references), and a statement meeting specific needs for verifying identification, handling, methodology, procedures and other aspects specific to requested take can be tailored from information not readily available in a CV (e.g., number of survey hours for a particular species).
8	Perry Hampton, con't	8-c. AZA-accredited facilities hire staff who are experts in specimen collection, animal nutrition, husbandry, life support, medicine, etc. Would CDFW consider a single statement from an applicant's supervisor (i.e., a PI)	8-c. A lot of what AZA looks for in terms of qualifications appears to focus on expertise in captivity and handling, but not certain procedures occurring by researchers in the field. Further, because the online user profiles of Authorized Individuals are anticipated be managed separately in the online system (by those Authorized Individuals) from those of PIs, it would likely not be possible for a PI to provide a blanket statement covering the references required of Authorized Individuals. Refer also to Specific Response 11-d and

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		attesting to knowledge of all individuals, rather than provide individual references?	35-c.
8	Perry Hampton, con't	8-d. Similarly, in lieu of separate Statements of Qualifications for each Authorized Individuals, can a PI provide a blanket Statement for all individuals?	8-d. Likely not; refer to Specific Response 8-c.
8	Perry Hampton, con't	8-e. The Transfer of Possession - Chain of Custody form (DFW 1379c) appears to only cover transport and transfer of Dead or Salvaged Wildlife and/or Parts Thereof in Sections 3 and 4. There doesn't appear to be a provision for transfer of live animals.	8-e. CDFW thanks the commenter for the clarification. Refer to the updated form DFW 1379c (version 07/01/17) with the Amended ISOR package (dated August 14, 2017) the suggested clarifications to Sections 3 and 4 to accommodate the transfer of live wildlife. Section 4 is more pertinent to dead wildlife and/or parts thereof, whereas transfer of live wildlife would be noted under Section 3.
8	Perry Hampton, con't	8-f. The Aquarium of the Pacific donates animals to other aquariums and zoos, under requirements by CDFW for holding time of 18 months, maintaining records, etc. Would transfers use the Chain of Custody form, and how would live transfers be recorded on the form?	8-f. Yes, the Aquarium of the Pacific would use the propose Chain of Custody form (DFW 1379c) for transfers of live or dead wildlife. Refer to Specific Responses 23-f , as well as 35-e and 35-f for more details.
9	Greg Tatarian Wildlife Research Associates Email dated 4/28/2017	The commenter submitted two comment letters; one by email on 4/28/2017, and another on 5/8/2017. The content of each was similar enough to be able to respond once, below.	Refer to Responses to this comment letter from Greg Tatarian under Specific Responses 55-a through 55-v below.
10	David Gibson Executive Officer, CA Water Quality Control Board, San Diego Region Email dated 4/28/2017	10-a. The commenter agrees with the exclusion under 650(u)(5) for certain sensitive marine habitats, but suggests addition of clarifying language for routine sampling activities in eelgrass beds, kelp forests, and noted marine areas.	10-a. Further language under letters (A) and (B) has been provided to the referenced subsection under 650(u) for when the exemption does not apply for sediment and water sampling within eelgrass beds, kelp forests and Marine Managed Areas. The added language means that water, as well as sediment sampling in designated marine areas continues to require a SCP, but water sampling in eelgrass beds and kelp forests does not.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
11	Mike Henry Senior Ecologist, Dudek Email dated 5/1/2017	11-a. The commenter understands that a General Use permit is intended for non-special status species with low impact methods, while a Specific Use would be necessary for project-specific information involving take involving special status species and more invasive methods.	11-a. The commenter is correct in this understanding. Please also see General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each.
11	Mike Henry, con't.	11-b. New clients, projects, or changes in existing projects, species, or survey areas would be required for the Specific Use. An amendment would take at least 100 days to obtain, but could be longer if the application is deemed incomplete. There are separate fees for General, Specific Use and their amendments.	11-b. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
11	Mike Henry, con't.	11-c. The proposed tiered permit structure is not workable for environmental consultants. To wait a minimum of 100 days for an amendment would be burdensome on this stakeholder group, and CDFW's workload might push it beyond this timing.	11-c. As detailed under General Response 2.2 , Specific Use amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
11	Mike Henry, con't.	11-d. Academics and researchers often have discrete projects over known durations that can be anticipated in advance. Consultant work is often of varied duration, requiring quick turnaround. The proposed changes would require a wait of minimum of 12 weeks under the proposed changes, and higher fees, relative to the existing system which relies more on the qualifications of the applicant warranting them working on multiple projects over a permit period. Additional burden is placed on the applicant or PI to track all approved staff, permit statuses and reporting associated with the new process.	11-d. As detailed under General Response 2.2, a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). Qualifications do play a considerable role in permit review and issuance, as detailed by Specific Response 2-a. Refer to Specific Response 11-c regarding current review timeframe of 90-100 days, as is current practice under the existing permit system. It is anticipated that the online application and data management system would involve Authorized Individuals maintaining separate profiles from that of the PI (e.g., update qualifications and references), where Authorized Individuals and PIs would be linked in the system. For the applicant/ Permitholder, a "dashboard" capability is anticipated to provide conveniences, such as reminders of reporting requirements, ability to track the status of (a) permit(s), and approved Lists of Authorized Individuals. So while more than one permit may be required, the ability to manage them compared to the current system is expected to benefit applicants and permitholders.
11	Mike Henry, con't.	11-e. It is unclear the standards for qualifications which could lead to arbitrary approval or denial of an application. where greater scrutiny would be warranted for species more sensitive to handling. Certifications or	11-e. As detailed under Specific Response 2-a, qualifications review is highly dependent on the review program. A combination of training, education, certification and other considerations were built into the qualifications language under subsection 650(h). The SCP review program staff evaluate applications and qualifications objectively. Refer to General Response 2.1 regarding permitting for species not covered by a SCP, i.e., California

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	,	trainings by societies should be taken into consideration. The commenter is concerned about restricted pools of consultants or researchers found qualified and competent by CDFW to work with certain species, when others could be as well to minimize delays to projects.	Endangered Species Act (CESA) -listed species.
11	Mike Henry, con't.	11-f. CDFW should recognize federal take permits for the same species to substitute for the state SCP, where CDFW could be a recipient of all reports required by the federal permit.	11-f. Similar to the logic applied for birds in Specific Response 36-b (Ornithological Council), CDFW would not be doing its due diligence under the California Environmental Quality Act (CEQA), and would be abdicating its role as Trustee agency for the State's wildlife, if the regulatory decision were to defer solely to federal recovery permits rather than issuing a state SCP. CDFW frequently issues permits with authorizations and conditions that are more restrictive than the associated federal permits, with need for reporting format, including format for CDFW's California Natural Diversity Database (CNDDB).
11	Mike Henry, con't.	11-g. SCP renewals should be ministerial, given permitholders meet all permit terms. Amendments should be issued within 30 days.	11-g. Contrary to the commenter's assumption that renewals should be ministerial, renewal is a deliberative process that necessarily involves the exercise of discretion to review submitted reports and evaluating continued work relative to that of other permitholders within a given area. Refer to General Response 3 regarding renewals, and their cost and issuance time.
12	Phil Ward Professor of Entomology, UC Davis Email dated 5/1/2017	12-a. California is home to tens of thousands of species of insects – potentially 50,000, and many are not yet described. Entomologists can't know ahead of time the species and quantities of insects that will be taken during collecting activities, and such collections are often conducted opportunistically (based on weather, potential for pest outbreaks, availability of staff, etc.). It could take years to accession and identify insect specimens collected.	12-a. CDFW appreciates the work that academic and research entomologists conduct to help identify and classify California's broad terrestrial invertebrate and insect diversity. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
12	Phil Ward, con't.	12-b. The current and proposed regulations are unjustified and burdensome with regards to terrestrial invertebrates, including nematodes, centipedes, millipedes, mites, ticks and spiders (among others), and would undermine education and research advancement in the state. Permitting oversight <i>would</i> be justified for endangered or threatened invertebrate species, or on state or federal parklands. Agriculture and public health programs would be burdened since sampling and monitoring of insects drives sustainable pest management	12-b. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data. Refer also to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017), or that occur in vernal pools or other ephemeral waters that may support vernal pool invertebrates. Sampling and monitoring of insects for agricultural and public health surveillance and monitoring would be exempt from needing a SCP, as long as take of those species listed on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017) is avoided.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		strategies. Exempting those invertebrates that are unjustified to permit would eliminate the proposed burden on entomologists and other scientists.	
13	Robbin Thorp Professor Emeritus, Dept. of Entomology & Nematology, UC Davis Email dated 5/1/2017	13-a. Terrestrial arthropods are not included in the animal groups under Title 14, Section 650, only vertebrate taxa.	13-a. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650.
13	Robbin Thorp, con't.	13-b. Unlike vertebrates, the proposed regulations do not easily apply to terrestrial arthropods, which are diverse, yet not well studied. Accurate identification of collected insects can take years, so species lists within the specified timeframes is unrealistic.	13-b. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
13	Robbin Thorp, con't.	13-c. Insects collected for class only require reporting at the family level, yet the proposed reports would require identification to the species level. Data reported to CDFW would be little value, and would be based on interests of the collector rather than towards management goals of ecosystems.	13-c. Refer to General Response 1.3 regarding indiscriminant methods used to collect insects and other terrestrial invertebrates precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data.
13	Robbin Thorp, con't.	13-d. Requiring a SCP would burden museum and systematics research, as well as agricultural and medical pest surveillance.	13-d. Refer to Specific Response 12-b.
13	Robbin Thorp, con't.	13-e. Requirement of a permit fee is counterproductive, and the proposed detailed reporting is infeasible, punishing the groups and institutions CDFW should be supporting.	13-e. Refer to General Response 3 regarding permit fees and cost recovery. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
13	Robbin Thorp, con't.	13-f. CDFW should hire interns to data mine museum and other data repositories, when publically available, and support those databasing activities to assist public data repositories.	13-f. There are insufficient funds to hire even temporary Scientific Aids to process permit applications. CDFW hopes to utilize existing public data repositories to help build upon the CNDDB as well as the proposed SCP database. Refer to General Response 3 regarding permit fees and cost recovery.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
13	Robbin Thorp, con't.	13-g. Remove the permit requirement for terrestrial arthropods from the proposed regulations.	13-g. Refer to General Response 1.1 regarding the invertebrate taxonomic scope for permitting.
14	Craig Seltenrich Senior Aquatic Ecologist, Dudek Email dated 5/1/2017	14-a. The commenter understands that a General Use permit is intended for non-special status species with low impact methods, while a Specific Use would be necessary for project-specific information involving take involving special status species and more invasive methods, where an amendment may be required for additional study question, method or project.	14-a. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each, and to Specific Response 11-a.
14	Craig Seltenrich, con't.	14-b. Specific Use permits would require project-specific information, and an amendment would be required for specific clients or projects, methods, and would take at least three months to process.	14-b. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each, and to Specific Response 11-b .
14	Craig Seltenrich, con't.	14-c. The proposed tiered permit structure seems better suited for graduate or academic research. The nature of consultant work requires quicker turnaround times to meet clients' needs. To wait a minimum of 100 days for an amendment would be burdensome on this stakeholder group.	14-c. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. Also refer to Specific Response 11-d .
14	Craig Seltenrich, con't.	14-d. CDFW should re-evaluate the Specific Use for consulting biologists, who do the majority of environmental studies in California. The proposed regulations would make it more difficult for timing for projects.	14-d. Refer to amended subsection 650(i)(2) and pages 22-24 of the Amended ISOR regarding clarifications to the permit structure. Refer also to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each.
15	Aquatic Ecologist, Spring Rivers Ecological Sciences LLC Email dated 5/1/2017	15-a. The notification requirements are not feasible due to changes in field work conditions, weather, staff availability, etc.	15-a. Refer to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b).
15	Lorrie Haley, con't.	15-b. Flexibility is crucial to collect data successfully. If take reports are only needed to	15-b. The intended recipients of the notification of field activities in CDFW are separate from those who receive the take reports (form DFW 1379a, Mandatory Wildlife Report, and any

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
	1 Office, Date	be submitted within 30 days of permit expiration, why do Permitholders need to notify for field activities every 14 days?	other reports specified in conditions of the permit). As discussed under General Response 4, the Notification is required primarily for CDFWt Law Enforcement Division (LED) officers, and secondarily for regional biologists to know who is conducting activities in their region(s) or county(ies). The take reports are a summary of take activities, species, methods, and numbers, and are sent to the CDFW review programs which authorized and issued the permit.
15	Lorrie Haley, con't.	15-c. More time is needed for Permitholders and CDFW biologists to revie data less time handling unnecessary forms, and survey schedules could be submitted when applying for a permit.	15-c. As the commenter stated in Specific Comment 15-a above, field or study schedules that may be indicated on the SCP application forms can change due to the stated reasons. The Notification form is intended to provide real-time indication of when field activities will occur (with at least 36 hours advance notice – reduced from 48 hour advance notice). As revisited in General Response 4 , the necessity of the Notification form is spelled out on pages 68 and 69 of the Amended ISOR.
16	Leah Kitchen Email dated 5/2/2017	16-a. The proposed regulations are unjustified in requiring a permit for the take of nonendangered terrestrial invertebrates, but would be just to permit the collecting of endangered and threatened species.	16-a. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
17	Warren Harris Email dated 5/3/2017	17-a. The proposal is garbage and seems to be a way to extract money from people, and should be rejected.	17-a. The commenter doesn't provide specific comment on the content of the proposed regulations, therefore a specific answer is not warranted.
18	Curtis Takahashi Lecturer, San Jose State University Email dated 5/3/2017	18-a. Would separate permits be required to take both aquatic (under Inland Fisheries review program) and terrestrial (under Terrestrial Wildlife review program) invertebrates?	18-a. Refer to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Depending on the species requested for the aquatic environment, it could be that just an Inland Fisheries General Use permit would be required, as most terrestrial invertebrates are now exempt under subsection 650(u)(5). If take targets those terrestrial invertebrates that are prioritized on the above referenced list, then the commenter could consider applying for a Specific Use permit to accommodate both aquatic and terrestrial invertebrate targeted take.
18	Curtis Takahashi, con't.	18-b. Locations to collect non-threatened species are difficult to find. It is burdensome to have students pay a fee to study the natural world, and seems at odds when public taxes already pay for access to public places.	18-b. Any taxes the public may pay for public use of lands generally fall under different statutory authorities than those granting CDFW the authority to permit the take of wildlife in any part of the State. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, as well as General Response 3 regarding fees and cost recovery.
19	Ken Schneider San Francisco	19-a. Amateurs and scientists maintain the collection of invertebrates in a time when funding and training of invertebrate taxonomists threatens the ability to understand	19-a. Refer to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	Email dated 5/3/2017	and protect them. The commenter requests invertebrate exclusion from needing a permit to avoid bureaucratic hurdles when invertebrates should be treated separately from vertebrates.	June 12, 2017). Refer also to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data.
20	David King Alameda Email dated 5/4/2017	20-a. The proposed regulations to require a permit for insects and terrestrial invertebrates, with seemingly onerous application and reporting process, and fees, would discourage education, hobby collection and other activities that do not affect populations of common or non-threatened insects. Casual collection of a few specimens for hobbies would be illegal if a person is unable to obtain a permit.	20-a. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement, as well as General Response 3 regarding fees and cost recovery. Lastly, refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
20	David King, con't.	20-b. The ISOR communicates that the proposed regulations focus on generating revenue, rather than protecting critical species, biodiversity. Scientific activities are underfunded already and are further threatened by the current Federal administration. CDFW should appeal to the Legislature for additional funding if needed to run the SCP program.	20-b. As stated in General Response 3 regarding fees and cost recovery, the statutes governing SCPs – Fish and Game Code (FGC) sections 1002 and 1002.5 allow the CDFW to "fully recover, but not exceed, all reasonable administrative and implementation costs of the department relating to those permits." Refer also to General Response 1.4 regarding fiscal restraints of SCP administration under the Legislature.
20	David King, con't.	20-c. The proposed regulations will not be effective in generating revenue because most people would ignore the regulations as being too onerous to follow, and CDFW wardens can try to cite these people. Regulations that are hard or inconvenient to follow can undermine respect of the law.	20-c. Refer to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP. Refer also to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.
20	David King, con't.	20-d. Scale back the regulations to exclude invertebrates not listed as threatened or endangered, and clarify the scope of who needs to obtain permits. CDFW should not base regulations to generate revenue, but instead protect California's resources.	20-d. Refer to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). It currently is, and has always been, CDFW's role to manage wildlife resources for the public trust, thus monitoring activities with certain species is regulated by permit.
21	Shane Beck President/ Principal Scientist, MBC	21-a. The commenter requests the language for subsection 650(o) be changed for rescheduled field activities to notify CDFW by a one business day (24 hour) notice.	21-b. CDFW has determined that any changes to update a submitted Notification of Field Work or Activity (form DFW 1379b) still falls under the minimum timeframe of 36 hours (reduced from 48 hours with the Amended ISOR, pages 29-30). This is because activities in the field can occur over the weekend (not just on business days), so restricting notifying

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	Applied Environmental Sciences Email dated 5/4/2017		CDFW Law Enforcement contacts of changes to a business day, or 24 hours, is not sufficient, and therefore not feasible. Refer also to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b).
21	Shane Beck, con't.	21-b. The commenter supports the exception for routine water and sediment sampling (when wildlife is not being targeted) from certain marine areas or marine habitats.	21-b. Comment noted. Please also refer to further clarified language in subsection 650(u)(3), as well as Marine Conditions specified in section 4c of the Marine General Use permit, form DFW 1379GM.
21	Shane Beck, con't.	21-c. Surveys can result in take of thousands of specimens of non-sensitive status, so simplification of reporting, including alternate formats, is supported.	21-c. Refer to adjusted language for freshwater sampling for benthic macroinvertebrates pursuant to CDFW-approved bioassessment protocol (i.e., Surface Water Ambient Monitoring Program (SWAMP)) that allows for sampling data to be submitted through alternate databases, pursuant to instructions on the Mandatory Wildlife Report, form DFW 1379a. All other take should be entered into the required report format, as detailed with reporting requirements are further detailed on form DFW 1379a, as well as Standard Conditions G and I on the form Standard Conditions for all SCPs, form DFW 1379d.
21	Shane Beck, con't.	21-d. The commenter requests a waiver of amendment fees to be able to have additional Authorized Individuals above the eight included in permit fees.	21-d. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a .
21	Shane Beck, con't.	21-e. The commenter supports CDFW's willingness to overhaul the SCP process and hopes for increased efficiency.	21-e. Comment noted. It is anticipated that an online application system alone will increase efficiencies, as well as providing a more detailed application forms that request information up front to ensure applications are complete.
22	Jason Gibbs Assistant Professor and Curator, R. E. Roughley Museum of Entomology, University of Manitoba Email dated 5/4/2017	22-a. The commenter states permitting can block scientific discovery of information regarding terrestrial invertebrates, and collections for science are taken in numbers much lower than agricultural, road strikes, compared to population size. Insects are unlike vertebrates and shouldn't be protected the same way. Protections for at-risk species or for protected areas is sufficient.	22-a. Refer to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
22	Jason Gibbs, con't.	22-b. CDFW should encourage study of invertebrate fauna rather than simply permitting it. Research intends to benefit native species,	22-b. The rulemaking will not discourage research through permitting, but the CDFW understands the sentiment. The permitting and reporting mechanism is intended to inform management and conservation priorities of those species taken by permit. Refer also to General Response 1.5 regarding how it is perceived that proposed permitting might

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		and permitting can discourage scientific research.	discourage research, and fail to collect meaningful data.
23	Mary Wilson Owner, Ocean World Aquarium Email dated 5/4/2017	23-a. Does not find the proposed change at all clarifying to end users to the length and complexity of the ISOR and application and the new forms will increase the time by applicants to fill out (from 30 minutes to several hours).	23-a. CDFW thanks Ms. Wilson for her comments. Much of the documentation provided with the regulatory proposal is required under the Administrative Procedure Act for approval by the Office of Administrative Law. The size of the package on paper appears voluminous, primarily due to the application forms having duplicative information. When implemented in an online system, the forms should be much more streamlined in their workflow. Though the commenter doesn't state specific aspects or fields of the proposed forms that would take more hours to complete (compared to 30 minutes), all fields of each of the forms are justified in the Second Amended ISOR.
23	Mary Wilson, con't.	23-b. The Economic Impact Assessment (EIA) states that businesses may now have to obtain multiple permits under the proposed structure. How does this "clarify" and make it easier for either the businesses or CDFW? We do not have the staff to handle complicated paperwork, such as the proposed SCP. What was the problem with the previous 2012 form? Commenter states the SCP is "over regulation" and is a real burden to business.	23-b. The proposed establishment of General Use and Specific Use level permits creates a tiered framework to streamline the permitting of take and/or possession activities, as outlined under General Response 2 . Each General Use application would be constrained within one review program to facilitate quicker review, requiring a separate application for each additional review program at this level, corresponding to separate permits issued by review program. As discussed under Specific Response 2-b , the forms were developed in the manner that they were in order to accommodate the informational needs of three review programs (Marine, as well as Inland Fisheries and Terrestrial Wildlife). Specific Response 3-b addresses how to select applying for a Specific Use permit rather than a General Use permit. Goal 2 (addressing the need for a new permitting structure, and with it, new application forms). Table 1 in the Second Amended ISOR addresses how the new permit structure and applications addresses the issues and problems of the existing permit structure and application.
23	Mary Wilson, con't.	23-c. As a small business owner with multiple responsibilities, more time is needed to review the regulatory proposal. The commenter requests an additional six months to put together detailed comments and suggestions for this important issue.	23-c. Refer to General Response 6 regarding the request for extension on the comment period.
23	Mary Wilson, con't.	23-d. Change Section 3a of the Scientific Collecting Permit Application "required qualifications" so that it only applies to the Principal Investigator (PI). The PI should have the ultimate responsibility for his/her collectors, as they have full liability. Nor should the PI be required to accompany staff members on simple collecting trips. It should be the PI who determines which employees should undertake collections on their behalf.	23-d. Authorized Individuals can work under adequate supervision, but independently under a PI in the field. Because of this, their qualifications require review, in addition to those of the PI. Refer to Specific Response 2-a regarding the need for documenting qualifications.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
23	Mary Wilson, con't.	23-e. Definitions of General and Specific Use permits are confusing. It is unclear when a Specific Use permit would be needed. The 10 pages of questions is burdensome on applicant.	23-e. Refer to General Responses 2.1 and 2.2 regarding the difference between the General and Specific Use permits, and what is allowed under each permit use level. All fields of the General and Specific Use application and respective amendment forms are justified on pages 40-66 of the Second Amended ISOR.
23	Mary Wilson, con't.	23-f. Give examples of when the Chain of Custody form would be needed.	23-f. Pursuant to proposed subsection 650(q), the Chain of Custody allows Permitholders and CDFW to track individual live, or dead wildlife, from collection to past death, and even to know where parts of wildlife are transferred to (tissue samples, clips, feathers, blood, etc.). Currently there is no formal way that organisms can be moved between aquariums; previously this fish have to be euthanized, as they cannot be released back into the wild without knowing where they came from. In this example, the recipient aquarium would also need to possess a SCP, pursuant to subsection 650(q)(1). The transfer of dead wildlife or parts thereof would not require the recipient to have a SCP, but to be named on the original collector's SCP as a recipient, and a Chain of Custody form should be completed and accompanying the specimen.
23	Mary Wilson, con't.	23-g. Why are notifications of field activity required? We did not need to do that in the past. As long as we are within the parameters of our SCP, what is the purpose of needing to establish the exact day? We cannot control the environment and the weather changes quickly and frequently here in northern California. We have often given dates and then been unable to go, so it just results in more unnecessary paperwork. This requirement is cumbersome and often hinders us. Forms DFW 1379a and 1379b are unnecessary and are burdensome for our business.	23-g. Notification of field activities is an important part of collecting by SCP permit holders and has been a part of the program prior to the proposed regulation changes. The main reason for notification is that CDFW Law Enforcement needs to know the details of researchers or others so that collectors who are using methodologies outside the FGC, or collecting in restricted areas, do not cause Law Enforcement to investigate suspect activities when alerted by members of the public. CDFW's Law Enforcement should not be called out unnecessarily to investigate a legal activity under a SCP. Notification of activities can be given for up to 14-days and at least 36 hours from planned activity in the field (reduced from 48 hour minimum notification, as indicated on pages 29-30 of the Amended ISOR). Flexibilities in the in the notification process can be granted to allow collections when weather conditions are conducive. See also General Response 4 for more information of notification of field activities. The necessity of forms DFW 1379a and 1379b is justified on pages 67-69 of the Second Amended ISOR.
23	Mary Wilson, con't.	23-h. A maximum of 200 fish per year for general permits is a good start, but why not have a step system of 500 and 1000 also? In addition to the general permit figures, I would suggest adding exceptions for schooling bait fish, such as herring, mackerel, and sardines.	23-h. The Marine General Use Permit take limits reflect reasonable numbers of fish for a small aquarium or researcher to obtain on an annual basis. Further, these limits are based on recreational fishing limits set in FGC Section 205. If an applicant requires a greater number of fish than stipulated in the Marine General Use Permit, then the more appropriate permit would be a Specific Use Permit for this type of collection.
23	Mary Wilson, con't.	23-i. I am happy that Fish & Wildlife last year reverted to their prior policy by opening up year round collecting and eliminating many size restrictions for the SCP. It made no sense for those collecting for scientific and	23-i. Depending on circumstances and species, these restrictions still exist under both the General Use Permit and the Specific Use Permit. As specific conditions can be placed on permits depending on circumstances to limit collector's activities to sport fishing license rules.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		educational reasons to abide by the same rules as a sport-fishing license.	
23	Mary Wilson, con't.	23-j. The Entity Permits are a good solution to prevent some of the problems that happened in the past, when some unscrupulous individuals left their respective organizations with the permit in their own name.	23-j. Under the existing Entity permit with the current structure, CDFW has witnessed issues of a PI who leaves that entity to be able to take the permitted work (and the permit) with them when they leave, which left the entity without a qualified PI, or a permit to conduct the permitted activities. As described under the justification for the proposed subsection 650(f)(1) and (2) in the Amended ISOR, CDFW clarifies that an entity will now own the permit, as well as the permitted activities approved under the permit. The creation of the role of the Executive Signatory for the Entity permit would oversee any change to the PI listed on a particular permit. With the Entity permit in the name of an entity, the proposed regulation provides a solution where the PI can be changed via a General or Specific Amendment if they leave the entity, so the entity wouldn't have to obtain a new permit.
23	Mary Wilson, con't.	23-k. When regulating SCP holders remember that there are less than 1,000 SCP issued in our state, and not all relate to marine collecting. How significantly can we possibly affect the marine population, especially when 40% of us are small entities?	23-k. Collections made under an SCP can certainly have an effect on the marine environment and deserves to be treated with the same caution as a commercial or recreational species. Much of the collections associated with a SCP are not for commercially, recreationally exploited or endangered species, and need to be managed accordingly. SCP are not solely marine-specific, and cover terrestrial and freshwater species. The Terrestrial Wildlife and Inland Fisheries review programs permit with endangered species listed both on a state and federal level, so CDFW is mandated to regulate scientific collection of organisms.
24	Doug Yanega Dept. of Entomology, UC Riverside Email dated 5/4/2017	24-a. The existing, and proposed regulations are worded to make it impossible for university and government researchers to conduct research and education with non-threatened terrestrial invertebrates.	24-a. The scope of this FSOR package is only for the proposed regulations, and accompanying documents, and not on regulations which became operative under Fish and Game Commission authority in July 1996. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
24	Doug Yanega, con't.	24-b. With random sampling of non-threatened invertebrates, it is impossible to predict what species or numbers will be captured. The activities conducted by government agencies, commercial and private individuals, and agricultural pest monitoring groups would be illegal under the present and proposed regulations, which don't allow for random sampling. While such regulations are practical for threatened and endangered species (which	24-b. Comment noted. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		researcher would be willing to comply), regulations for non-threatened terrestrial invertebrates are not practical.	
24	Doug Yanega, con't.	24-c. The field of entomology relies on universal allowance to collect opportunistically. It is impossible to train or educate students when specific dates, locations and taxonomic levels need to be identified ahead of time.	24-c. As detailed in General Response 1.2 , collection of invertebrates opportunistically in any location at any time, without authorization, permit or other exemption from CDFW is inconsistent with the law, particularly for educational purposes, when a clear authority to permit such take exists. General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1).
24	Doug Yanega, con't.	24-d. The proposed regulations are not conducive to discovery of new species, or of taxa that are yet unnamed. Small-scale sampling has the potential to result in take of unnamed taxa, and therefore cannot be identified on the application.	24-d. Refer to General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1). Given that most terrestrial invertebrates are exempted from needing a SCP, prospective sampling of unnamed taxa for taxonomic discovery is not anticipated to be affected.
24	Doug Yanega, con't.	24-e. Targeted collections are even opportunistic, and are generally unplanned. It is not possible to anticipate when such collections may take place.	
24	Doug Yanega, con't.	24-f. Even for invertebrate specimens collected 100 or more years ago, it is not possible to identify the majority of collected species to the species level within a normal timeframe that it might be possible to identify vertebrates to the species level. The reporting requirements are written to the level of vertebrate identification, rather than for invertebrates.	24-f. Reporting requirements are intended for specimens to be collected in the future, with the hopes that collection means taxonomic experts will be available to identify the specimens taken. See also General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1).
24	Doug Yanega, con't.	24-g. The existing and proposed regulations are unacceptable as written because they make it illegal for invertebrate collectors to comply.	24-g. Refer to Specific Response 24-a.
24	Doug Yanega, con't.	24-h. It would be easiest for CDFW to treat non-threatened invertebrates the same way as non-threatened plants, an action well within CDFW's authority. Doing so would virtually eliminate all the problems inherent with the existing provisions, which are practical for threatened and endangered, but not for those that don't have this special status designation.	24-h. Comment noted. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
24	Doug Yanega, con't.	24-i. Remove limits and reporting requirements for non-threatened invertebrate to alleviate concerns for identifying time and location, taxonomic identification and reporting for broad sampling activities. Then it would be more feasible to comply with the regulations.	24-i. Refer to General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1). Given that most terrestrial invertebrates are exempted from needing a SCP, prospective sampling of unnamed taxa for taxonomic discovery is not anticipated to be affected.
25	Professor and Director, Bohart Museum of Entomology, UC Davis Email dated 5/4/2017	25-a. With California's vast insect fauna, it is difficult to predict what can be targeted in advance for sampling. At least 6% of insect species are still new to science, and specialists are in demand for such identifications. The cost and review time for permitting stifles discovery, studies and surveys. There is a need to oversee collecting of endangered or threatened, but it is unclear why regulating teaching and scientific investigation is of value to CDFW.	25-a. Comment noted. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Specifically, General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a permit.
25	Lynn Kimsey, con't.	25-b. The regulations as drafted make it seem like mosquito abatement districts and public health agencies or organizations need a permit, such as during disease outbreaks.	25-b. As stated in the Second Amended ISOR, subsection 650(u)(2) and (u)(3) were removed from the proposed regulations because of statutory authority under which public health agencies and agricultural pest control agencies operate that are separate from CDFW's statutory authority to permit the take of wildlife for scientific, educational, or propagation purposes, as specified in these regulations. Further, subsection 650(u)(5) exempting the need for a SCP for the take of most terrestrial invertebrates (while those terrestrial and vernal pool invertebrates referenced the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017) (see General Response 1.1), mosquito abatement districts and public health organizations would likely not need a SCP.
25	Lynn Kimsey, con't.	25-c. Permitting would make courses where students must collect insects unfeasible, particularly when permit approval takes 6-8 weeks for a 10 week quarter. The fees for students would be high, and notification for students to collect near where they live burdensome.	25-c. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
25	Lynn Kimsey, con't.	25-d. What is done with the data, and how does it contribute to knowledge of California's fauna? It appears to funnel funds from the community more than anything else.	25-d. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data. Refer also to General Responses 1.4 and 3 regarding fees and costs.
25	Lynn Kimsey, con't.	25-e. The current and proposed regulations for non-endangered or threatened terrestrial or freshwater invertebrates are unjustified and	25-e. Comment noted. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		unnecessary and would hinder education and research. Oversight is understood for threatened or endangered species, or on state or federal parklands.	for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
26	Zach Lieberman Dept. of Life & Earth Sciences, College of Marine Email dated 5/4/2017	26-a. The commenter expresses concerns about the proposed regulations, where sampling is important for controlling agricultural pests, vectors for disease, and ecological studies. It is impossible to know which of tens of thousands of arthropods might be collected at a given site, and depends on weather or other unpredictable factors. Identification of collected specimens often doesn't happen for months or years after when species experts can identify the collection.	26-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Specifically, General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a permit. Refer to Specific Response 25-b regarding sampling for agricultural and vector control monitoring.
26	Zach Lieberman, con't.	26-b. Requiring a permit for non-threatened and non-endangered arthropods would reduce education and investigation in a variety of fields. Collection of threatened, endangered species, or on federal and state parklands should be regulated.	26b. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
26	Zach Lieberman, con't.	26-c. The same points apply for other terrestrial invertebrates. CDFW should not require a permit of these animals unless they are threatened, endangered or of special concern, to not hamper scientific advancement.	26-c. Refer to General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
27	Greg Ballmer Riverside Email dated 5/4/2017	27-a. The proposed SCP regulations are misguided, and a financial burden to scientific research, and may impede activities by citizen scientists, who contribute to many discoveries. CDFW has no statutory authority to list endangered or threatened terrestrial insects.	27-a. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, as well as General Response 3 regarding fees and cost recovery. CDFW only makes recommendations for listing and the Fish and Game Commission has authority for all the listings of animals and plants in California. The procedures for listing animals under CESA is not addressed under the proposed SCP regulations. However, CDFW does have the authority to regulate the take of any invertebrate for scientific, educational or propagation purposes, as detailed under General Response 1.2 .
27	Greg Ballmer, con't.	27-b. Impediments to citizen science are not in the public interest. The commenter cites an example whereby an individual unpermitted by the State engaged in take to identify a sensitive vernal pool crustacean. Strict application of SCP permitting requirements would not have allowed for such identification.	27-b. It is not CDFW's intention to impede or prohibit activities of citizen scientists. However, the rule of law regarding take applies to all persons engaging in such activities, and CDFW reminds the regulated community that proper permitting should be in place prior to engaging in take activities.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
27	Greg Ballmer, con't.	27-c. The fee increases appear to relate to the need to hire additional personnel to handle increased workload. The increased workload could be reduced by eliminating the need for a SCP for species that are not rare, endangered, or threatened, particularly for invertebrates, which are much different from vertebrates in terms of population size and generation time. As a comparison, agricultural pest control activities are destroyed when pesticides are applied, so requiring a SCP for such common insect collections would be a wasted effort and of no value to CDFW.	27-c. As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program, and at this time, not to hire additional staff. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
27	Greg Ballmer, con't.	27-d. Loss of habitat and land use changes have affected invertebrate populations more than scientific or recreational collection activities. If CDFW lacks authority or will to regulate land use decisions affecting invertebrate populations, declines may continue. Any policies or regulations that discourage data collection on such populations should be amended or abandoned.	27-d. CDFW thanks the commenter for bringing up this point regarding habitat loss and land use changes. Certain authorities grant CDFW the ability to regulate and/or inform certain land use changes, where habitat loss may occur. CDFW agrees that data collection should be encouraged to promote sharing of information, including of populations that may be affected by land use changes. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data. Refer to General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
27	Greg Ballmer, con't.	27-e. SCP fees appear to support bureaucratic processes rather than supporting management of the decline of invertebrate and other wildlife populations. CDFW appears to need more funds to pay more staff, when workload could be reduced. If CDFW does not manage or enhance terrestrial invertebrate populations it shouldn't be permitting them.	27-e. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650. Refer also to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement, as well as General Response 3 regarding fees and cost recovery.
28	Jeff Steinman	28-a. The proposed changes would be a burden on consultants, where a Specific Use	28-a. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use permit or
	Wildlife Biologist, Garcia and Associates Email dated 5/4/2017	permit would be required for each individual project. This application appears to be tailored more for graduate and university work, but not for consultants with multiple clients and ever changing, opportunistic field work.	amendment are anticipated to be able to cover multiple projects or contracts a consultant might face. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2).
28	Jeff Steinman, con't.	28-b. The timeframe for approval is unrealistic based on current staffing at CDFW. Without	28-b. CDFW appreciates the commenter's acknowledgement of the need for additional staff to assist with permit review. As stated in General Response 3 – (fees and cost recovery),

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
	·	hiring more staff, review and approval may delay clients' projects and increase costs to consultants.	and detailed in the SCP Fiscal Analysis (revised June 2017), CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program, and at this time, not to hire additional staff. As detailed under General Response 2.2 , Specific Use amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
28	Jeff Steinman, con't.	28-c. It appears the changes, which are better suited towards academics, would make things worse for consultants, which are thought to be the major permitholder group.	28-c. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each. Refer also to amended subsection 650(i)(2) and pages 22-24 of the Amended ISOR regarding clarifications to the permit structure.
29	Melinda Mohamed Wildlife Biologist, WRA, Inc. Email dated 5/4/2017	29-a. The commenter asks CDFW not to adopt the proposed regulations due to review timelines for projects, and would change the way consultants conduct work.	29-a. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each.
29	Melinda Mohamed, con't.	29-b. Consultants are often in frequent communication with CDFW as well as the U.S. Fish and Wildlife Service (USFWS) because of permitting. In making consultant work more difficult and costly, access to clients' lands, as well as timely data collection could be constrained, depriving CDFW and other groups of information that may otherwise not be obtained.	29-b. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face, and CDFW reminds permitholders that reporting is mandatory and required by statute.
29	Melinda Mohamed, con't.	29-c. A moderate price increase to the current permitting process could cover CDFW needs, which would allow to hire more staff for increased permit requests and paperwork.	29-c. As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program. As the commenter is not clear as to what a "moderate" price increase means, refer to the SCP Fiscal Analysis Alternatives 1 and 2 (pages 8-12) for cost recovery options evaluated.
30	John Heraty Professor, Dept. of Entomology, UC Riverside Email dated 5/4/2017	30-a. The commenters requested that CDFW not require permits for insects (and other invertebrates) that are not threatened or endangered, as CDFW currently does for non-threatened and non-endangered plants.	30-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
30	John Heraty, con't.	30-b. Regulation of non-endangered insects restricts the type and quality of research conducted for university, government, and other programs that assist with and inform industry practices in California (e.g., agricultural, medical, forestry, etc.).	30-b. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.5 regarding how it is perceived that proposed permitting might discourage research.
30	John Heraty, con't.	30-c. It would be impossible to predict what species or numbers of insects would be collected during sampling, and requiring a permit to do so would have negative effects.	30-c. Refer to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Refer also to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
30	John Heraty, con't.	30-d. Insects are the primary taxonomic group used to introduce younger generations to wildlife diversity. Educators should not face the burdens of the proposed CDFW permitting process. Requiring permit fees for K-12 for such activities would be a burden.	30-d. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students, as well as General Response 3 regarding fees and cost recovery.
30	John Heraty, con't.	30-e. Recommends CDFW exclude non- endangered or non-threatened terrestrial or freshwater arthropods from the permitting process, as is the case for plants, since it is impossible for CDFW to provide meaningful oversight for insects or arthropods.	30-e. Refer to General Response 1.1 regarding CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Refer also to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650.
30	John Heraty, con't.	30-f. Recommends CDFW exclude permits for representatives of a university, college, school, incorporated city, state or federal government agency, publicly owned zoo, or wildlife or research organization.	30-f. The commenter has noted the main permitholder affiliation categories, as identified in Figure 1 (page 83) of the Amended ISOR. As detailed in the justification for subsection 650(g) (pages 20-21 of the Amended ISOR), amendments by Legislature to FGC sections 1002 and 1002.5 expanded the types of organizations, affiliations, institutions, etc. that are eligible to apply for an Entity permit. As outlined in General Response 1.4 , Entity permits may help spread permit fee cost among a PI, and many Authorized Individuals, and allows for collaborative efforts to help reduce the burden of the proposed fees.
			It is fundamentally unequitable to exempt from permitting, or exempt fees for the commenter's noted categories of permitholders, while the few remaining groups (i.e., environmental consultants, private universities, public health and utilities, businesses, tribal, and for-profits) would be required to pay their fair share of fees to take wildlife for scientific, education and propagation purposes. Any situational exemption or reduced fees opens the door to other requests for fairness with the benefitted community.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
30	John Heraty, con't.	30-g. Recommends CDFW issue an Arthropod's Collector's Permit for Scientific Purposes, for the above noted classes of Permitholder types, via an online registry.	30-g. CDFW believes the concern is alleviated with the proposed exemption from permitting of most terrestrial invertebrate species. Refer to General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
30	John Heraty, con't.	30-h. Any of the above recommendations would decrease CDFW's responsibilities. CDFW should seek to negotiate permits with other land managers (e.g., State Parks, National Monuments, businesses, etc.). Researchers are willing to share their findings with CDFW to inform management of these resources.	30-h. As outlined on page 91 of the Second Amended ISOR, CDFW operates the SCP program under its own authority, and other state or federal entities may require permits under their own respective authorities. CDFW acknowledges that several databases exist where data can be shared in the public domain, as outlined in General Response 1.5 .
31	Craig Campbell Water Biologist II, City of Los Angeles Environmental Monitoring Division Email dated 5/5/2017	31-a. Notification of Field Activity, subsection 650(o): ocean conditions often change, requiring change in field sampling. More flexibility than the 48 hours advance notice should be allowable.	31-a. The timeframe for notification has been reduced from a minimum of 48 hours, to 36 hours prior to activity in the field, as indicated on pages 29-30 of the Amended ISOR. Refer also to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b). All other forms are updated with this window for notification.
31	Craig Campbell, con't.	31-b. Notification of Field Activity, subsection 650(o): is there a deadline to submit a revised notification, or can they be submitted day-of?	31-b. Subsection 650(o)(2) of the regulations clarifies that the same timeframe of a minimum of 36 hours is to be submitted for any changes to the original notification, as detailed in the justification for subsection 650(o) (pages 29-30 of the Amended ISOR).
31	Craig Campbell, con't.	31-c. Regulations, subsection 650(u): routine water or sediment sampling that do not target wildlife [in certain geographic locations] are exempt from permitting. Is targeted take of infauna exempt from notification of field activity requirements?	31-c. Unless otherwise stated in permit conditions, targeted take of benthic infauna in the allowable geographic areas described by subsection 650(u)(3) of the Second Amended ISOR would continue to require notification. Refer also to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b).
31	Craig Campbell, con't.	31-d. Standard Condition F, Standard Conditions for all Scientific Collecting Permits [form DFW 1379d]. Requirement to notify at least 48 hours in advance, as commented above.	31-d. Refer to Specific Response 31-a.
31	Craig Campbell, con't.	31-e. Standard Condition M, Standard Conditions for all Scientific Collecting Permits [form DFW 1379d]. Transfer of possession:	31-e. CDFW believes the commenter meant to refer to Standard Condition N – Transfer of Possession, rather than Condition M - Labeling of Vessels, Vehicles, and Capture Equipment. Language clarifying how benthic macroinvertebrate and infauna samples should

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	,	Chain of Custody – provide specific instructions for how to document benthic infauna samples (samples may not be identified down to the species level). Clarify if this requirement is only for permanently transferred samples?	be labeled has been added to the Instructions, page 3, Section 3, of the Transfer of Possession – Chain of Custody form (DFW 1379c – revised with the Amended ISOR dated August 14, 2017), and is justified for this form (page 70 of the Amended ISOR), which carries over to the referenced Standard Condition (form DFW 1379d).
31	Craig Campbell, con't.	31-f. General Use permit: limits and methods contradict NPDES requirements. Commenter assumes such take would fall under the Specific Use, rather than the General Use permit. Perhaps there a blanket statement could allow exceedances to CDFW permits if sampling is mandated by NPDES permits?	31-f. The commenter is correct to assume that a Specific Use permit would be required for NPDES –related take activities, if the species limits, methods and other allowances granted by the Authorizations of a General Use permit do not meet an applicant's needs. Refer also to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each.
31	Craig Campbell, con't.	31-g. Regulation subsection 650(b)(19): a PI may not be able to identify over 3,000 species/ subspecies level for marine benthic infauna – it takes specialists to be able to ID specific taxonomic groups.	31-g. CDFW understands that identification and expertise in all potential and possible species being targeted, or captured incidentally as by-catch is not possible in all cases. As addressed for terrestrial invertebrates under General Response 1.3 , it is expected that samples of unidentified invertebrates may need to be sent to other taxonomic specialists to confirm identification. This is allowable, given the aquatic invertebrate specimens are preserved, and that a Chain of Custody form (DFW 1379c) accompanies such samples.
31	Craig Campbell, con't.	31-h. Regulation subsection 650(b)(19): a PI may not be able to train Authorized Individuals and/or Field Assistants on the permit in the 3,000+ species/ subspecies level for marine benthic infauna. Language could be modified to ensure appropriate training is provided.	31-h. Refer to Specific Response 31-g. Pursuant to subsection 650(b)(19)(A), it is understood that a PI would provide supervisory oversight over Authorized Individuals and/or Field Assistants to ensure authorizations, conditions and terms of the permit are met. This also includes training of Authorized Individuals to send samples for identification, if needed.
31	Craig Campbell, con't.	31-i. Notification of Field Activity, subsection 650(o): due to the PI being unavailable for any time a field activity may need to occur, provide an option for Authorized Individuals to notify CDFW, aside from the PI.	31-i. As clarified in subsection 650(o), as well as on the Notification of Field Work or Activity (form DFW 1379b), language has been added to allow for any Authorized Individual on an Entity or Individual permit aside from the PI to prepare and send in the Notification form.
31	Craig Campbell, con't.	31-j. Completed custody form, subsection 650(q)(3): identification of over 3,000 species/ subspecies level for marine benthic infauna cannot be performed, and transfer is to independent specialists is often required. Thus the form cannot be completed for several months.	31-j. Commented noted. Refer to Specific Response 31-e , explaining that instructions for the Chain of Custody form (DFW 1379c, page 3, Section 3) have been clarified.
31	Craig Campbell, con't.	31-k. Completed custody form, DFW 1379c: identification of over 3,000 species/ subspecies level for marine benthic infauna cannot be performed, and transfer is to independent	31-k. Commented noted. Refer to Specific Response 31-e , explaining that instructions for the Chain of Custody form (DFW 1379c, page 3, Section 3) have been clarified.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		specialists is often required. Thus the form cannot be completed for several months.	
31	Craig Campbell, con't.	31-I. Completed custody form, DFW 1379c, page 3, Section 3 (instructions): can the "range of IDs" cover the standard taxonomy for the over 3,000 species/ subspecies level for marine benthic infauna?	31-I. Commented noted. Refer to Specific Response 31-e , explaining that instructions for the Chain of Custody form (DFW 1379c, page 3, Section 3) have been clarified.
31	Craig Campbell, con't.	31-m. Inland Fisheries General Use permit, Section 4, Authorization F2, Methods & Equipment: Inland surface water in the LA River Watershed generally exceeded 21°C in the late Spring through early Fall sampling period. If this restriction is followed no scientific collection with take would be able to take place during this period. Should be changed so that only the first part of this requirement applies (within 2°C) If the water temp of the surface water being sampled exceeds 21°C.	31-m. The temperature limit of 21°C is meant to address the sensitivity of fish to handling in warmer water and is consistent with federal permit regulations. In cases where these temperatures regulations cannot be met a Specific Use Permit would be needed to justify the need to sample in higher temperatures.
31	Craig Campbell, con't.	31-n. Inland Fisheries General Use permit, Section 4, Authorization F2, Methods & Equipment: Most of the time fish are collected at a specific location to determine whether the fish being caught by the general public are safe for them to eat. It is best to simulate the methods the public uses to catch fish so that the same species are caught for scientific analysis. If the area being sampled is not restricted, so that the public can only use barbless hooks and artificial lures, it seems like this restriction on the scientific collection method would make it difficult to catch the same species as the public. This would make it much harder to determine whether the fish the public are catching and eating are safe to eat, thus negating the purpose of the scientific collection of the fish.	31-n. The General Use permit is intended to allow take that would not require additional review by CDFW. Fishing with barbed hooks and bait may be allowed, but would require further evaluation and therefore, would require a Specific Use permit.
31	Craig Campbell, con't.	31-o. Inland Fisheries General Use permit, Section 4, Authorization F2, Methods & Equipment: Commenter is confused about whether the return of fish into freshwater	31-o. "Returned to freshwater" is intended to mean that fish will be returned to into the source freshwater body of capture, as clarified under Authorization F2 of the Inland Fisheries General Use permit (form DFW 1379GF, page 9) with the Amended ISOR. Only small nets were allowed under a General Use permit to limit the take and minimize effects

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
		means back into the water body being sampled or into a bucket containing freshwater. This restriction would be an impossibility if it means you only have 10 minutes to sample, collect, ID, weigh and measure all the fish collected via seine net before they had to be returned to the water body itself.	on the species captured. If a larger scale seining project is needed in which these time restrictions cannot be met, a Specific Use permit would be needed.
31	Craig Campbell, con't.	31-p. Inland Fisheries General Use permit, Section 4, Authorization F2, Methods & Equipment: Earlier in Section 4, it seems like take of fish is allowed under the General Use permit. But according to this statement later in the Section only Capture, Handle, and Release is authorized under the General Use permit. Commenter requests clarification.	31-p. Capture, handle, and release is take. FGC Section 86 defines take as follows: "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill. The Inland Fisheries General Use permit does not allow procedures such as marking, genetic sampling, tagging, etc. to be implemented on fish subject to "take" under a General Use permit – such uses may be considered via application with the Specific Use permit.
31	Craig Campbell, con't.	31-q. Inland Fisheries General Use permit, Section 3a – required qualifications. These requirements seem like overkill for the General Use. The company or agency should determine the qualifications and experience hired to conduct the work. Does CDFW even have enough employees to process this info/	31-q. As detailed under Specific Response 2-a , qualifications review is highly dependent on the review program. A combination of training, education, certification and other considerations were built into the qualifications language under subsection 650(h). The SCP review program staff evaluate applications and qualifications objectively. The necessity of qualifications information for all Authorized Individuals (aside from the PI) is outlined on pages 20-21 of the Original Proposed ISOR.
32	John Spranza Principal/ Aquatic Ecologist, Dudek Email dated 5/5/2017	32-a. The commenter understands that a General Use permit is intended for nonspecial status species with low impact methods, while a Specific Use would be necessary for project-specific information involving take involving special status species and more invasive methods.	32-a. Refer to Specific Response 11-a.
32	John Spranza, con't.	32-b. New clients, projects, or changes in existing projects, species or survey areas would be required for the Specific Use. An amendment would take at least 100 days to obtain, but could be longer if the application is deemed incomplete. There are separate fees for General, Specific Use and their amendments.	32-b. Refer to Specific Response 11-b.
32	John Spranza, con't.	32-c. The proposed tiered permit structure is not workable for environmental consultants. To wait a minimum of 100 days for an amendment would be burdensome on this stakeholder	32-c. Refer to Specific Response 11-c.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		group, and CDFW's workload might push it beyond this timing.	
32	John Spranza, con't.	32-d. Academics and researchers often have discrete projects over known durations that can be anticipated in advance. Consultant work is often of varied duration, requiring quick turnaround. The proposed changes would require a wait of minimum of 12 weeks under the proposed changes, and higher fees, relative to the existing system which relies more on the qualifications of the applicant warranting them working on multiple projects over a permit period. Additional burden is placed on the applicant or PI to track all approved staff, permit statuses and reporting associated with the new process.	32-d. Refer to Specific Response 11-d.
32	John Spranza, con't.	32-e. It is unclear the standards for qualifications which could lead to arbitrary approval or denial of an application. where greater scrutiny would be warranted for species more sensitive to handling. Certifications or trainings by societies should be taken into consideration. The commenter is concerned about restricted pools of consultants or researchers found qualified and competent by CDFW to work with certain species, when others could be as well to minimize delays to projects.	32-e. Refer to Specific Response 11-e.
32	John Spranza, con't.	32-f. CDFW should recognize federal take permits for the same species to substitute for the state SCP, where CDFW could be a recipient of all reports required by the federal permit.	32-f. Refer to Specific Response 11-f.
32	John Spranza, con't.	32-g. SCP renewals should be ministerial, given permitholders meet all permit terms. Amendments should be issued within 30 days.	32-g. Refer to Specific Response 11-g.
33	Brian Banker Email dated 5/5/2017	33-a. It is believed that recreation collecting of non-edible, non-protected arthropods on non-protected lands required a valid sportfish license, but that this is generally not enforced. The proposed regulations require the costly	33-a. Comment noted. SCPs are issued for the take of wildlife, in any part of the state, for scientific, education and propagation purposes. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		SCP for insect/ spider take for any reason, at any time, and would now be enforced, which the commenter states is a mistake.	Invertebrates of Conservation Concern list (dated June 12, 2017). Lastly, refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.
33	Brian Banker, con't.	33-b. Amateur collectors have sourced a great deal of information about insects and arachnids, and their activities have no impact on population sizes, and are not taken for personal consumption like other invertebrates. Vertebrates, and threatened and endangered entities may warrant enforcement. Strict standards under these regulations would limit using bug spray, photographing a moth; such restriction is likely not what was envisioned when SCP regulations were drafted in the 1940's.	33-b. As stated in General Response 1.5, CDFW does not wish to discourage the fascination and passion that amateurs and other hobbyist collectors that have led to scientific discoveries of certain species. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement. Refer also to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
33	Brian Banker, con't.	33-c. Common sense should prevail when considering the value of individual invertebrate specimens compared to those of vertebrates. There should be other ways to address revenue concerns at CDFW than by punishing everybody, perhaps by re-distributing workload so new people don't need to be hired (and funded).	33-c. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and fiscal restraints of SCP administration, as well as General Response 3 regarding fees and cost recovery.
33	Brian Banker, con't.	33-d. The commenter wouldn't be against a user-friendly permit with reasonable annual fees, ability to conduct research in State Parks and ecological reserves, reporting. The proposed regulations do not appear to have any ecological benefit, and the amateur, naturalist and entomological community hope the proposed regulations are rejected. Students should be able to assemble insect collections for a class, and citizen science should be supported by CDFW.	33-d. CDFW believes the concern is alleviated with the proposed exemption from permitting of most terrestrial invertebrate species; refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). As outlined on page 91 of the Second Amended ISOR, CDFW operates the SCP program under its own authority, and other state or federal entities may require permits under their own respective authorities for certain land ownership or designations (i.e., Department of Parks and Recreation). Lastly, refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection.
34	Kelly Richers Superintendent, Wasco Union Elementary School District	34-a. The proposed regulations may be applicable to vertebrates, but are draconian and will impede those who study and collect invertebrates – a bureaucratic nightmare for California citizens.	34-a. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and CDFW's approach in response to comments on the Original Proposed ISOR to exempt from permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	Email dated 5/5/2017		
34	Kelly Richers, con't.	34-b. Any person studying moths would have to have a permit and notify CDFW 48 hours before setting traps or attractants. This policy would either be ignored, or if complied with, will overload CDFW.	34-b. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
34	Kelly Richers, con't.	34-c. Potential effects on students would be catastrophic, and amateurs, who contribute to scientific discoveries, would be impacted by this cumbersome and onerous proposed process.	34-c. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. Refer also to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
34	Kelly Richers, con't.	34-d. It appears from the regulations that windshield strikes or homeowners with bug zappers would be violation.	34-d. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.
34	Kelly Richers, con't.	34-e. The commenter requests CDFW evaluate the proposed regulations to exclude public land with reference to invertebrates, since state and federal park permits already exist, and not further burden game wardens.	34-e. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
35	John O' Sullivan Monterey Bay Aquarium Letter dated 5/5/2017	35-a. Commenter requests that CDFW extend the formal comment period on the draft rulemaking beyond May 8, 2017 for additional 60 day extension to review and comment on the proposed changes. Other scientific and educational institutions in California may have had the same difficulty. The extension would allow the Aquarium to respond in detail to the draft regulation and would benefit CDFW in finalizing the rule.	35-a. Refer to General Response 6 regarding the request for extension on the comment period.
35	John O' Sullivan, con't.	35-b. Specific and General Use Permits: The Aquarium anticipates it would be beneficial to have both Specific Use and General Use permits for its collecting program. We should be able to minimize the need for additional submissions to support annual amendments to our Specific Use Permit.	35-b. CDFW appreciates the supported two-permit structure by the commenter, and concurs that there is benefit to obtaining both permits types. As clarified under General Response 3 , it would be permissible to hold both a Marine General Use Permit and a Specific Use permit with the same PI. Any organism collected under either permit the specimens will need to be clearly delineated on what has be collected with which permit. Refer to subsection 650(b)(19) for the responsibilities of a PI that must be met for each permit held.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		Will it be permissible for the same PI to apply for and receive both permits? The commenter states he cannot find this information in the proposed regulations, stating that a PI can or cannot be on one or more Specific Use and General Use Permit(s) at the same time.	
35	John O' Sullivan, con't.	35-c. List of Authorized Individuals (LAI): if CDFW has previously approved staff members at the Aquarium, must the LAI requirements be met again when the Aquarium applies for a renewal of a permit?	35-c. As stated in subsection 650(h) of the proposed regulations, each Authorized Individual shall provide certain qualification information to request to be named on a LAI. In the online application system, this is envisioned to involve each Authorized Individual creating a profile, and maintaining/ updating required qualification information with gained experience, technical ability, trainings (i.e., CV or resume, statement of qualifications) in order to be named on a LAI for a subsequent permit, or permit renewal. Some flexibility in meeting LAI requirements may be granted depending on the organization or entity whose permit is established, whether an Authorized Individual had been named on a LAI previously, and the species or nature of the methods requested in the permit application. Refer also to Specific Response 2-a regarding the role qualifications play in permit issuance.
35	John O' Sullivan, con't.	35-d. Notification Prior to Field Work: Requiring that the PI be the person that has to notify poses a very high administrative burden on us and other similarly situated large institutional permittees. We suggest the notice Authorized Individual be principally responsible to notify CDFW for each activity under the permit, and not necessarily the PI.	35-d. As clarified in subsection 650(o), as well as on the Notification of Field Work or Activity (form DFW 1379b), language has been added to allow for any Authorized Individual on an Entity or Individual permit aside from the PI to prepare and send in the Notification form.
35	John O' Sullivan, con't.	35-e. Chain of Custody: To donate living specimens to other institutions, must the receiving institution have a permit from CDFW authorizing possession of the specific species? And to donate non-living species, must the receiving institution have a permit authorizing the possession?	35-e. Pursuant to the proposed subsection 650(q)(1), when donating living wildlife to other entities or person, the receiving entity or person would be required to obtain a SCP for the possession of such wildlife, or have written authorization issued by CDFW. A CDFW-approved and issued SCP, where a person or entity is named on that SCP's LAI or in the permit conditions as a recipient of transferred live wildlife, could count as written authorization of the transfer from the original permitholder to the recipient. However, the donor and recipient would additionally need to complete and sign a Chain of Custody form (DFW 1379c), which describes which wildlife species were taken, where and when, as well as donor's contact information, and the recipient's contact information.
			As stated in subsections 650(q)(2), and (3), when donating dead wildlife (pursuant to subsection 650(b)(18), interpreted to mean specimens, carcasses or parts thereof) to eligible entities or persons engaged in scientific study, education and propagation, a separate SCP is not required for the recipient to receive such dead wildlife into possession. The original permit authorizing the take of the specimens in possession may list an entity or person on a permit's LAI as a recipient of the specimens, and a copy of this permit may serve as lawful documentation of take and possession. However, a Chain of Custody form must be completed and in possession at all times, including during shipments and

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			transportation of such specimens. Pursuant to subsection 650(q)(3) and (4), when there is no original permit authorizing the take on which a recipient is named, or during subsequent transfers (where a previous recipient now acts as a donor to transfer the wildlife specimens), the Chain of Custody form shall serve as the documentation of lawful possession.
35	John O' Sullivan, con't.	35-f. What is the holding time requirement for that specimen prior to making the donation? We request a shorter holding period term not to exceed four weeks, before we can donate a species as opposed to the 18-month term we have conditioned on our permit now.	35-f. Regarding the 18-month holding requirement for transfer of organisms between entities, holding times are not discussed in these regulations and are a condition placed on permits based on a case-by-case basis. This condition was agreed upon based on discussion between CDFW and relevant permitholders. This time frame was a reasonable allowance for both parties to ensure the permitholder can transfer specimens that are no longer suitable (e.g., outgrew tank, behavioral problems, etc.) and to ensure the permit holder is not acting as an intermediate between wild caught specimens and non-permit holders. At this time, we have not evaluated changing this period, but would consider doing so in the future.
36	Ellen Paul Executive Director, Ornithological Council Email dated 5/5/2017	36-a. The Ornithological Council (OC) appreciates the amount of effort by CDFW staff and outreach to the regulated community, however, many suggestions submitted by OC during the 2015 pre-notice comment period were rejected and/or not addressed in the ISOR, and CDFW is urged to re-consider the ideas that were submitted.	36-a. CDFW also appreciates the OC's time and effort to provide suggestions on the proposed regulations during the official public comment period, and we provide our responses below. CDFW considered all comments and suggestions during the pre-notice period, and incorporated into the regulatory proposal those comments and suggestions that helped achieve the rulemaking's five goals (as outlined on pages 6-12 of the Original Proposed ISOR).
36	Ellen Paul, con't.	36-b. The OC appreciates the role of the permitting regulations in protecting wildlife populations and share the CDFW's commitment to wild bird conservation, and request the proposed regulations be reconsidered to achieve that end with as little burden as possible.	36-b. As trustee agency for the State's fish and wildlife resources, CDFW appreciates the commitment of OC and other partners to the scientific study and conservation of birds, as well. As noted on page 1 of the Original Proposed ISOR, SCPs enable the public to engage in scientific research, education and propagation activities, where research and data collection help benefit and conserve the State's wildlife resources. SCPs also allow CDFW to monitor research activities to determine how they affect wildlife populations, and provide an important mechanism for CDFW to balance public use and conservation of wildlife.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
36	Ellen Paul, con't.	36-c. The OC requests a registration system with an accelerated process for ornithological research, in lieu of a full permit, because the USFWS and U.S. Geological Survey (USGS) already review and scrutinize applications, screen qualifications and process permits for research on birds protected under the Migratory Bird Treaty Act (MBTA) and federal Endangered Species Act (ESA).	 36-c. CDFW has considered the proposed registration system to streamline permitting of bird research activities, however, we decided against the proposal for the following reasons: i. we already heavily rely on federal permits; ii. we screen for different special concern taxa; iii. USFWS does not typically screen qualifications for MBTA permits; iv. few conditions are provided in the federal USGS Bird Banding Lab (BBL) and MBTA permits; v. CDFW would lose the opportunity to provide conditions independently of the federal government for species, activities, methods and locations; vi. reporting format is list form, whereas we desire detailed reports in standard scientific format; vii. cost recovery would not be achieved and a registration would not be fair to the rest of the stakeholder group; and viii. we would lose the opportunity to weigh in on research in California and abdicate the trustee responsibility under CEQA.
36	Ellen Paul, con't.	36-d. According to USFWS Region 8 MBTA staff, CDFW consults with their office with about 20% of the permits issued, primarily for species on the USFWS list of Birds of Conservation Concern. The CDFW could request additional consultations with the USFWS as to those species for which it feels such consultation is needed.	36-d. CDFW does coordinate with USFWS permitting staff in both the Recovery and Migratory Bird offices, in addition to the USGS Bird Banding Lab when necessary, and CDFW will continue to coordinate and share information with USFWS on an as needed basis, in order to achieve our shared goals of bird conservation and facilitation of bird research in California, especially in regards to permit requests for bird taxa and/or activities of concern. Our jurisdiction is limited to the geographic boundaries of California and we also consider cumulative impacts to species, while also working closely with researchers to form working relationships and collaborations.
36	Ellen Paul, con't.	36-e. With regard to the impact on wildlife populations, any researcher whose work requires Animal Welfare Act compliance must obtain approval for the research protocol from the Institutional Animal Care and Use Committee (IACUC). The IACUC is required by law to require that the researcher justify and minimize the number of animals to be "used" in the study. This law pertains to any research funded in whole or in part with federal funding, which likely covers a very substantial number of research projects in California. This additional scrutiny should further reassure the CDFW that there is sufficient oversight to justify a system that reduces the CDFW's own oversight and, in	36-e. The Animal Welfare Act (AWA) and its associated regulations set the standards for humane care and treatment for certain warm-blooded animals that are exhibited to the public, bred for commercial sale, used in research, or transported commercially. Facilities using regulated animals for regulated purposes must provide their animals with adequate housing, sanitation, nutrition, water and veterinary care, and they must protect their animals from extreme weather and temperatures. The AWA is upheld and enforced by U.S. Department of Agriculture (USDA) Animal Care unit. The AWA, which became law in 1966, does not cover every type of animal used in every type of activity. The following types of animals that may be studied under an SCP are not covered by AWA: coldblooded species (amphibians and reptiles); fish; invertebrates (crustaceans, insects, etc.). Birds are covered under the AWA but the regulatory standards have not yet been established. Institutional Care and Use Committees (IACUC) are mandated by AWA, in addition to the Health Research Extension Act of 1985 (HREA), which establishes guidelines for the proper care and humane treatment of animals used for biomedical and behavioral research, and

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	Tomat, Date	turn, reduces burden on CDFW and the researchers.	policies are then developed separately for each institution. According to the U.S. Department of Health and Human Services National Institutes of Health's "PHS Policy on Humane Care and Use of Laboratory Animals (2015)," the HREA applies to any public or private organization, business, or agency (including components of Federal, state, and local governments) where any live, vertebrate animal used or intended for use in research, research training, experimentation or biological testing or for related purposes.
			CDFW typically only requests IACUC protocols when additional information is needed from university researchers who are sacrificing or taking animals into captivity to ensure animals will treated humanely at the institution's animal facility(ies), or in cases where anesthesia is being used to chemically immobilize animals in the field (e.g., for mountain lion biotelemetry studies). CDFW greatly appreciates the scrutiny that various IACUC's place into developing policies and reviewing researcher protocols, because the applicant is required to address questions we may have regarding care and treatment of animals, and therefore reduces the time required for CDFW's application review. However, the applicability of IACUC protocols to SCPs is narrow in scope, and IACUCs do not apply to most SCP holders conducting research on wild animals in the field. Overall, the IACUC review of certain research projects does not substitute for the requisite biological expertise of CDFW for evaluation of the potential impacts to wildlife resources arising from scientific, education and propagation activities for all wildlife species on a statewide level, but are useful when appropriate, and we do review them and occasionally need clarifications and updates. Methods allowed under IACUCs do increase likelihood of injury or death, and need to be reviewed and conditioned appropriately by CDFW. While IACUCs may consider duplication of research after a thorough literature review, IACUC committees exist independently of one another, and do not have a fully informed statewide perspective of all other research and surveys being conducted throughout the
36	Ellen Paul, con't.	36-f. We ask CDFW consider the number of times it has denied a permit for ornithological research, or has issued a state permit that differs in any significant way from the federal permit issued for the same activity. The OC is	State. 36-f. CDFW rarely denies permits for research on birds, in comparison to the number of permits approved over time. However, CDFW does frequently issue permits with authorizations and conditions that are more restrictive than the associated federal permits, and several examples are provided below to indicate our need for specialized authorizations and conditions, and reporting format, including CNDDB reporting.
		not aware of such cases in 25 years, which provides evidence CDFW has been satisfied that federal permits are sufficient to assure both activities and impacts are acceptable, and permittees qualified, thus supporting a streamlined process for bird research and acceptance of federal permits to satisfy CDFW's goal of protecting wild bird populations.	i. Federal Bird Banding Permits issued by USGS allow subpermittees to conduct all the same auxiliary marking methods as a Master Bander, if the subpermittee has special authorization to "auxiliary mark" on the permit they are named, even if the subpermittee is not qualified for all the marking methods. During the SCP review process, CDFW will independently evaluate study proposals and qualifications for auxiliary marking, and we specifically authorize only the marking methods a person has justification for and has experience with. As a result, SCPs are often more restrictive regarding auxiliary marking authorization when compared to federal banding permit.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			ii. Federal Scientific Collecting Permits issued by the Migratory Bird office of the USFWS can allow permittees to sacrifice birds for scientific purposes. During the SCP review process, CDFW frequently reduces the authorized limits (e.g., by location, annually, over the term of a permit) for bird species covered by a federal permit, and does not allow certain bird species to be sacrificed that the USFWS may have allowed. As a result, SCPs are more restrictive regarding species and numbers authorized for sacrifice when compared to federal permits.
			iii. Federal permits issued by the Migratory Bird office of the USFWS usually do not have permit requirements for holding facilities and care of wild birds in captivity, and often allow release of wild birds back into the wild after spending time in captivity. Whereas, CDFW is responsible for the surveillance and investigation of wildlife diseases, and preventing harm to natural resources and public health resulting from wildlife diseases. CDFW has significant concerns about disease transmission during SCP activities, and federal permits are not adequate to alleviate such concerns. Therefore, SCPs are almost always more restrictive than federal permits in regards to requiring measures to minimize disease transmission for live birds held in temporary and/or permanent captivity (i.e., including but not limited to, biosecurity measures, disinfection and cleaning procedures, waste disposal, and health assessments as noted on page 10 of the proposed Specific Use SCP application).
			iv. CDFW has further determined that the reports required by the USGS Bird Banding Lab are not sufficient to meet CDFW information needs, because these federal reports are primarily limited to a banding schedule listing the dates, generalized location blocks, band number and species banded, and no annual report is required summarizing the results of the research in standard scientific format (in addition to CNDDB data and any scientific journal publications).
36	Ellen Paul, con't.	36-g. Suggest CDFW utilize FGC subsection 1002(c), and retain and implement the current regulation Title 14 650(b)(4), thus keeping the ability to exempt an SCP for any bird research activities covered under a federal Bird Marking and Salvage Permit (aka bird banding permit), at least for future use by CDFW.	36-g. When the Title 14, Section 650, CCR regulations were last amended under Fish and Game Commission authority in 1996, changes included incorporating into Section 650 certain elements from the repeal of Title 14, Section 653, CCR (Marking Birds for Scientific Purposes), which also falls under authority of FGC Section 1002. Provision for a free banding permit for raptors only was added to FGC Section 1002 sometime between 1959 and 1965, and implementation of such a permit was specified in Section 653. This included mention that a permit issued pursuant to Section 650 was required for the capture and marking of raptorial birds – hawk, owls and their allies (orders Falconiformes and Strigiformes) and "resident game birds," whereby a state permit was not required for capture and mark of migratory birds under a federal Bird Marking and Salvage Permit. CDFW staff is aware that free State bird banding permits were issued as recently as 1977, however, institutional knowledge of CDFW suggests that the repeal of Section 653 coincides with the time when free bird banding permits were discontinued, relying on Section 650 for authorizing the take (capture, banding, etc.) of all birds, not just raptorial birds.
			CDFW has determined the OC's request to retain current regulation Title 14 Section

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Commenter Name, Format, Date	Comment	Department Response
1 ormat, Bate		650(b)(4) for current or future uses undermines CDFW's ability to reasonably conserve, protect and manage birds and bird populations for the following reasons:
		 i. CDFW would not know or be able to quantify what bird banding work would be occurring in California;
		ii. CDFW would not be able to ensure researchers who are working in the same locations are coordinating with each other to avoid duplicate work and to avoid impacts to local populations, and to share information on individually-marked individuals and their movements, including with CDFW regional biologists;
		iii. CDFW would not be notified of the permitholder going out to conduct the work, and CDFW Law Enforcement could then be called to respond for no cause;
		iv. CDFW would not have the opportunity to inform people that they first need to receive written authorization from the CDFW Reserve Manager prior to entering CDFW lands to conduct research activities.
		v. CDFW could have an issue (permit history, as in violations) with a bird bander that the BBL not know about;
		vi. Reporting for the federal Bird Banding Permit is primarily limited to a banding schedule listing the dates, generalized location block, band number, and species banded, and no annual scientific report is required summarizing the results of the research, thus we lose ability to condition a State permit for scientific reporting on annual basis and for obtaining publications;
		vii. CDFW would also lose the opportunity to require permittees to submit location information on special concern birds to CNDDB;
		viii. CDFW would lose the ability to limit or restrict capture methods, sensitive habitats or locations of research, and take of special concern birds, including species listed under the California Endangered Species Act that may not be restricted under federal Bird Banding Permit (e.g., willow flycatcher, sandhill crane);
		ix. The current regulation Title 14 Section 650(b)(4) exempts any individuals who possess a valid federal BBL permit, except when working on raptorial birds, whereas, CDFW may allow a free permit only for the banding of birds under current law, FGC subsection 1002(c). It is an important distinction that federal Bird Banding Permits can also authorize use of alternate marking methods (patagial tags), blood and feather collection and radio-marking, and these methods do increase likelihood of injury or death, but these additional activities are not specifically mentioned under current law, FGC subsection 1002(c);
		x. As noted above, permittees are often conducting more activities than just banding non-raptorial birds pursuant to federal BBL permits, and those biologists could interpret our regulations to indicate no SCP needed for any bird research, as long as they have a federal permit from USGS and/or USFWS, and this would further lessen biological feedback to us on bird research and reduces our ability

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
			to coordinate and collaborate with researchers in CA; and xi. The current regulation Title 14 Section 650(b)(4) conflicts with FGC subsection 1002(c) that indicates we can issue a 12 month permit for banding of birds, and does not specify the option for a permit exemption.
36	Ellen Paul, con't.	36-h. CDFW might wish to exercise additional control over species deemed "threatened, endangered, or fully protected" under state law, and a federal Bird Banding Permit registration system would help address concerns with these listed taxa.	36-h. As stated under General Response 2.1 , birds that are listed as threatened, endangered, or candidate under the California Endangered Species Act, or Fully Protected Birds, are permitted through a separate memorandum of understanding (MOU) pursuant to FGC subsection 2081(a) and/or FGC Section 3511. An exemption to SCPs or simple registration system would not fully alleviate CDFW concerns regarding the incidental capture, injury or mortality of CESA-listed or Fully Protected birds species. CDFW would still need to review permit requests, qualifications, and provide permit conditions to alleviate concerns about incidental take of state-listed birds. Federal banding permits often provide broad authorization for banding threatened and endangered species, and those species are often CESA-listed as well, and/or fully protected. We have found that a fair number of permitholders have difficulty separating the status of all state and federally-listed species and our special MOU-related requirements for fully protected species. Having direct interaction with permitholders gives us the best chance at properly educating them on the various permit/MOU types and procedures.
36	Ellen Paul, con't.	36-i. The holder of a federal bird banding permit could register with the CDFW at a nominal fee (perhaps \$50 for a three-year period), and submit copies of the reports required by U.S. Bird Banding Lab, send CDFW revised federal permits, and provide advance notice of the times when and places where the research will occur. The CDFW authorization could be provided by way of a letter or by stamping and co-signing the federal permit.	36-i. As noted under Specific Response 36-g, CDFW has determined that providing a permit exemption for bird banding or any other bird research activities severely limits CDFW's ability to uphold its public trust responsibilities. While issuing free bird banding permits pursuant to FGC subsection 1002(c), or implementing a registration system with a nominal permit fee as proposed, would allow CDFW to provide permit conditions to bird researchers with limited oversight, thus alleviating some concerns to a complete permit exemption for all bird research covered under a federal Bird Banding Permit. However, free or lower fee permits would not provide CDFW the necessary financial resources to meaningfully implement, enforce or manage such a permitting system, nor allow for us to process information or reports required in a permit. While not specifically addressed in the fiscal analysis for the SCP regulatory package, a \$50 fee would undoubtedly not fully recover CDFW's cost to implement a functional permit registration system that facilitates receiving reports (and reviewing/filing reporting information), storage and management of federal permit files, responding to Notifications to Conduct Field Work or Activity forms, and issuing a streamlined State bird banding permit. The legislature has found that CDFW is inadequately funded to meet its mandates, CDFW has been largely supported by user fees, and that user fees are not sufficient to fund all of CDFW's mandates. The legislature has also given CDFW authority to adjust the fees for SCPs by regulation as necessary to fully recover, but not exceed, all reasonable administrative and implementation costs to CDFW. Therefore, CDFW has determined the costs to evaluate applications, review qualifications, and issue permits for banding and marking birds, and review and file the reports (including CNDDB purposes) shall require

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			fees equal to all other permit requests. CDFW has further determined that the reports required by the USGS Bird Banding Lab are not sufficient to meet CDFW information needs, because these federal reports are primarily limited to a banding schedule listing the dates, generalized location blocks, band number and species banded, and no annual report is required summarizing the results of the research in standard scientific format (in addition to CNDDB data and any scientific journal publications). Furthermore, the value to CDFW of the working relationships and collaboration and coordination with avian researchers that occurs as part of the permit and reporting process is difficult to assess in financial terms, but in regard to conservation value for avian resources in the state, it is an essential benefit that must be maintained. It can be a win-win situation for gathering ecological information on select species, or for evaluating species conflicts of interest to CDFW and to a University researcher or a student, for example.
36	Ellen Paul, con't.	36-j. The federal Bird Banding Permits often authorize the collection of blood and feathers, and the USFWS determined that it has little to no impact on bird populations. We see no reason why this could not be allowed under the registration system we have proposed.	36-j. Federal Bird Banding Permits do often allow collection of blood and feathers, in addition to non-invasive swabs and procedures such as laparotomy, however, the authorization is often globally (e.g., "all taxa except waterfowl and threatened and endangered species") provided for all bird taxa groups that a Master Bander or subpermittee is authorized to band. Thus, in reading the federal permits, CDFW cannot determine what bird species will be sampled or targeted during banding activities. The collection of blood, feathers or other biological samples typically implies that a permitholder may be studying genetics, food habits, contaminants, pathogens, parasites, or other specific research objective that may be of interest to CDFW (Fair et al. 2010, MAPS 2017). CDFW is especially interested in coordinating with researchers that may be proposing to collect samples of CA Bird Species of Special Concern (BSSC), many of which have research needs identified that require tissue sampling (Shuford and Gardali 2008).
			When people request to collect biological tissue samples, CDFW generally asks the following types of questions to determine if the proposed work is scientifically justified: i.) what will the tissue samples be used for, and why is the collection necessary? ii.) are there specific species and genetics/marking projects in mind in one or more locales? iii.) will the tissue samples be shared or provided to other researchers with expertise in conducting species-specific genetic work? iv.) how will tissues will be collected or preserved, where they will be deposited, when they will be analyzed, and by whom, and who is responsible for reporting on what aspects of the research?
			Therefore, as noted in Specific Response 36-g , CDFW has determined that heavy reliance on a federal Bird Banding Permit registration system is not sufficient to meet the review, coordination, reporting, and CEQA-related needs of CDFW.
36	Ellen Paul, con't.	36-k. If retaining the SCP exemption for persons that possess a valid federal Bird Banding Permit, then OC requests the CDFW	36-k. As discussed in Specific Response 36-g , CDFW has determined that we will continue to require and issue SCPs for all capture, bird banding and marking work. Furthermore, CDFW retains all raptors (i.e., diurnal birds of prey, vultures, owls) as

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name,	Comment	Department Response
	Format, Date		
		eliminate the standard exception for raptors. No legal or biological justification has been identified for this exception. We ask CDFW to note that the USGS Bird Banding Lab requires special authorization for all raptors and urge the CDFW to re-consider the need for this additional restriction.	"Prohibited Wildlife" for SCPs. We understand the USGS authorizes permittees to capture and band diurnal raptors (except eagles) and owls; however, USGS usually authorizes these entire taxonomic groups, rather than individual raptor species. Raptors are quite different biologically from other birds and are specifically protected under state law (FGC Section 3503.5), and conducting raptor research activities requires specific knowledge and experience that is not gained from working with other types of birds (Hull and Bloom 2001, Bird and Bildstein 2007). CDFW will continue to require applicants submit detailed study proposal information and evidence of adequate experience with the requested species and methods in order to properly evaluate the potential impacts of any requests to capture, handle, mark or otherwise take any raptors.
36	Ellen Paul, con't.	36-I. The OC suggests that this registration system be extended – perhaps on a trial basis - to other federal permits for research involving bird species, subject to the exclusion of state- and federally listed endangered and threatened species, standard exception species, and Species of Special Concern (SSC). The system would include all activities allowed under the federal scientific collecting permit for MBTA species. This might cover collection of blood and/or feathers in cases where the bird is not also being banded (which would be covered under the federal banding permit); tissues, eggs, and nests, and temporary or permanent removal of individual birds for study in captivity or lethal take of individuals for use as specimens. It would also cover salvage of birds found dead.	 36-I. As noted in Specific Responses 36-f through 36-i, the USFWS is responsible for issuing other types of federal permits pursuant to the MBTA; including nearly 20 different types for non-eagle MBTA protected birds and 14 different eagle-specific permit types. Since the Bald eagle is listed as endangered under CESA and Fully Protected, and the Golden eagle is Fully Protected, we will only address federal permits for MBTA protected birds in this particular response to comments, but also excluding state and federally listed species (CESA and ESA). Of all the federal permits issued by the USFWS, the federal Scientific Collecting Permit and Special Purpose – Salvage permit types are the most common permit types that overlap with activities authorized under SCPs. CDFW has determined that a registration system for other ornithological research activities, in addition to those activities covered by federal Bird Banding Permits issued by USGS, would not be appropriate for several reasons: i. CDFW routinely issues State permits that are more restrictive than federal permits, as noted earlier (e.g., our CEQA-related trusteeship is limited by the geographic boundaries of CA), and our reporting requirements are more detailed and include CNDDB compliance. ii. Federal Scientific Collecting Permits allow sacrifice of migratory birds, and the allowable take limits are typically based on Breeding Bird Survey (BSS) population estimates for each species. While BBS data is one source to help determine population status and potential impacts, there are limitations to that data set, and we rely on other sources as well (e.g., breeding bird atlases, CDFW California BSSC manuscript), and species experts with whom we consult when approving and conditioning SCPs. iii. Translocation efforts via SCPs are problematic given translocation is usually reserved for highly imperiled species with recovery plans and adequate funding to carry out a full program of recovery. Thus, this type of permit re

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
			 iv. Release from captivity, as mentioned earlier, is another problematic area due to disease concerns, and requires special conditioning and coordination with our Wildlife Investigations Lab.
			v. Salvage of avian species at renewable energy facilities is another area of great interest to CDFW given the need to properly address impacts to avian species in California, and numbers that may be impacted in specific geographic locales. Our permit language is more restrictive than USFWS and includes coordination with Regional CDFW personnel, including our enforcement staff and the right to inspect the facilities and specimens collected, along with notification of special status species and specialized disposition instructions to help avoid disease transmission and to potentially allow for use of specimens at other facilities for bias trials.
			vi. As noted earlier, our trustee role and CEQA compliance mandates require an independent assessment process based on the best available information at the time of permit review and conditioning, and consideration of cumulative impacts within the state of California.
			For these reasons, CDFW believes continuing our existing permit program under the proposed regulations is the best course of action.
36	Ellen Paul, con't.	36-m. The general permit seems unduly restrictive for ornithological research, and no justification is given for excluding six of the 23 orders of birds, along with eight entire families. conservation concern in California. Training unique to hummingbirds is required for the federal permit; it is unclear how the shift of this family to the specific use permit enhances conservation or serves the purposes of CDFW. Permittees may now need to obtain two permits instead of one if	36-m. During the development of the proposed regulations, CDFW determined that permit applications for low risk activities, methods and wildlife species of least concern could have a streamlined review and thus cost less to process. The Terrestrial Wildlife General Use SCP would authorize activities involving the capture, handling and marking of non-sensitive or common taxonomic groups of wildlife, including birds, for the purpose of identification and documentation. However, exceptions were identified based on scientific information and CDFW management and conservation emphasis, and are discussed below. CDFW has proposed to designate the following birds as "Prohibited Wildlife," which expands upon the current "Standard Exceptions" for SCPs to now include most resident or migratory game birds, hummingbirds, marsh birds, seabirds and other colonial nesting birds,
		research involves hummingbirds. The commenter requests CDFW revise the regulations and minimize the taxonomic exclusions in the general permit.	among others: State- and federally-listed Threatened and Endangered, State-designated Candidate, and Fully Protected birds, California BSSC, and all birds in the families and orders Anatidae (ducks, geese and swans), Galliformes (quail, partridges, turkey), Columbidae (pigeons and doves), Trochilidae (hummingbirds), Gruiformes (rails, coots, cranes), Alcidae (auks, murres, puffins), Laridae (gulls, terns, and skimmers), Procellariiformes (albatrosses, shearwaters, petrels, and storm-petrels), Phalacrocoracidae (cormorants), Pelecanidae (pelicans), Ardeidae (herons, bitterns, and allies), Threskiornithidae (ibises and spoonbills), Accipitriformes (osprey, hawks, kites, eagles, and vultures [=Cathartiformes]), Strigiformes (owls), and Falconiformes (caracaras and falcons). CDFW has determined these "Prohibited Wildlife" may not be targeted under the authority of a General Use SCP due to a combination of heightened conservation status, management

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Commenter Name, Format, Date	Comment	Department Response
		concerns, special handling expertise requirements and/or agency coordination needs that cannot be adequately addressed under the proposed framework of the General Use SCP.
		CDFW has determined that the capture, banding and collection of morphometric measurements for a majority of the birds that occur in California (e.g., landbirds, passerines, near-passerines) meets the intent of the lower risk standard for the General Use SCP and can be accomplished by using mist nets. Mist nets will limit capture of larger birds such as raptors and waterbirds, and would rarely lead to incidental harm or injury of wildlife when properly implemented by qualified individuals following standard scientific practices. The General Use SCP would be suitable for permitholders who are establishing and operating constant-effort bird banding stations as part of the Monitoring Avian Productivity and Survivorship program or similar programs monitoring landbird populations.
		In particular, the capture, banding and marking of hummingbirds requires special training on the currently accepted techniques to band hummingbirds and the proper procedures for making hummingbird bands (Russell and Russell 2001). The USGS will only issue hummingbird bands to permittees that have demonstrated the knowledge, skills and equipment necessary to customize the bands, and incidental banding of hummingbirds is not allowed under federal banding permits. There are only a small number of permitholders in California with required expertise to conduct research on hummingbirds, and CDFW needs to maintain the ability to selectively allow the banding of hummingbirds through the Specific Use SCP to help ensure that only qualified individuals are attempting to band these unique birds. Lastly, mist nets are not an effective capture method for studies with hummingbirds as the primary objective, and baited traps are more effective, but traps for birds are not proposed for the General Use SCP (Russell and Russell 2001).
		As now noted on page 17 of the Specific Use SCP application, CDFW periodically publishes reports identifying the wildlife species (beyond those already designated as State- and federally-listed threatened or endangered) that represent our highest conservation priorities and draw attention to species in need of conservation action. Species assessments are based on population trends, threats, distribution, abundance, habitat and ecological considerations, and include recommendations and priorities for research, management and monitoring. A species' status as California BSSC is a factor that requires closer consideration during the Specific Use SCP application review process. Many of the prohibited bird groups contain BSSC.
		Seabirds, waterfowl, and Galliformes are of interest to CDFW for special management and conservation needs, and a higher level of review and permit conditioning is desired for research on these species. For example: Common murres may be "common", but inexperienced seabird researchers could cause loss of a whole cohort of chicks for a colony due to undue disturbance and associated predation by gulls or ravens, and inexperienced researchers could impact burrows of non-target BSSC seabirds such as storm petrels or tufted puffins.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
			Marsh birds include all species that primarily inhabit marshes (i.e. marsh-dependent species), and many of these species are considered "inconspicuous," "secretive" or species of conservation concern for both the federal government and CDFW (Conway et al. 2011). In regards to rails, many of which are listed, fully protected, or special concern, a researcher studying pied-billed grebes or Virginia rails could cause impacts to the more sensitive species or their habitat; thus, a higher level of review and conditioning is needed.
			Research on hummingbirds and other "Prohibited Wildlife," and use of capture methods other than mist nets, may be covered under a Specific Use SCP, and these special status bird taxa (excluding hummingbirds, State-listed Threatened and Endangered, State-designated Candidate and Fully Protected birds) may be marked if incidentally captured in mist nets under a General Use SCP. However, in most cases, it would not be necessary for permitholders to obtain both a General Use SCP for general bird banding activities, and a Specific Use SCP for activities involving Prohibited Wildlife (e.g., hummingbirds), because all banding activities could be covered under a single Specific Use SCP if the requirements in the revised regulations are met.
36	Ellen Paul, con't.	36-n. The proposed General Use SCP allows mist nets and government-issued/approved metal leg bands; the commenter requests to include additional capture and marking methods if authorized under the applicant's federal banding permit.	36-n. In addition to utilizing census methods such as point counts and breeding bird surveys, CDFW understands that mist-netting is important for studying the population status of birds and providing information on demographic parameters, productivity, survivorship, and movements of birds during the breeding, migration and non-breeding seasons (Ralph et al. 1996, MAPS 2017). However, the CDFW has determined that only mist nets will be authorized under a General Use SCP because this is the primary method for capturing the authorized landbirds, as noted above. In addition, there are a myriad of capture methods for birds that cannot be conditioned appropriately and accurately under the pre-determined authorization structure of the General Use SCP (Silvy 2012).
			CDFW has determined that mark-recapture research activities for birds shall be limited to numbered metal bands from the USGS for migratory birds, or other government-approved bands for resident migratory birds (e.g., Galliformes), under the General Use SCP. Federal metal bands are the universal marking method for migratory bird researchers, are the primary marking method for all federal bird banding permits, and thus easily tracked under the structure on the General Use SCP. Bird capture and standard metal leg banding data are useful for the long-term identification of landbirds and better understanding the health and demographics of populations studied, as noted in the responses above (Ralph et al. 1996).
			Color bands may be used in conjunction with standard metal leg bands for rapid field identification and to determine survival estimates of individuals without requiring recapture, and color bands allow for detailed observation of breeding biology, foraging ecology and other bird behaviors. Other types of auxiliary marking, such as biotelemetry devices, may assist with studies of nest sites, breeding home ranges, dispersal and migration. Even when allowed on a federal bird banding permit, color banding and auxiliary marking is not

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			proposed to be authorized for the General Use SCP, because these types of marking methods imply the permitholder is conducting a focused species-specific study that goes beyond the intent of the General Use SCP. Additional review of study proposals, screening of qualifications, and coordination with CDFW biologists and other researchers may be necessary for permit requests that involve auxiliary marking, and tracking of such unique studies is better suited under the custom-fitted permit structure of the Specific Use SCP. Furthermore, other types of banding or marking that can potentially be covered by federal bird banding permits (e.g., neck bands for swans, web tags for ducks, patagial wing tags for vultures) are appropriate for bird taxa considered Prohibited Wildlife, and these taxa are not proposed to be covered under the General Use SCP, as noted in the responses above.
36	Ellen Paul, con't.	36-o. If a study that requires a Specific Use permit also happens to entail capture, marking, and release, the specific use permit should suffice to cover all activities. It should not be necessary to obtain both a specific use permit and a general use permit. We ask that the regulation be revised to make this clear.	36-o. Depending on specific situation, CDFW agrees that it would not be reasonable to require permitholders to obtain multiple permits with redundant authorizations. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover activities that the General Use would otherwise cover. To help clarify the intent of the draft regulation 650(i)(2)(C), we have added the following language on page 16 of the Specific Use SCP application form: "Specific Use permits may be issued for wildlife and species, activities, and methods that may or may not otherwise be authorized under Authorizations of a General Use permit (see DFW 1379GW, DFW 1379GF, DFW 1379GM)." As an example: if a researcher wanted to intentionally target BSSC or other "Prohibited Wildlife" under the requirements of a Specific Use SCP, in addition to capturing and banding birds that are otherwise covered under a General Use SCP, the research activities could be covered under one single Specific Use SCP if the requirements in the revised regulations are met. However, all General Use SCP authorizations would not be automatically covered under a Specific Use SCP, unless requested in the application.
36	Ellen Paul, con't.	36-p. The OC is concerned with the level of review and requirements in the background and past findings section of the Specific Use SCP form, indicating CDFW will assess the merits of proposed research. CDFW staff likely does not have cumulative knowledge that encompasses all taxa and all questions that will be the subject of research for which specific use permits are sought. We realize that the ISOR (p. 4) states that CDFW regional biologists will be consulted to review and condition permits, however, carefully designed peer review and expert guidance is the appropriate means to assess merit.	36-p. Refer also to General Response 2 regarding the proposed permit structure — differences between the General and Specific Use permits, and what is allowed under each. As discussed in General Response 2.2, page 59 of the ISOR identifies several fields in the "Background and Past Findings" section that are necessary to help provide CDFW a better understanding of the importance of activities that will be performed under a permit. These fields help applicants demonstrate to CDFW the rationale for the proposed research and linkage to short-term or long-range conservation planning actions, while considering wildlife conservation and data needs. In response to your comments, we have changed "literature review" to "literature cited" in the Specific Use SCP application, as it is not our intent to require all applicants to conduct a full written review of the available scientific literature that is relevant to their proposed activities. Further under General Response 2.2, CDFW understands that some of the information requested in the "Background and Past Findings" section of the Specific Use SCP application will not be applicable to all permitholders, thus we have included the option to state "not applicable." For example: the section asking for a discussion on past findings may not be applicable to a biological consultant who will be conducting presence/absence

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		Good science requires replication of studies to help ensure sufficient independent samples so that conclusions have a sound foundation. Clarify the meaning of duplication vs. replication. Grant programs (both government and private) are extremely competitive, judged by other scientists with relevant expertise and thus have been assessed for merit, which should provide CDFW level of comfort the research is meritorious.	surveys at many unknown locations throughout the term of a three year permit, but consultants may be routinely using specific published survey protocols that can be cited. Due to the high level of animal biodiversity in California and staffing limitations in State government, CDFW likely will not have biologists with the relevant expertise to evaluate the scientific merits for all potential research permitting scenarios. The SCP process does however present an opportunity for CDFW biologists to gain knowledge from researchers who are the experts in their fields. As noted on page 4 of the ISOR, it's essential that various employees in CDFW regional biologists and other taxonomic specialists are most familiar with all research projects occurring within their jurisdiction, and can identify any potential conflicts, overlapping research projects or potential for incidental take of non-target sensitive wildlife that were not considered by the applicant. We also understand the importance of replicating and repeating research projects is fundamental to science, and consider the following sentence on page 9 of the Specific Use SCP application to be optional: "When applicable, explain how the research will address questions not answered by earlier research." CDFW highly respects and consider any outside peer review that has taken place, for example through the grant process, but most applications we receive have not gone through scientific peer review where written proposals and reporting information have been independently evaluated by appropriate professionals. While we do not require applications receive peer review, it is however, the responsibility of CDFW to maintain the ability to evaluate and improve the integrity of all scientific work conducted under SCPs, because the results of work may be used to inform CDFW and the California Fish and Game Commission on policy and management decisions regarding natural resources. Therefore, we consider the level of information requested is appropriate to carefully consider
36	Ellen Paul, con't.	36-q. The CDFW has been permitting scientific research activities for decades and should have ample data to determine if such activities have had negative impacts on wildlife populations. Impacts may be averted through permit conditions tailored to that particular species, location, or type of research. Otherwise, the level of scrutiny based on the information required by the specific use permit seems unwarranted in regards to the protection of wildlife populations.	36-q. Comment noted. Over the years, CDFW has determined what types of wildlife research, activities and methods have a greater impact on wildlife populations and individuals, and CDFW has developed programmatic permit template language that may be custom-fitted depending on the particular request to help minimize processing times and consistently process permits. When applicants request specifically defined areas of research, CDFW will identify any concerns for the site and condition permits accordingly. Due to the large size of California, we have also developed template conditions for averting impacts at sensitive locations and habitats over large study areas by placing the responsibility on permittees to determine whether or not implementation of their research project could have potential adverse impacts to a listed or special status plant or animal, or special status natural community. To further minimize impacts, we ask permittees to compile relevant biological information in the general research area prior to conducting field work by using Rarefind, CNDDB Quick Viewer, or other reliable sources for known

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	1 ormat, bate		occurrences of special status plants, animals, or natural communities at the site before conducting the research. We also require permitholders to coordinate their field activities with the landowner, at which time the landowner may inform the permitholder of any special considerations. However, even with programmatic template conditions developed, applicants must still provide a scientific justification for CDFW to determine if the proposed work is warranted, as noted in Specific Responses 36-f through 36-i , as well as General Response 2 .
36	Ellen Paul, con't.	36-r. The proposed Specific Use permit regulation and the accompanying application form are problematic and particularly burdensome as to the museum (or "general") scientific collecting of specimens for research collections, rather than for specific research projects. Although section 4a (purpose) includes a check box for museum collections, much of the information required by this form is scientifically immaterial to such studies.	36-r. In response to the comments regarding museum (or "general") scientific collecting and the applicability under the definition of "study" and it's usage in the Specific Use SCP application, we have made changes to subsection 650(i)(2) of the regulations to expand on the meaning of "planned undertaking," in addition replacing the word "study" with "permit" at various locations of the application or emphasizing "planned undertaking" alongside "study." CDFW agrees that some questions on the Specific Use SCP application may not be well suited for some potential permit requests, and applicants are given the option to state "not applicable." In regards to providing copies of reports or publications from previous or similar research conducted on the requested wildlife being unduly burdensome, CDFW does not agree, provided that permitholders periodically submit such reports to CDFW on an annual basis. Reports and journal publications associated with a permitholders work should be readily accessible by them, and help justify the continual authorization of activities with greater impacts, such as sacrifice of birds for museum collections. By having the publications in our possession at the time of application review, we can more easily determine the value of the proposed or ongoing research.
36	Ellen Paul, con't.	36-s. Section 4f poses a significant problem. Museum collecting expeditions and taxonomy-based collecting usually not based on a predetermined list of species, localities, or numbers of individuals. The purpose is to build collections by increasing taxonomic breadth, range of specimen preparation types, and seasonal, geographical, and temporal representation. Researchers affiliated with museums who conduct such work cannot supply the kind of information that those conducting a very specific research project, with pre-determined species, locations, and numbers can provide.	36-s. CDFW understands the flexibility required for museum collecting activities; however, these types of permits are strictly conditioned. From our experience, most museum collectors that apply for SCPs usually have a prioritized species list or know of areas where museum collections are lacking. We currently, and will continue to, allow applicants to request and justify sacrifice of entire groups of wildlife at any taxonomic level with limitations for each different wildlife group, as appropriate. In general for terrestrial wildlife, we strive to limit sacrifice of animals to the greatest extent feasible, and only when necessary for filling museum collection gaps (e.g., documenting new location or new morphology for a location). The "dropdown lists" for Section 4f of the Specific Use SCP application will include taxonomic options at levels higher than species or subspecies. "Prohibited Wildlife" will typically be excluded from sacrifice for taxonomic categories that contain entire groups of birds, reptiles, mammals and amphibians. Additional justification will be required to sacrifice any California SSC and other Prohibited Wildlife, and take limits and conditions will typically be more restrictive compared to common species based on the status of each animal. For museum researchers collecting birds, CDFW has developed standard take limitations and restrictions for all bird species recognized by the California Bird Records Committee. Thus, a museum collector applicant could hypothetically justify and request to sacrifice all birds in California, and CDFW could provide a permit with

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Commenter Name, Format, Date	Comment	Department Response
Format, Date		minimal and varying levels of sacrifice for non-special status birds in California, as determined by CDFW's analysis of the status of each bird independent of the USFWS's considerations under NEPA.
		Museum collectors and other researchers should reasonably be able to request a number of individuals to be sacrificed per species for consideration by CDFW. If specific numbers of individuals are not requested, CDFW will set limitations for the numbers of individuals that may be sacrificed per species annually and throughout the term of the permit. Permits are typically not issued with open-ended and unlimited authorization for sacrifice due to the potentially significant impacts of such activities, except in limited cases such as for invasive and non-native species. Furthermore, the authorized totals are cumulative and may not be exceeded by the combined efforts of other researchers associated with the same museum collecting project.
		Museum collectors may request broad geographic areas to sacrifice animals, however, we typically ask that the sacrifice of animals be spread geographically, to the greatest extent possible, to avoid impacts to local populations, and in consideration of cumulative threats to the species, including drought. Sacrifice limitations are typically set by location, as well. Any researchers sacrificing animals are also asked to avoid or limit sacrifice, to the extent reasonably possible, of animals during their breeding seasons, or take reasonable measures to avoid collection of gravid females and individuals who are actively brooding, feeding young, or defending young. Lastly, permitholders need to make a reasonable effort to coordinate with any other researchers who may be collecting the same species in the same locations to avoid impacts to local populations.
		Depending on the nature of the museum collector's request, additional permit conditions may be appropriate to minimize cumulative lethal take of birds, and to maximize sample sharing to the greatest extent feasible.
36 Ellen Paul, con't.	36-t. The information in Section 4f is duplicative to Section 5, which asks the applicant to demonstrate conclusively that existing specimens are unavailable or that the research objectives require new/additional specimens. Museum collections are made for various research objectives, documentation of species at a point in time, and an unforeseeable number of specific and important unknown research objectives in the future. It would be impossible to identify specific research objectives for each new or additional	36-t. Comment noted about the value of museum specimens. CDFW understands the nature and importance of general museum collecting activities, and agrees that it may be difficult for applicants and permitholders to demonstrate conclusively that existing specimens are unavailable. In general, CDFW asks that any applicants and permitholders removing animals from the wild make a reasonable good-faith effort to consult GBIF.org, VertNet.org, the CNDDB, or similar source of information to determine whether vouchers already exist from the site and how recently they were collected. We also ask that applicants and permitholders take reasonable effort to obtain specimens via salvage, donation, rehabilitation centers, or locations imposing imminent death (such as for depredation) or deleterious alteration of habitat, if feasible for their research, in order to reduce the number of healthy animals removed from the wild to the greatest extent feasible. In regards to the difficulty with identifying future unknown research objectives, CDFW understands the concerns raised, and we only expect applicants to demonstrate why collections are necessary in the foreseeable future at the time of application. The museum
	number of specific and important unknown research objectives in the future. It would be impossible to identify specific research	depredation) or deleterious alteration of habitat, if feasible for their reduce the number of healthy animals removed from the wild to the In regards to the difficulty with identifying future unknown research of understands the concerns raised, and we only expect applicants to describe the concerns raised.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name,	Comment	Donartment Posnense
	Format, Date		Department Response
		existing specimens are unavailable will be burdensome, if not impossible.	Vertebrate Zoology working on the Grinnell Resurvey Project, is a prime example on the importance of keeping detailed records of the distribution and natural history of birds, mammals, reptiles and amphibians, backed by specimens, photographs, and field notes for future study.
36	Ellen Paul, con't.	36-u. We urge CDFW to define the term "student," and specify that students may apply for individual permits, if qualified to do so.	36-u. The proposed regulation 650(f)(3) allows "Student permits" to be issued in the name of a student in accordance with subsection 650(g)(8), which defines students to be applicants that are 18 years of age or older or , of collegiate level, enrolled at a university, college, or other academic institution of higher education. Furthermore, subsection 650(g) of the proposed regulations allows Individual or Entity permits to be issued to students as defined in 650(g)(8). While no change to the regulations is necessary to allow students to apply for Individual or Entity permits, we have clarified this allowance by amending Section 2 of the Specific Use SCP and General Use SCP application to specify, "Students may also apply for Individual and/or Entity permit with payment of those respective fees."
36	Ellen Paul, con't.	36-v. If a researcher has obtained protocol approval from an IACUC, we suggest the CDFW allow the applicant to simply attach the approved protocol. That document will include all specifics requested by the application forms.	36-v. Applicants may attach approved or draft IACUC protocols and any other supporting documents at Section 4f(10) on page 12 of the Specific Use SCP application, however, applicants will still need to complete the appropriate sections of application and provide adequate justification for evaluation by CDFW. Alternatively, in lieu of retyping information contained in an IACUC protocol, applicants may upload an IACUC protocol as supplemental information, and cross-reference relevant portions of the protocol within an SCP application. However, the application informational fields must be stand-alone, and IACUC protocols typically do not contain all specifics requested for an SCP application, therefore this approach may potentially cause delays during the review process.
36	Ellen Paul, con't.	36-w. We suggest that if a researcher has prepared a grant proposal, then CDFW allow the applicant to attach a copy of the proposal.	36-w. Applicants may attach grant protocols and any other supporting documents on page 12 of the Specific Use SCP application at Section 4f(10). A grant proposal may be uploaded as supplemental information to the applicant's profile in the online system, but is not required for the General Use permit, as all informational fields of both the General Use and Specific Use applications must be completed as stand-alone information.
36	Ellen Paul, con't.	36-x. Subsection 650(a)(2) — identification requirements. Requiring non-citizens to carry passports when working in the field is problematic because of the potential for loss under such circumstances. Passports are not easily replaced. Further, photo identification issued by a state-run university should be accepted.	36-x. As noted for the justification of necessity on pages 13 of the Original Proposed ISOR for subsection 650(a)(2), as well as page 18 for subsection 650(e)(2), and on page 38 for subsection 2b of all SCP application forms, a government-issued photo identification is required for CDFW Law Enforcement to be able to verify identity of the permitholder in the field to ensure that those persons permitted to conduct authorized activities. This approach meets the requirements for payment for a permit or license pursuant to CDFW via the Automated License Data system (ALDS), as required by Title 14, subsection 700.4(c). Passports were determined by CDFW Law Enforcement to be the correct government-issued identification for international researchers, or for those who would not have a U.S. State-issued photo identification card, or a tribal-issued identification card. Photo identification cards from state-run universities were explicitly excluded under subsection 650(a)(2) to prevent future confusion by potential student applicants, as university-issued IDs are not one of the approved identification forms required for payment via ALDS

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			pursuant to subsection 700.4(c). Secondly, it was anticipated most students are expected, or required to possess a State-issued photo identification card, and/or a Driver's License for voting and/or other purposes.
36	Ellen Paul, con't.	36-y. Subsection 650(a)(3) – Unless CDFW intends to issue multiple originals, the requirement to carry the permit should be clarified to provide that a photocopy is acceptable. If so, this should be made clear here and in section 650(j)(3). Authorized individuals may be working at some distance from one another and it would not be feasible to retrieve the permit from the permittee or another authorized individual.	36-y. It is anticipated that an approved permit will be issued electronically to the permitholder, whether through the online system, or through email. Permitholders will be able to print the issued permit, where additional copies can be printed so each Authorized Individual listed on the permit can carry a copy, as required by 650(a)(3).
36	Ellen Paul, con't.	36-z. Subsection 650(a)(5) – This provision should be clarified so as to assure that the terms "trade" and "barter" are also modified by the term "commercial." Otherwise, it could be construed to prohibit the transfer of specimens and samples among researchers, museums and research institutions.	36-z. It is currently not legal to sell, barter or otherwise use any wildlife for commercial activities, unless specified elsewhere in law or regulations. "Buy" is defined in FGC Section 24 to include "an offer to buy, purchase, barter, exchange, or trade" and "sell" is defined in FGC Section 75 to include an "offer or possess for sale, barter, exchange, or trade" for monetary or nonmonetary consideration, giving away in conjunction with a commercial transaction, or giving away at a location where a commercial transaction occurred at least once during the same or the previous calendar year. Such commercial activities are strictly prohibited under the authority of SCPs, as noted in Section 650(a)(5) of the proposed regulations (refer also to pages 14 and 72-73 of the Amended ISOR).
			Pursuant to FGC Section 201, the Fish and Game Commission (Commission) has the power to regulate commercial activities involving natural resources when specifically identified in statute and/or regulations. We have determined that CDFW does not have the sole authority to issue permits or allow take of wildlife for commercial purposes within existing state law, statute, regulation under their jurisdiction, including those taxa exempted from SCPs under 650(u)(5) of the proposed regulations. Any person who illegally takes, possesses, imports, exports, sells, purchases, barters, trades, or exchanges any wildlife, or part of any of those animals, for profit or personal gain, is guilty of a misdemeanor violation pursuant to FGC Section 12012.
			However, specimens and samples may be donated to eligible public scientific or educational institutions free of charge and/or transferred pursuant to Section 650(q) of the proposed regulations.
36	Ellen Paul, con't.	36-aa. 650(b)(2) – Suggest CDFW establish a standard for the approval of persons requesting to "independently conduct" any permitted activities to avoid arbitrary and inconsistent determinations among permit	36-aa. Any applicant seeking to conduct activities under an SCP will need to have adequate experience and qualifications prior to independently conducting the activities with the requested wildlife, as outlined in Section 650(h) of the proposed regulations. Applicants are required to submit a resume or CV that describes the educational background and wildlife-related experience, statement of qualifications, and references in order to verify the

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Commenter Name, Format, Date		Comment	Department Response
	Tomat, Date	issuers and over time, and to help applicants better understand CDFW's expectations for qualification requirements.	experience. The USGS BBL and USFWS Recovery offices require similar information for research permits involving birds and endangered wildlife, and their qualification requirements serve as a model for CDFW's SCPs.
			In order to provide applicants additional guidance on submitting statements of qualifications, CDFW has added language to page 21 of the ISOR to clarify the Statement of Qualifications. Depending on the review program, at least one field season of supervised experience will be required to gain enough experience to work independently with most sensitive or special concern species, however, less time may be needed to work with common species or when an applicant has experience with similar wildlife species. Qualifications must be verifiable, and for this reason CDFW requires applicants to submit reference contact information from persons or permitted individual(s) who provided the training who can confirm the experience received, discuss details of experience that pertain to an applicant, and provide an assessment of the applicant's ability to perform each requested permitted activity independently.
			As discussed in Specific Response 2-a , CDFW understands that each applicant will have different levels of experience and qualifications depending on a number of unique factors. Due to high levels of animal and plant biodiversity in California, there is a large amount of wildlife taxa that can be permitted under SCPs (i.e., birds, mammals, reptiles, amphibians, fish, marine plants and invertebrates), and CDFW cannot easily include minimum qualifications that would suffice for every potential scenario under these regulations.
36	Ellen Paul, con't.	36-bb. 650(b)(5) – OC thanks CDFW for including non-profits and non-governmental organizations in the definition of "entity." However, the term "organization" has no legal meaning. Are unincorporated organizations included (as they should be)?	36-bb. If the non-profit and non-governmental agency, even if unincorporated, fulfills the requirements under one of the three eligible purposes of a permit pursuant to subsection 650(c),and the Executive Signatory and/or PI is able to provide proof of identification consistent with requirements of Title 14, subsection 700.4(c) for payment of the application and permit issuance fees, then the organization would be eligible to apply for a permit.
36	Ellen Paul, con't.	36-cc. Subsection 650(b)(7) –The terms "direct supervision" and "adequate supervision" need definitions, otherwise the terms are subject to inconsistent and arbitrary application by the CDFW and its enforcement agents. OC is concerned that CDFW may be implying a 1:1 ratio of direct oversight between authorized individuals and field assistants, given the lack of specificity for "direct supervision." It is also the case that the proficiency of field assistants generally increases with time, therefore, it should be made clear that the proximity, and duration of oversight for "direct supervision should be	36-cc. Due to the variety of wildlife taxa, activities and methods that may be covered by to SCPs, it is extremely challenging to define in regulations what adequate supervision means for all potential permit scenarios. Lack of direct visibility or lack of ability to hear another person in certain habitat types (e.g., dense forests, or near loud streams or rivers, or when diving in the ocean off a boat) also needs to be factored in. The authority for requiring adequate supervision can be found in FGC 1002.5, and as stated on page 16 of the Amended ISOR, CDFW has further clarified that adequate supervision can only be attained when the designated PI (refer to Section 650(b)(19) of the proposed regulations) is responsible for the leadership, training role and appropriate oversight for all involved personnel (i.e., Authorized Individuals and Field Assistants). While PIs do not necessarily always need to be present in the field or lab, and they may sub-delegate their authority to Authorized Individuals to work independently and supervise Field Assistants, the PI is ultimately are responsible for all activities and issues that may arise under a permit. Adequate supervision largely depends case-by-case on the dynamics and realities of each

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Commenter Name, Format, Date	Comment	Department Response
	made by the permitholder or the authorized individuals, exercising their best professional judgment. Further, if IACUC approval has been required for the study, the issue of training and supervision of all project staff has already been addressed in the process of obtaining approval for the study protocol.	unique field crew, and comfort level of each PI with the expertise of their field crew, as well, as approved by CDFW. On the other hand, direct supervision is a term that is solely used in regards to the supervision required for Field Assistants, people in training and other visitors to the field. "Field Assistant" means a person who may assist with activities authorized by a permit issued under this Section, but may only do so while under the direct supervision of an Authorized Individual (including a PI). As with adequate supervision, the meaning of direct supervision will vary depending on the wildlife species, activities and methods authorized under a permit, and the definition will be adjusted on a case-by-case basis in the conditions of SCPs, as needed. We generally concur with OC that in most cases, we will defer to the expertise and best professional judgement of the PI for the work being conducted. For some activities, where appropriate, permit conditions may refer to the federal recovery permit stipulation for supervised individuals (e.g., within 3 meters). Adequate supervision and direct supervision should not be inconsistent or arbitrary in enforcement by CDFW law enforcement, because the roles and responsibilities of all Authorized Individuals will be clearly defined on the permit LAI, and the nature of direct supervision will be clear in the permit conditions. Lastly, the qualifications screening conducted under the IACUC process does not perfectly align with the SCP standards outlined in the proposed regulations, therefore we will not rely solely on IACUCs to determine permit LAIs.
Ellen Paul, con't.	36-dd. Subsection 650(b)(19) – due to concerns about people being able to meet the PI requirements, we request that the CDFW this subsection and/or the entity permit regulation to provide that the PI under an individual permit need not be employed by or affiliated with the same institution as the authorized individuals on the permit.	36-dd. Since the regulations are silent in regards to the affiliation of the PI, CDFW does not see the need for the regulation text to be amended or clarified for the requested purpose for Entity SCPs. The Executive Signatory designated for the Entity SCP is ultimately the principal officer or responsible party on an Entity SCP, and they have the authority to act for, or bind the Entity, and may designate or change the PI on an Entity permit when necessary, subject to approval by CDFW pursuant to Section 650(b)(6) of the proposed regulations. Executive Signatories must, however, be employed or affiliated by the Entity to have appropriate responsibility and accountability for the issued permit.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
36	Ellen Paul, con't.	36-ee. Subsection 650(b)(25) – defines take as "all activities listed in Section 86 of the Fish and Game Code, as well as collecting, handling, marking, manipulating, or conducting other procedures on wildlife." Alternatively, to be clear that "take" includes the permanent removal of individuals from the wild, including both the sacrifice and captivity, the OC suggest that all the activities from Section 86 of the Fish and Game Code be included in the regulation. We are particularly concerned about confusing regarding the term "collecting," which is not defined in the regulation and is not included in the statute.	36-ee. Due to the SCP always having been referred to as the Scientific Collecting Permit (since the 1940's), CDFW has chosen to emphasize usage of the terms "captivity" and "removal from the wild" and "sacrifice" in the SCP applications and the Mandatory Wildlife Report form, and minimize usage of the term "collecting." In the proposed regulations, "collection" is used in the definition of "procedures" under subsection 650(b)(2), and the definition of "part" under subsection 650(b)(15) has been amended to use the word "collected" in reference to removing biological samples from an animal.
36	Ellen Paul, con't.	36-ff. Subsection 650(j)(1) – Limits on authorized individuals for General Use Permit. The regulation does not allow the applicant to request approval for more than eight authorized individuals at the time of the general permit application. The inability to make this request with the initial application for a general permit means that the permitholder would need to immediately seek an amendment, resulting in unnecessary delay.	36-ff. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a .
36	Ellen Paul, con't.	36-gg. Subsection 650(j)(2)(B) – allows the applicant for a specific use permit to request additional authorized users above eight. The net effect of this provision is to avert delay and reduce burden, in that an amendment will not be needed. We ask that this same process be allowed with regard to general permit applications, and the OC reminds CDFW that for ornithological research, issuance of the federal permit should be sufficient for qualifications.	36-gg. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a . Considerations for qualifications in light of federal or bird banding permitting are discussed in Specific Responses 36-c , 36-f , 36-aa and 36-cc .
36	Ellen Paul, con't.	36-hh. Subsections 650(j)(1)(A) and 650(j)(1)(A) – Limits on numbers of authorized individuals. The number of authorized	36-hh. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a . Refer also to Specific Response 36-cc regarding adequate and direct supervision.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	·	individuals for both general and specific permits should be increased to at least 20 per permit. Some studies are large-scale and may take place over a wide geographic area or at multiple sites. An entity permit will likely cover a suite of projects so there will likely be a need for more than eight authorized individuals. Professors with labs of graduate students would be burdened due to this low number, and because of considerations for "direct supervision" [as noted in comment 36-cc], the number of field assistants could determine the number of Authorized Individuals.	
36	Ellen Paul, con't.	36-ii. Subsection 650(j)(3) – Documents required when permitted work is conducted. This section implies that a photocopy of the LAI is acceptable (as opposed to a CDFW issued copy). If so, that should also be made clear here and in the section 650(a)(3).	36-ii. Refer to Specific Response 36-y regarding carrying of permit documents in the field.
36	Ellen Paul, con't.	36-jj. Subsection 650(k)(1) – Increase in permit duration. We thank the CDFW for increasing permit duration. Doing so reduces burden for everyone and reduces costs for the permitholders.	36-jj. Comment noted. The increased permit duration, granted by the Legislature as noted on pages 7 and 83 of the Original Proposed ISOR, also lessens the day to day permit workload for CDFW staff, allowing focus on other related priorities, such as the status and distribution of listed and special concern species.
36	Ellen Paul, con't.	36-kk. Subsection 650(k)(2) – Continuance of permit activities pending permit renewal. We thank the CDFW for including a continuation of activities provision. Allowing permitted activities to continue will prevent interruption of research activities, This is especially important for student projects or projects that are grant-funded.	36-kk. Comment noted. The continuance provision will also help CDFW with triaging all SCP work, along with other work priorities and time sensitive situations that sometimes appear with little warning. Refer also to pages 24-25 of the Original Proposed ISOR.
36	Ellen Paul, con't.	36-II. Subsection 650(I)(4) – New permits vs. amendments. Under the proposed regulation, a new general use permit would be needed to allow more than eight Authorized Individuals. A potential solution of applying for another permit to increase the size of the field crew is problematic because the project would then have two (or more) PIs.	36-II. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a . Considerations for qualifications in light of federal or bird banding permitting are discussed in Specific Responses 36-c , 36-f , 36-aa and 36-cc . It is possible for two or more Pls for the same project in the same locale (under separate permits) is possible (depending on the size of the study area), as long as the Pls coordinate their efforts to avoid significant impacts to wildlife, and also use each other's data as necessary to properly assess and report on the combined results of the individual study teams.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
36	Ellen Paul, con't.	36-mm. Subsection 650(o) - CDFW Notification Prior to Conducting Field Work or Activity. OC questions the need for notification when the activity is to take place on private property with the landowner's permission. The dates and times of day would be subject to the landowner's permission. OC questions the need for repeated submissions of this form with regard to	36-mm. Refer to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b). The timeframe for notification has been reduced from a minimum of 48 hours, to 36 hours prior to activity in the field, as indicated on pages 29-30 of the Amended ISOR. The necessity of form 1379 is justified on pages 68-69 of the Second Amended ISOR.
		research activities at research stations or other fixed sites such as MAPS stations. It should be sufficient to submit this form once each year for the site.	
		Even in as little as two business days, many of the specific elements could change between the time the form is submitted and the time of the actual field work. The permitholder should be allowed to simply state, "all activities authorized by the permit,".	
36	Ellen Paul, con't.	36-nn. Subsection 650(q)(2) – Accidentally killed or legally acquired wildlife. Possession of such wildlife is unlawful unless a person can provide documentation of lawful take and possession OC is concerned this provision would serve to bar the practice of "citizen salvage" whereby individuals who do not hold permits and have	36-nn. CDFW appreciates the suggestion and understand the merits, but given the possibility for misuse of such a process for personal or commercial gain, and the fact that the practice could blossom beyond our ability to manage it as word spreads, we believe it is in the best interest of wildlife and limited CDFW staff to not include citizen salvage provisions. It is important to remember the provision of subsection 650(a)(5), in that personal or other human consumptive use is discouraged. The proposed Chain of Custody would be used to transfer specimens or carcasses to eligible individuals or entities; see also Specific Responses 35-e and 36-z regarding transfer of possession.
		no reason to hold permits happen upon a dead animal and wish to take the carcass to a museum or research institution. We urge the CDFW to include a provision for "citizen salvage." 650(q)(4) – Transfer of dead wildlife. This section should be revised to allow the transfer of "citizen salvaged" specimens provided that the requisite custody form is transferred with the specimen.	However, in some instances CDFW occasionally get calls from citizens about dead specimens they have encountered, and in such cases, we generally work out a system with our numerous contacts and enforcement staff for collection, documentation, and proper disposition, in the interest of science.
36	Ellen Paul, con't.	36-oo. Subsection 650(r)(1)(C) – The complete absence of qualification standards could result in arbitrary, subjective, and inconsistent permit denials under the proposed subsection 650(r)(1)(C). The	36-oo. Refer to Specific Response 36-aa with regards to qualifications standards, and Specific Responses 36-c-i, 36-f, 36-h and 36-bb in regards to the assertion that federal permits imply a person is qualified for any SCP request.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	,	issuance of federal permits indicates that the applicants are qualified.	
36	Ellen Paul, con't.	36-pp. Subsection 650(r)(2)(D) – portends an assessment of merit for the Specific Use application. Grants, contracts, and federal permit signify that the impact of a permit, if any, is justified by the knowledge to be gained. Assessments of merit should be made in the context of a peer review process by other researchers with relevant expertise and subject to well-defined criteria.	36-pp. As stated in FGC Section 1002, and subsection 650(s) of the proposed regulations, CDFW may determine in its sole discretion to deny a permit. However, on occasion, CDFW permit review staff may seek independent opinions from external scientists with expertise in the particular request, and we will take any additional information provided into consideration before making a final permit determination. Refer also to Specific Response 36-p and Specific Responses 55-h , 55-i , and 81-a regarding external review from the scientific community.
		OC suggest that this provision be revised to require that the CDFW avail itself of the expertise of the relevant scientific community before denying the permit.	
36	Ellen Paul, con't.	36-qq. Subsection 650(r)(2)(D) – also states permits may be denied if: "Not in the best interest of a wildlife resource." In the absence of definitions or standards, adds another requirement to obtaining a permit, and may be used to prohibit virtually any research activity.	36-qq. As noted on page 1 of the Original Proposed ISOR, "current regulations enable the public to engage in scientific research, education and propagation activities, where research and data collection help benefit and conserve the State's wildlife resources" CDFW will continue to consider the benefits of the anticipated results and the potential impacts of a proposed permit. CDFW understands that some wildlife may be harmed or injured during research and survey activities, and it's necessary to retain the ability to make a determination using the best scientific information available as to whether the impacts to wildlife populations and individuals is warranted for the proposed scientific, educational or conservation purposes. CDFW is responsible for maintaining sustainable populations of wildlife and the habitats upon which they depend, and ensuring well-justified and humane treatment of all individuals, but it is not our intent to halt the research engine of California. And, as noted earlier, very few requests for permits are denied.
36	Ellen Paul con't.	36-rr. Subsection 650(r)(2)(D) also states permits may be denied if: "Is not necessary to benefit wildlife." Benefits of research may be immediately and specifically defined, but the general knowledge obtained may have critical value decades later.	36-rr. Comment noted. CDFW understands that some future benefits may be unknown, as noted above. The intent of this language is to provide CDFW clear discretion to deny permits when a clear purpose and adequate justification is not provided and benefits to wildlife are absent or not described. CDFW needs the ability to ensure responsible use of the wildlife, and filter out permit requests that are detrimental to wildlife and the public trust.
36	Ellen Paul con't.	36-rr. Subsection 650(r)(2)(D) also states permits may be denied if: "Needlessly duplicates previously documented scientific research." In studies involving natural systems and wild populations, repetition is necessary because conditions change over time and	36-ss. Comment noted. CDFW concurs with the value of repeated studies, but there may be a few extreme cases where it may not be necessary, or at least not likely to be approved, if for instance, a large number of specimens were requested to be sacrificed, and the desired information could be gathered via another method. Additionally, the SCP review process is not intended to determine who should receive grant funding, and we recognize our role in reviewing and approving permits for grant-funded projects. Likewise, the grant

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name,	Comment	Department Response
	Format, Date	across biogeographical systems. Studies are also repeated because reproducibility is a key element of scientific understanding. The issue of duplication is always considered in competitive grant programs. It would be inappropriate for the CDFW to substitute its judgment in such circumstances.	process does not identify potential cumulative or permit-specific impacts to wildlife from the statewide perspective of CDFW. Refer also to Specific Responses 36-p, 55-I and 71-e regarding CDFW's intent behind duplication or replication of work.
36	Ellen Paul, con't.	36-tt. We are concerned that subsection 650(r)(1)(E) implies CDFW will review the merit of applications, which could lead to arbitrary, inconsistent, and subjective decisions in the absence of standards and expertise. We suggest that this provision, if retained, be amended by requiring that CDFW seek outside expertise relevant to the proposal and the taxa.	36-tt. Comment noted. The CDFW is the public trust agency whose administration of scientific collecting has been delegated to it by the legislature. In that capacity, CDFW has professional staff with extensive scientific and technical education and experience enabling it to competently evaluate each application. Once again, the proposed regulation gives CDFW the ability to filter out permit requests that are not remotely scientific or education in nature, or which have ulterior motives, such as activities that are commercial in nature. Whenever we are lacking relevant information to make a decision on issuing a permit, we coordinate with the applicant, experts in the field of study, and consult the scientific literature and other available information. Refer also to Specific Responses 55-i , and 81-a regarding external review from the scientific community.
37	David Wikle Research Associate, CA. Dept. of Food and Agriculture/ CSCA-PPD and Field Associate, LA County Museum of Natural History Email dated 5/5/2017	37-a. Fish and Game Code sections 1002, 1002.5 and 1003 authorized CDFW to issue SCPs, but do not mandate it.	37-a. The commenter is correct. CDFW issues SCPs in its discretion for the purposes authorized by the cited statutes.
37	David Wikle, con't.	37-b. Entomology involves people outside the realm of academics and formal entomology, where in working in collaboration with such people, the commenter has contributed to discoveries working with arthropods. The commenter collects working in State Parks without a SCP, he has had the freedom to make such discoveries.	37-b. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement. Refer also to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
37	David Wikle, con't.	37-c. The commenter is opposed to the proposed rulemaking and regulatory changes	37-c. CDFW presumes the commenter meant amendments to Title 14, Section 703, not 702. The commenter doesn't provide specific comment on the content of the proposed

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		in Title 14 sections 650 and 702, which are already intrusive and should be amended to be more relaxed and Laissez-faire, not expanded for more control and regulation.	regulations, therefore a specific answer is not warranted.
37	David Wikle, con't.	37-d. The proposed regulations provide no net benefit to the state, the USA, or residents, to arthropod species group, but only to CDFW, who demonstrate a lack of knowledge of the groups they regulate. Economically, the package is a disaster.	37-d. The benefits of the proposed regulations are outlined in Table 1 (page 9), as well as on pages 82-83 of the Original Proposed ISOR. Refer to the SCP Fiscal Analysis (revised June 2017), Alternatives 1 and 2 (pages 8-12) for cost recovery options evaluated.
37	David Wikle, con't.	37-e. There is no need for any state agency to regulate non-game scientific, recreational/ avocational collecting of arthropods outside of State Parks and Refuges. Other states where arthropods aren't considered wildlife have less endangered species than in California, and ample study goes on in those states.	37-e. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). CDFW has outlined a couple of other states where invertebrates (including arthropods) are regulated, as stated in General Response 1.2 , though acknowledges that different states prioritize conservation and management of species differently than California.
37	David Wikle, con't.	37-f. Bureaucratic control of this action beyond State Parks and Refuges would stifle sharing of knowledge on insect and arthropod species, habitat and diversity, and hinder numbers of future enthusiasts or entomologists. The regulatory body has nothing to do with promoting the above, leading to no benefit to the state (economic or otherwise).	37-f. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650. Refer also to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement, as well as General Response 3 regarding fees and cost recovery.
37	David Wikle, con't.	37-g. Fish and Game Code sections 1002, 1002.5 and 1003 authorized CDFW to issue SCPs, but do not mandate it. Revenue and staffing shortfalls can be attributed to unneeded paperwork and bureaucracy. CDFW should seek legislative or statutory tweaks to exempt terrestrial invertebrates.	37-g. Refer to Specific Response 37-a. As stated in General Response 1.2 , CDFW's existing and proposed authority under the cited code sections allow it to regulate taxa of invertebrates under Title 14, Section 650. Refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
37	David Wikle, con't.	37-h. This "SCP business" started out as a revenue enhancement scheme, and was not intended to become as big as it has, a tax masked as regulation. The commenter asserts that CDFW seeks to exert its power over others, and its proposal will not provide a positive net financial gain, or break even. The commenter suggests CDFW should simplify	37-h. As outlined on pages 1-2 and 5 of the Original Proposed ISOR, SCPs started out to regulate the take of wildlife by scientists, students and museum collectors, and has always had some sort of fee associated with it (starting with \$5 per calendar year – FGC Section 1002, amended by stats. 1957, Chapter 1972). CDFW seeks to adequately recover costs to implement the current SCP program (which has vastly changed since 1957), as outlined in General Response 3 , while also fulfilling trusteeship responsibilities under FGC sections 1002, 1002.5 and 1003 for the natural resources CDFW is responsible for. Reporting requirements are stated in certain forms of the proposed regulations, as well as subsection

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		the process by requesting money and requiring an annual report.	650(p).
37	David Wikle, con't.	37-i. The commenter asserts that CDFW will never meet cost recovery objectives because "overtaxing" already taxed entities will lower the pool of available people to "tax." The commenter asserts CDFW authors of this package have no experience with species protection, scientific research, or its own purpose.	37-i. As outlined on pages 5-6 of the SCP Fiscal Analysis, legislature increased fees effective January 2013 towards cost recovery objectives for the few staff involved in SCP review. Subsequent years' trends of fee revenue coming in are reflected in Attachment 1 of the SCP Fiscal Analysis. The regulated community has continued to apply for permits, and will continue to do so under the new regulations. CDFW worked hard to produce a permit structure to allow some permitholders to lower fees than currently effective based on permitting needs requiring less scrutiny, and maintain or slightly raise existing fees for other permitholders who partake in more activities requiring more scrutiny. CDFW maintains the trustee role in managing species under sound scientific principles, and relies on the data that SCP permitholders produce (via the CNDDB or otherwise).
37	David Wikle, con't.	37-j. The commenter asserts that conservation and management of species would suffer under the proposed regulations, which misuses the statute. He asserts that banning collecting of arthropods would be CDFW's next step and destruction of habitat and those who advocate for habitat preservation would ensue.	37-j. The commenter does not specify how conservation and management of species would be affected under the proposed regulations, or how the proposed regulations are "misuse" of the statute. The CDFW was charged by the legislature with administering the Fish and Game Code in general, and the scientific collection program in particular. (Fish and Game Code §§ 702, 1002.) In that capacity, regulations adopted pursuant to the Administrative Procedure Act are presumed to be consistent with the underlying statutory authority. CDFW does not agree with the commenter's assertion of banning collection of arthropods, and in fact has exempted the need for a SCP to collect most terrestrial arthropods, as outlined under General Response 1.1 .
37	David Wikle, con't.	37-k. If the SCP Fiscal Analysis were submitted in a private corporate setting, the generalities, omissions and wishful conclusions would lead to public outcry.	37-k. The commenter does not specify what generalities or wishful conclusions appear to be incorrect, or provide the omissions that are allegedly lacking in the SCP Fiscal Analysis or in the proposed regulations, therefore a specific answer is not warranted.
38	Associate Professor, Dept. of Entomology and Nematology, UC Davis Email dated 5/5/2017	38-a. The commenter states he is not aware of any value the proposed regulations contribute for conservation and resource management. Collection of threatened or endangered species is already and should be regulated, most insects and terrestrial invertebrates should require a special permit. The regulations are unjustified scientifically and would be counterproductive for education and stifling for research data collection, while countless insects are killed on highways with no concern.	38-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
39	Deborah Letourneau Dept. of Environmental	39-a. It is unreasonable to include non-threatened (common and abundant arthropods) as wildlife.	39-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	Studies, UC Santa Cruz		
	Email dated 5/6/2017		
39	Deborah Letourneau, con't.	39-b. The proposed change would mean a kindergarten teach cannot capture a ladybug to teach students about beneficial insects, an entomology professor can't require a student collection of insects because opportunistic locations at home aren't pre-determined locations, and we can't "collect" a tick or "propagate" fruit flies by leaving out fruit.	39-b. As detailed in General Response 1.2 , collection of invertebrates opportunistically in any location at any time, without authorization, permit or other exemption from CDFW is inconsistent with the law, particularly for educational purposes, when a clear authority to permit such take exists. Given that most terrestrial invertebrates are exempted from needing a SCP, prospective sampling of unnamed taxa for taxonomic discovery is not anticipated to be affected. Refer also to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students, and prioritization of CDFW resources for enforcement.
39	Deborah Letourneau, con't.	39-c. The commenter compares the existing language of 650(a) [under current regulations, operative 7-18-1996] that lists certain taxa subject to study with that of the proposed 650(a), considered ambiguous or all-inclusive text proposed with this package. Nonthreatened arthropods should not require permits, and any such language should be removed from the proposed regulations.	39-c. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under both FGC sections 1002, 1002.5 and 1003, as well as promulgated through regulation in Title 14, Section 650. That being said, refer to General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
40	Professor, Director of University of Hawaii Insect Museum Email dated 5/6/2017	40-a. The commenter opposes the changes regarding insect collecting. Insects should be treated differently than vertebrates due to their life cycles. It would not help to lump common insects with those species of concern, which already have permit procedures in place for their protection.	40-a. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
40	Daniel Rubinoff, con't.	40-b. If the proposed inclusion of terrestrial invertebrates is so CDFW knows who is conducting research, then the commenter recommends conducting literature searches to identify peer-reviewed articles. Those who don't publish are not doing work that the State should be focusing on, and could impact those	40-b. Refer to General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Peer-reviewed literature searches are a regular part of CDFW scientist staff duties, but the vast spectrum of invertebrate or insect research would not be reliably maintained in institutional knowledge by staff.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
		who do publish by requiring everyone to get a permit.	On the contrary to the comment, CDFW does rely on data, unpublished reports, observation notes, anecdotal findings and other unpublished work for compilation into several management actions, such as CESA petition listings with the Fish and Game Commission, recovery status reports, CNDDB records, wildlife and habitat management plans, policy, and other actions. General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1).
40	Daniel Rubinoff, con't.	40-c. Asking every scientist working on California insects to apply for a complex permit would not benefit the state, save rare insects, but would impede research often funded by state or federal agencies, which could waste taxpayer funding.	40-c. Not every scientist would be subject to a permit requirement under the amended proposed regulations. Refer to General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Any taxes the public may pay that would fund state or federal agencies generally fall under different statutory authorities than those granting CDFW the authority to permit the take of wildlife in any part of the State. As stated under General Response 3 , the permit fees are intended towards cost recovery to implement the program.
40	Daniel Rubinoff, con't.	40-d. The diversity of insects means entomology lags behind vertebrate and plant science in terms of magnitude of study, and insects should not be treated the same as trees and mammals in order to keep study of insects going.	40-d. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
40	Daniel Rubinoff, con't.	40-e. The commenter works on Hawaii insects, which all require a free permit for study, stifling research there on insects at risk of habitat loss, where less is known about the species and threats compared to other places where permits aren't required. The commenter also studies insects in California, and requiring a permit here would slow the pace of discovery, risking loss of rare insects, and because their habitat may be developed before species are better understood.	40-e. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes, and understands other states, including Hawaii, have required permits for take of terrestrial or other invertebrates. Refer also to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research.
40	Daniel Rubinoff, con't.	40-f. Science is under attack these days, and additional regulations would only work to discourage scientists. The commenter requests CDFW reconsider the proposed regulations, which would not help science, nor biodiversity.	40-f. Comment noted. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
41	Sandra Russell Santa Barbara	41-a. CDFW should have heard comments, reactions to the proposed changes from	41-a. As stated in the beginning of Appendix A (General Responses) , over 3,000 interested parties were notified with the Original Proposed Package of the proposed regulatory changes to Title 14, sections 650 and 703. Over 2,700 of those were existing

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	Email dated 5/6/2017	several entomological-based groups – if not, they had not been noticed sufficiently.	permitholders, and some entomological societies were notified as well. Forty-six percent of 89 comment letters to the Original Proposed ISOR received addressed the perceived changes in permitting requirement to include terrestrial invertebrates, therefore CDFW believes there was sufficient notice to the entomological community.
41	Sandra Russell, con't.	41-b. The commenter proposes the designation of terrestrial wildlife to exclude classes Insecta and Arachnida that are not listed as threatened, endangered or protected, and exclude the necessity to permit on private property with landowner permission, and on campus of any educational or scientific institution or museum with institution permission.	41-b. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017), and why all state, federal and private lands were not made exempt for collection.
41	Sandra Russell, con't.	41-c. The proposed regulations may prevent mishandling of natural resources, but should be qualified to not affect scientific and educational purposes (e.g. citizen science, local community awareness of resources, etc.)	exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except
41	Sandra Russell, con't.	41-d. Insects provide introduction to the natural world at a young age, with pollinator gardens, terrariums in the classroom, and hands-on activities that impress children more than videos or other non-hands on activities. Schools aren't funded enough for permit fees, and the proposed regulations would be negative for public education and community awareness.	41-d. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
41	Sandra Russell, con't.	41-e. Entomology is a science involving a broad audience with links to schools, universities, museum, public data, etc. The proposed regulations would curtail contribution and deposition of specimens to institutions for later study.	41-e. CDFW agrees with the commenter's value of entomology as a science to studying and appreciating our natural world. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection. As stated in General Response 1.5 , CDFW acknowledges that several databases exist where data can be shared in the public domain, and does not wish to discourage the fascination and passion that amateurs, volunteers and others that have led to entomological discoveries.
41	Sandra Russell, con't.	41-f. The commenter speaks as a member of several entomological organizations who could be affected by the proposed regulations that is within CDFW's interest to encourage such individuals and associations.	41-f. Comment noted. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection.
42	Paul Da Silva	42-a. The commenter provides the following comments in the context that California is a biological hotspot, and state regulations	42-a. Comment noted. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except

C	ommenter Name, Format, Date	Comment	Department Response
	Dept. of Life and Earth Sciences, College of Marin Email dated 5/7/2017	affecting insect and collection should not hinder entomological research and education.	for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
42	Paul Da Silva, con't.	42-b. Proposed subsection 650(a): Insects and arachnids should be exempted to avoid impeding necessary identification of insects, and massive paperwork. Insect population size and life cycles poses little or no risk to their collection. Continuing to include insects and arachnids would be harmful.	42-b. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
42	Paul Da Silva, con't.	42-c. Proposed subsection 650(f)(3):student permits may work for graduate students working with their PI, but not undergraduate classes taught by an instructor, and an entity permit of the General type on which an instructor is listed should be valid for student on the instructor's class roll.	42-c. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost. Refer also to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a .
42	Paul Da Silva, con't.	42-d. Proposed subsection 650(I)(1): General Use permits may work for large organizations with large numbers of wildlife from a single taxonomic group, but would put smaller organizations with fewer financial resources who work with fewer numbers of wildlife from a variety of taxonomic groups, due to the need to pay more fees. Smaller organization should be able to combine authorizations under one permit, or obtain exemptions or discounts when applying for multiple permits.	42-d. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each. The commenter could apply for a Specific Use level permit, instead of a General Use level permit, in order to specifically request more taxonomic groups that are otherwise separated out by the General Use permit levels (by Inland Fisheries, Marine and Terrestrial Wildlife) that aren't provided for in the General Use. Refer also to Specific Response 3-b , which addresses how to select applying for a Specific Use permit rather than a General Use permit. Lastly, General Response 3 discusses permit fees and cost recovery.
42	Paul Da Silva, con't.	42-e. Proposed subsection 650(j): List of Authorized Individuals – a class roster should be accepted as authorization for class collecting activities under supervision of an instructor for an Entity permit (General Use).	42-e . Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
42	Paul Da Silva, con't.	42-f. Proposed subsection 650(k): permit duration and renewal – Other agencies (e.g., National Parks Service) grant permits of five year duration, or more. It would be beneficial to	42-f. As stated under Goal 1 of the Original Proposed ISOR (page 7) and justification for subsection 650(k) (pages 25-26 of the Original Proposed ISOR), the duration of a Student permit of one year was already set in statute from decades ago, and the permit duration for an Individual or Entity permit was increased from two years (24 months) to three years (36 months), as established by Legislature with the passage of AB 2402 and amendments to

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		make permits valid for 5 to 10 years to reduce burden on CDFW and applicants.	FGC Section 1002.
42	Paul Da Silva, con't.	42-g. Proposed subsection 650(o): Notification of Field Work or Activity – would be a huge amount of paperwork as proposed. It would be more reasonable to require one notification per field season or semester with planned dates and times.	42-g. Refer to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b).
42	Paul Da Silva, con't.	42-h. Proposed subsection 650(p):reporting requirements – as data reporting formats change over time, CDFW should join the Global Biodiversity Facility (gbif.org) and make its formats an acceptable option for permit reporting.	42-h. CDFW appreciates this suggestion, and acknowledges that other data formats exist that may be more conducive to the types of data that many SCP permitholder collect. However, as stated in General Response 1.5 , the goals of such data collected as part of SCP reporting are often different than those of publicly available databases, such as GBIF. It would be something for CDFW to consider in the future as the SCP reporting database develops to meet other data needs in the coming years.
42	Paul Da Silva, con't.	42-i. Regulations for entomological collecting for science and education have the goal of protecting wildlife. With the commenter's above suggestions, progress toward that goal may be achieved.	42-i. CDFW thanks Da Silva for his thoughtful comments, and hopes that the revisions made in the Amended ISOR regarding invertebrate permitting will help alleviate most of the commenter's concerns.
43	Daniel Marschalek Postdoctoral researcher, San Diego State University Email dated 5/7/2017	43-a. The commenter welcomes the proposed changes to electronic reporting, but is concerned about several aspects of the permitting process in regards to insects, which may restrict and limit interest of the public to natural resources.	43-a. Comment noted. The Mandatory Wildlife Report (form DFW 1379a) is anticipated to be available for electronic submission via the SCP online system.
43	Daniel Marschalek, con't.	43-b. Requiring a permit for K-12 and kid activities to grow their interest in natural resources would be a financial hardship. Live specimens in the classroom should not have to pay fees. Fees and permitting process seem to deter people from engaging in, or reporting entomological activities. The commenter suggests CDFW wants to encourage interest and reporting as "use and enjoyment" under CDFW's mission statement.	43-b. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). As mentioned in this General Response, by continuing to issue SCPs for the taxa on this prioritized list, CDFW provides an avenue for educators to inform students and others of conservation priority for certain terrestrial invertebrates, and relay that permitting their take provides CDFW data to help inform their management and conservation. CDFW agrees with the commenter that encouraging interest, engagement and reporting is consistent with our mission.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
43	Daniel Marschalek, con't.	43-c. The requirement to deposit specimens in a public collection could be unwanted or unsustainable to accession such new specimens, with difficult budget times for many museums or collections. A large collection indicated years ago that they were unaware of CDFW's requirement to deposit specimens at that particular institution. Collections and museums may require specific information for specimen curation that CDFW doesn't ask for, therefore better coordination with such institutions is warranted.	43-c. Comment noted. CDFW thanks the commenter for an insightful suggestion to facilitate coordination with museums and other collections intended for final disposition of salvaged or sacrificed wildlife, and to make sure that the details for specimen accessioning would be complete prior to donation. Such direction to a particular institution for final disposition of specimens is often drafted at the level of specific conditions for a permit, and coordination for potential future accessioning is something CDFW will work on. Lastly, as noted in General Response 1.3 , increased flexibility for donation or accessioning to a museum collection under the Terrestrial Wildlife General Use permit (form DFW 1379GW) has been expanded from three months to 12 months, or as soon as reasonably possible.
43	Daniel Marschalek, con't.	43-d. The commenter is glad for the move to electronic reporting, so CDFW can use compiled data more effectively. For reporting timeframe, it can be difficult to have specimens within one or two years following insect community sampling, though a coarse list could be generated, or a count of species within an order, but this may provide little biological information.	43-d. Comment noted. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
43	Daniel Marschalek, con't.	43-e. Only a few experts are available for specialized identification within the diversity of Insecta. Insect projects may need to be reviewed by them, and if not, CDFW's process should be simpler to ensure other resources are protected during entomological studies.	43-e. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017), which does simplify permitting requirements.
43	Daniel Marschalek, con't.	43-f. General Use, application section 3c. The LAI cap of eight Authorized Individuals should be reconsidered so there aren't two permits for the same project to cover more than nine people (including the PI). The same amount of effort would be required to process the permit application as two.	43-f. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a. CDFW presumes that the commenter refers to the LAI limit in reference to the General Use level permit, Authorization W1 (Terrestrial and vernal pool invertebrates). In this situation, the commenter may wish to seek a Specific Use permit to cover the project or study and all Authorized Individuals requested.
43	Daniel Marschalek, con't.	43-g. General Use, application section 4a (Purpose of Permit). Define the terms research, survey/inventory and monitoring.	43-g. Research is defined under subsection 650(b)(23). Survey/ Inventory is intended to be a subset of research, as further defined by "science" under subsection 650(b)(24). Monitoring is likewise a subset of research. The categories are not intended to be mutually exclusive, and often overlap with one another, therefore checking the box for "science" and/or "education" is the priority.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
43	Daniel Marschalek, con't.	43-h. General Use, Authorization W1 (Vernal Pool & Terrestrial Invertebrates). – a typo shows "terrestrial invertebrates and vernal pool invertebrates may be taken in in accordance with the restrictions below."	43-h. Comment noted, this typo has been corrected in the Second Amended ISOR package, Terrestrial Wildlife General Use application, form DFW 1379GW, Authorization W1.
43	Daniel Marschalek, con't.	43-i. Notification of Field Activity (form DFW 1379b) – CDFW should provide contact information for who to send this form to. A webpage could provide up-to-date information.	43-i. Comment noted. As mentioned in General Response 4 , contacts will be clarified for permitholders to know who to send the Notification form to, whether by online means, or as part of conditions in the issued permit.
44	Erik Raddatz Email dated 5/7/2017	44-a. Why are hobbyists/ personal collectors suddenly called out, where it is illegal to catch or spider or bug for a child. SCPs don't include thousands of hobbyist teachers, and nature lovers to collect for personal or educational reasons. A fishing license is required for nonendangered or threatened reptiles/ amphibians within designated limits, but invertebrates require a SCP – the logic is nonsensical.	44-a. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement. Lastly, refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
45	Linda Erickson Email dated 5/7/2017	45-a. The commenter states confusion over the regulatory language and volume of information, making it hard to know what changes are proposed. The commenter requests guidance for collection of invertebrates for scientific or education purposes.	45-a. The proposed SCP regulations package is amongst the largest CDFW has undertaken, and acknowledges its complexity, which explains the volume of the Original Proposed ISOR as an attempt to justify necessity and clarity. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
45	Linda Erickson, con't.	45-b. Commenter would like to know: i) additional requirements for permitting; ii) is the requirement to notify before collecting new, iii) Is the requirement to report species and GPS info new, and iv) what is the increase in permitting cost for individuals and businesses?	 45-b. Responses are as follows: i. With the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (General Response 1), there are no longer requirements for most invertebrate taxa. For those 303 species or genera that continue to require a permit, refer to regulation subsection 650(i), as well as forms DFW 1379GW (General Use – Terrestrial Wildlife – Authorization W1) or to form DFW 1379S (Specific Use) to know which permit type is needed, depending on whether the 303 prioritized species or genera are thought to be incidentally taken during activities otherwise exempt from needing a SCP (pursuant to subsection 650(u) – General Use), or are being targeted for take (Specific Use). ii. the requirement to notify CDFW prior to conducting permitted activities in the field is not
			new; refer to General Response 4 regarding the history, as well as necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b). iii. the requirement to report species and GPS coordinates is not new, and has been in
			iii. the requirement to report species and Gr 3 coordinates is not new, and has been in

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			regulation since before 1996 (formerly "Report of Specimens Captured or Salvaged"). Refer to pages 63-64 of the Original Proposed ISOR for justification of fields on form DFW 1379a (Mandatory Wildlife Report).
			iv. The straight dollar amount of permit fees have gone down from current 2017 SCP fees by 45% for the General Use (from a total of \$421.58 to \$230.10) and by 19% for the Specific Use (to \$340.70). The tiered permit and corresponding fee structure allows for more choice for applicants in deciding which permit use level would meet their needs (refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each).
45	Linda Erickson, con't.	45-c. There is confusion in online forums about whether situations such as recreational collecting, children collecting for a school project, or a bug enthusiast require SCPs.	45-c. It may depend on the intent and scope of the insect collection to determine whether a SCP is required. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.
46	Jill Carpenter Sr. Biologist, Bat Specialist, LSA Email dated 5/7/2017	46-a. The commenter expresses understanding that the Specific Use would require multiple amendments for multiple clients or projects. Amendments can take months to process, where clients have faster turnaround timeframes, and would complicate the consultant's job. The commenter works primarily with bats.	46-a. Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. Refer to Specific Response 82-c regarding bat permits and MOUs.
46	Jill Carpenter, con't.	46-b. If the Specific Use amendment process for separate project amendments is based on concerns for duplication of work by different permitholders in a given area, this might not be a bad thing for bats. Follow-up surveys by one, or by different permitholders are often necessary for baseline data. Notification requirements pursuant to subsection 650(o) should inform CDFW of permitholders working in the same area.	46-b. As discussed in detail under Specific Response 55-h , CDFW concurs with the value of repeated studies and surveys in consulting work for terrestrial wildlife, but there may be a few extreme cases where it may not be necessary, or at least not likely to be approved, if for instance, a large number of specimens were requested to be sacrificed, and the desired information could be gathered via another method. Our intent is not to limit repeated surveys and inventories, but to encourage such work on terrestrial wildlife in California. As noted under General Response 4 , the Notification is required primarily for CDFW Law Enforcement, and secondarily for regional biologists to know who is conducting activities in their region(s) or county(ies). The take reports are a summary of take activities, species, methods, and numbers, and are sent to CDFW review programs which authorized and issued the permit.
46	Jill Carpenter, con't.	46-c. Commenter understands the need to streamline the permit process while addressing CDFW's state goals for SCP administration improvements. The commenter states concerns for a cumbersome process for consultants (and CDFW staff themselves) as currently proposed.	46-c. Comment noted. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
47	Ron Jackman	47-a. The commenter's work often involves take of certain listed species, and California	47-a. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. Refer to General Response 2.1 regarding permitting for species not

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	Garcia and Associates Email dated 5/7/2017	SSC through catch and release monitoring, at multiple sites with short notice. The proposed study-based Specific use permit would add delay and costs with a longer review time, when CDFW already requires project assessments from clients.	covered by a SCP (i.e., CESA-listed species). As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. A Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face.
47	Ron Jackman, con't.	47-b. The commenter recommends a separate permit for consultants that might be more programmatic in nature with a quick catalog-type of new projects. CDFW already sees many reports prepared for clients (perhaps permit conditions could cover the need to see any final written products), and submits CNDDB data for listed species; why make it hard for biologists?	47-b. Refer to General Response 2.2 regarding the request to create a separate permit type for environmental consulting-type work.
48	John De Benedictis Research Associate, Bohart Museum of Entomology, UC Davis Email dated 5/7/2017	48-a. The commenter objects the proposed changes to include permitting requirement for insects for scientific collecting because it would inhibit entomological education and research and be impossible to comply with permit requirements.	48-a. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement. Lastly, refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
48	John De Benedictis, con't.	48-b. Insect collecting is essential to training in entomology. Permit requirements would be detrimental to entomology.	48-b. CDFW understands the utility that voucher specimens and museum collections play in education and research. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection. Refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
48	John De Benedictis, con't.	48-c. The permit application requests common and scientific names for each species for collection. There are 700 to 1,500 lepidopteran species with no common name, and others haven't been described yet. It is impossible to anticipate all the species that may be collected at a given location, or to limit sampling to just those identified on the application would defeat the research.	48-c. CDFW appreciates the work that academic and research entomologists conduct to help identify and classify California's broad terrestrial invertebrate and insect diversity. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
48	John De Benedictis, con't.	48-d. It would be impossible to comply with reporting as proposed with the numbers of specimens collected, identification can take years, and many species are yet to be described. Data entry and store time and costs would be excessive.	48-d. Refer to Specific Response 48-c above.
48	John De Benedictis, con't.	48-e. The proposed changes are similar to the situation in requesting National Parks Service] permission to collect lepidopterans on the Channel Islands. Several exemptions were granted to allow the research to continue.	48-e. Commented noted. Refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
48	John De Benedictis, con't.	48-f. Under the current and proposed regulations allow for other insect sacrifice without needing a SCP or report those taken. This suggests the intent of the proposed regulation is not to protect insects, but trigger requirements to make research more costly and time-consuming.	48-f . It is not clear which current and proposed regulations legal means of killing insects indiscriminately is allowed. Refer to Specific Response 25-b regarding take for public health and agricultural pest control concerns. The proposed exemption from needing a SCP for most terrestrial invertebrates (General Responses 1.1) is expected to alleviate costs, difficultly, and time for terrestrial invertebrate and insect permitting.
48	John De Benedictis, con't.	48-g. Permit fees for insect collections required for their training would be another burden to students already dealing with increasing tuition and other costs, and the application would be a challenge. Permits might be detrimental to the ability to train future entomologists.	48-g. Refer to Specific Response 20-c regarding hardship, General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students, as well as General Response 3 regarding fees and cost recovery.
48	John De Benedictis, con't.	48-h. The commenter isn't opposed to requiring a SCP for insects, but feels it is naïve to think invertebrates should be regulated the same way as vertebrates. The commenter suggest insects and other terrestrial invertebrates not included under existing regulations be excluded from the proposed regulations, with alternative requirements to be more accommodating for this community.	48-h. Refer to Specific Response 48-a , as well as General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups.
49	Greg Kareofelas Davis Email dated 5/7/2017	49-a. The commenter is against "terrestrial arthropods" requiring a SCP.	49-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
49	Greg Kareofelas, con't.	49-b. The commenter states his inability to understand the proposal for a progressive California state, particularly in the current "antiscientific" political climate. The proposal would burden students, scientists and researchers towards pursuing their work elsewhere.	49-b. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR. CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
49	Greg Kareofelas, con't.	49-c. The commenter states he can't see any benefit for the data that would be generated from permitting, when habitat destruction continues to be a concern (agricultural conversion, off-road vehicles, urban development). It appears it would only burden underfunded researchers and students.	49-c. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650, as well as General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data.
49	Greg Kareofelas, con't.	49-d. Needless regulations that hinder should be struck and replaced with language that would help those documenting California's natural history; CDFW should help them.	49-d. The commenter does not specify what aspects of the regulations would hinder, therefore a specific answer is not warranted. Refer to Specific Response 49-b .
49	Greg Kareofelas, con't.	49-e. Delete the words "terrestrial arthropods" from the current requirements. Extinction of every threatened and rare butterfly was caused by habitat destruction. Research and the collecting community defend against other extinctions.	49-e. Comment noted. As stated in General Response 1.1 and General Response 1.5 , the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list is intended to provide a mechanism for reporting of information to CDFW to inform management actions for those sensitive terrestrial invertebrates.
49	Greg Kareofelas, con't.	49-f. Help support research; don't treat insects the same as the Golden Eagle.	49-f. Golden Eagles have Fully Protected status pursuant to FGC Section 3511 and Title 14, Section 670.7, CCR. There are no insects that are considered Fully Protected, therefore the commenter is misled in thinking that insects could be treated the same.
50	Kipling Will Associate Professor and Director Essig Museum of Entomology, UC Berkeley Email dated 5/8/2017	50-a. Based on the commenter's expertise to document the state's insect biodiversity, it is clear that the proposed regulations for SCP are not realistic and not in the best interest for California's biodiversity.	50-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR. CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
50	Kipling Will, con't.	50-b. Unlike vertebrates, insects are very diverse in California. It is impossible to predict the numbers and species that would be found	50-b. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		during sampling. Insect sampling is critical for human health, economic reasons and for natural resource protection.	
50	Kipling Will, con't.	50-c. CDFW is authorized by FGC to issue permits, but it is not mandated. Permit issuance to should be limited to instances where benefits to the people and resources are clear. Costs and burdens should align with level of benefits.	50-c. As stated in General Response 1.2, CDFW's broad jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat, together with the specific authority to administer scientific collection, allows it to regulate taxa of invertebrates under Title 14, Section 650. The benefits of permitting by regulation of a prioritized terrestrial and invertebrate species list are outlined in General Response 1.1 .
50	Kipling Will, con't.	50-d. The proposed regulations would stifle education and research, where passive sampling techniques make it impossible to predict what will be captured and in what quantities. Opportunistic sampling during the right conditions is critical.	50-d. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
50	Kipling Will, con't.	50-e. Complex and costly permits for activities not otherwise restricted may be viewed as overly bureaucratic and would hinder the casual working relationships between government, independent research organizations, zoos, etc.	50-e. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
50	Kipling Will, con't.	50-f. Universities need to produce students trained in entomological, hands-on skills as part of organismal curriculum. This is critical in our day for understanding climate change and human impacts, and the proposed regulations could be a blow to this effort.	50-f. CDFW agrees with the commenter's value of entomology as a science to studying and appreciating our rapidly changing world. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection. CDFW hopes that the revisions made in the Amended ISOR regarding invertebrate permitting will help alleviate most of the commenter's concerns.
50	Kipling Will, con't.	50-g. The regulations will not protect California fauna. Sampling and reporting restrictions are unrealistic for invertebrates. There is no indication that CDFW can store, maintain and share data in perpetuity. Data stored would likely be skewed to and thus of little value for management, and for enforcement.	50-g. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity. Refer also to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data.
50	Kipling Will, con't.	50-h. Recommends CDFW exclude non- endangered or non-threatened terrestrial or freshwater arthropods from the permitting process, as is the case for plants, since it is impossible for CDFW to provide meaningful oversight for insects or arthropods.	50-h. Refer to Specific Response 30-e.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
50	Kipling Will, con't.	50-i. Recommends CDFW exclude permits for representatives of a university, college, school, incorporated city, state or federal government agency, publicly owned zoo, or wildlife or research organization.	50-i. Refer to Specific Response 30-f.
50	Kipling Will, con't.	50-j. Recommends CDFW issue an Arthropod's Collector's Permit for Scientific Purposes, for the above noted classes of Permitholder types, via an online registry.	50-j. Refer to Specific Response 30-g.
50	Kipling Will, con't.	50-k. For an Arthropod Collector's Permit, clear rationale for its need and elements for reporting should be defined to evaluate outcomes.	50-k. A separate permit for arthropod collection was not within the scope of the proposed regulations, or within the capabilities of CDFW to program. It is expected that CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP. It could be considered unequitable to create a separate permit type for one constituent group.
50	Kipling Will, con't.	50-I. If permits are needed at all, CDFW should consider formation of advisory committee with representatives from museums, zoos, parks, research organization to craft a set of regulations that work and protect wildlife.	50-I. Refer to General Response 6 regarding pre-notice outreach efforts conducted prior to initiating the rulemaking.
51	Robert Zuparko Essig Museum of Entomology, UC Berkeley, and Cal Academy of Sciences Email dated 5/8/2017	51-a. The commenter is concerned about proposed regulations, which seem to reflect a bias for vertebrates, regulations which do not necessarily work for invertebrates.	51-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups.
51	Robert Zuparko, con't.	51-b. The few entomologists studying invertebrates need to be efficient as possible to collect invertebrates for current, and future study.	51-b. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
51	Robert Zuparko, con't.	51-c . The proposed regulations appear to limit collections, which is impossible for small insects and methods employed to document diversity. Specimens are brought back to the lab, sacrificed, and then examined under a microscope. Specimen numbers need to	51-c. Refer to Specific Response 51-b.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		document diversity from multiple locations and dates.	
51	Robert Zuparko, con't.	51-d. The proposed regulations require identification of collection sites ahead of time, which is understandable for vertebrates or geographically local species, but when working statewide in opportunistic conditions, such locations can't be identified in advance. Why do such locations need to be known ahead of time?	51-d. Locations would not need to be identified under the Terrestrial Wildlife – General Use (form DFW 1379GW), if working within the allowances and restrictions granted by Authorization W1. Refer to Specific Response 45-b(i). As discussed in General Response 2.2 , the need in many cases for planned sampling locations be identified ahead of time is outlined in the justification of Specific Use form DFW 1379S, form section 4f, "Requested Take Activities," on pages 57-61 of the Original Proposed ISOR.
51	Robert Zuparko, con't.	51-e. The commenter expresses concern for use of collection methods, such as malaise trap, sweeping by net, light traps, as indiscriminant, and thus not being allowed under the proposed regulations.	51-e. Refer to Specific Response 51-b.
51	Robert Zuparko, con't.	51-f. The commenter understands the main push for the revised regulations was for financial reasons, but the proposed regulations call for notification of field activities to law enforcement. The commenter isn't clear on why, and which law enforcement needs to be notified – local police, CHP, County sheriff?	51-f. As stated in the Original Proposed ISOR package (Goal 3, pages 10-11), cost recovery is one of the goals of the SCP rulemaking. The requirement to notify CDFW prior to conducting permitted activities in the field is not new. As discussed in General Response 4 , the Notification is required primarily for CDFW Law Enforcement, and secondarily for regional biologists to know who is conducting activities in their region(s) or county(ies). General Response 4 discusses the history, as well as necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b).
51	Robert Zuparko, con't.	51-g. The commenter states wildlife loss in the state (a CDFW concern) is attributable to habitat loss, climate change, and poaching/ overhunting. There is no known evidence of scientific collecting impacting insect populations.	51-g. CDFW acknowledges that habitat loss, climate change and poaching can all attribute to wildlife loss in the state. It is difficult to know the impact of scientific collecting when population baselines are not well established or known, and if take data is not being centralized in order to track trends. Nonetheless, the prioritization of certain terrestrial and vernal pool invertebrates for permitting allows CDFW to focus data collection efforts on 303 species or genera to efforts to track those species and natural communities of greatest concern.
51	Robert Zuparko, con't.	51-h. We should do everything to facilitate scientific research, but would not be as feasible with cost and time-intensive regulations to comply with.	51-h. Comment noted. CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
52	Stacy Philpott Professor, Environmental Studies Dept., UC Santa Cruz	52-a. The commenter opposes including insects in the definition of wildlife; permits should not be needed to collect non-threatened insects. Most insects and terrestrial arthropods are highly abundant, where collection shouldn't impact their populations.	52-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	Email dated 5/8/2017		
52	Stacy Philpott, con't.	52-b. Requiring a permit for insects would prohibit other take associated with human health (such as removing ticks), agricultural operations, and would slow the pace of research and education, where field and classroom demonstrations would be limited.	52-b. As stated in General Response 1.2 , CDFW's existing and proposed authority under the cited code sections allow it to regulate taxa of invertebrates under Title 14, Section 650. Refer to Specific Response 25-b regarding sampling for agricultural and vector control monitoring.
52	Stacy Philpott, con't.	52-c. The commenter opposes including insects as wildlife and requiring a SCP for their collection.	52-c. As stated in General Response 1.2 , CDFW's existing and proposed authority under the cited code sections allow it to regulate taxa of invertebrates under Title 14, Section 650. As summarized under General Response 1.1 , it is expected that CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
53	Ken Osbourne Osborne Biological Consulting Email dated 5/8/2017	53-a. In the commenter's experience, field entomology involving collections of insects can be transformative for students, and can be carried out without regulation, permits, oversight.	53-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students.
53	Ken Osbourne, con't.	53-b. Compared to the multitude of hunters and fishers that CDFW regulated, what benefit would it have to regulate the hundreds or few thousand of insect collectors with regards to insect populations, particularly since the federal government manages and protects endangered insect species?	53-b. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection. The State would not be doing its due diligence to manage wildlife resources if we deferred to the federal government. The Fish and Game Commission is delegated with the role of listing species under CESA; however, listing is not addressed under the proposed regulations. That being said, CDFW does have the authority to regulate the take of any invertebrate, as detailed under General Response 1.2 . Refer also to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
53	Ken Osbourne, con't.	53-c. The commenter argues that all insect collecting is scientific when data (i.e., location, date, habitat, ecological information) is associated with the specimen. When there is no data associated with the specimen, the	53-c. CDFW sees the viewpoint of the commenter in that all collections could be considered to be scientific when data is associated with a specimen. That could be one way to consider bringing under the purview of SCP permitting most recreational insect collecting activities. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	,	specimen's value to science diminishes. Amateurs maintain collections, which could end up in museums. Citizen science can be a recreational activity, and contributes value to people themselves, and to science and knowledge.	
53	Ken Osbourne, con't.	53-d. It would be absurd to regulate non-threatened, rare federally listed species as a means to provide oversight. Insect diversity and abundance and provision in the food chain suggest they don't need regulation. Windshield strikes likely take more insects in a day than collectors take in many days or years.	53-d. As stated in General Response 1.2 , CDFW's existing and proposed authority under the cited code sections allow it to regulate taxa of invertebrates under Title 14, Section 650.
53	Ken Osbourne, con't.	53-e. Do not impose SCP requirements on insect collecting activities in California – these protections are already in place for federally listed species.	53-e. Similar to the logic applied for birds in Specific Response 36-b (Ornithological Council) , CDFW would not be doing its due diligence under CEQA, and would be abdicating its role as Trustee agency for the State's wildlife, if the regulatory decision were to defer solely to federal recovery permits rather than issuing a state SCP. CDFW frequently issues permits with authorizations and conditions that are more restrictive than the associated federal permits, with need for reporting format, including CNDDB reporting.
54	Daniel Barton Assistant Professor, Dept. of Wildlife, Humboldt State University Email dated 5/8/2017	54-a. The commenter seeks to understand how research work funded by CDFW, or because of benefits HSU research generates, why a permit fee should be charged at all. Involvement in multiple projects suggests that under the proposed regulations, such work would require separate permit applications. Thus cost imposed by CDFW onto another state agency (HSU) could amount to several thousand dollars. This dis-incentivizes research and education, and should be reconsidered.	54-a. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). General Response 3 discusses permit fees and cost recovery, and the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost. See also Specific Response 30-f .
54	Daniel Barton, con't.	54-b. The commenter appreciates the faster turnaround since 2013 [statutory] changes, and to "streamline the process." However, the commenter doesn't support the requirement for the SCP program to be self- funded because it can discourage Pls from research in California to study in other states with regulatory frameworks more friendly to researchers and educators. It is clear the state assembly made a mistake for self-funding.	54-b. Comment noted. As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), the Legislature included the requirement for self-funding. CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
9/ 55		Comment 55-a. We oppose the implementation of the draft Specific Use permit, because it will impose significant delays, cost and confusion to the SCP process that will unfairly burden biological consultants. The new 17-page Specific Use application is written more like a grant application for a specific research project, not as a permit for an individual with a set of skills who will apply those to a variety of projects (e.g. consultants). This will have the effect of curtailing or eliminating smaller, short-term, localized, contemporaneous, or opportunistic research by qualified biologists in the course of their work as consultants.	55-a Refer to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each. CDFW has developed the Specific Use SCP and online application in order to reduce processing delays (identified as a problem for the stakeholder group in the ISOR), while also accommodating the work of biological consultants, as described below. In response to the comments regarding the applicability of the Specific Use SCP to the type of work conducted by biological consultants, we have made changes to subsection 650(i)(2) of the regulations to expand on the meaning of "planned undertaking." The Specific Use SCP application also includes an example of a planned undertaking in Section 4b.1) that is particularly relevant to biological consultants (e.g., "presence/absence or inventory surveys for terrestrial wildlife, possibly at one or more locations"), in addition replacing the word "study" with "permit" at various locations of the application or emphasizing "planned undertaking" alongside "study." Section 4f.7) of the Specific Use SCP application has been amended to allow for applicants, including biological consultants, to apply for permits on a broader geographic scale when the specific geographic areas are not known at the time of application (e.g., "if planning to conduct surveys on a contract basis in the future, such as presence/absence surveys"). Lastly, Section 4b.2) has been revised to highlight that the definition of "research" pursuant to Section 650(b)(23) of the proposed regulations includes activities such as surveys or inventories intended to assess the potential for, or to monitor actual project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations. Therefore, the definition and usage of the word "research" throughout the proposed regulations and the Specific Use SCP application
		further helps to broaden the applicability of the permit to biological consultants, because consultants routinely conduct survey and inventory activities. CDFW agrees that some questions on the Specific Use SCP application may not be well suited for some potential permit requests, and applicants are given the option to state "not applicable." However, CDFW does not intend to curtail or eliminate smaller, short-term, localized, contemporaneous, or opportunistic research in California. Consultants and other qualified biologists who have appropriate training and experience may be able to obtain a permit to opportunistically conduct research activities with specified wildlife over large geographic areas (e.g., presence/absence surveys),. As outlined in the Fiscal Analysis, the proposed cost of a Specific Use SCP will be reduced from the current cost of more than \$400, down to \$341. In regards to the potential confusion with the stakeholder community, we expect that we will receive many inquiries with the newly proposed SCP structure. After the 2013 change to FGC sections 1002 and 1002.5, many applicants have been confused solely on new the Entity vs. Individual permit option, and the proposed regulations package will be changing many more factors. We hope that any confusion will be temporary, and that the new online application and other improvements will result in overall faster permit processing times.	

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
9/ 55	Greg Tatarian, con't.	55-b. People who work with both SSC and non-special-status species would now be required to purchase both a Specific Use SCP and General Use SCP. The Specific Use permit will be issued for individual studies, locations, timeframes, and study goals, rather than a range of scientific collection activities previously covered under a qualified person's SCP.	55-b. Refer to General Response 2.1 , which discusses that both a General and Specific use permit will not always be required. As discussed under the justification for subsection 650(i) of the Amended ISOR (pages 23-25), while a majority of the species and/or taxonomic groups may be able to be surveyed for under the General Use permit without specifying target species, capture and release numbers and specific locations, conducting permitted activities with "Prohibited Wildlife" would require a Specific Use permit. In most cases for "terrestrial wildlife" permits, it would not be necessary for permitholders to obtain both a General Use SCP and a Specific Use SCP for activities involving Prohibited Wildlife (e.g. SSC), because those activities could be covered under a single Specific Use SCP if the requirements in the revised regulations are met.
9/ 55	Greg Tatarian, con't.	55-c. CDFW would require Amendments to permits for different studies, location, study goals, etc., that could take 3+ months to review, with the potential that those amendments would be denied. As stated in comment 55-a., such delays could cause issues for biological consultants.	55-c. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. However, any significant changes to the currently authorized wildlife, activities, methods, procedures, timeframe and location, or changes to the study or planned undertaking covered by a permit, may require an amendment.
9/ 55	Greg Tatarian, con't.	55-d. The new Specific Use permit application requires project-specific information, and no longer appears to be a permit to conduct a range of biological survey work in a variety of habitats and localities, which common in the biological consulting field. The proposed SCP changes are not workable in the consulting environment.	55-d. Refer to Specific Response 55-a , General Response 2.2 , and pages 23-25 and 88 of the Amended ISOR in regards to environmental consultant work.
9/ 55	Greg Tatarian, con't.	55-e. Biological consultants must often conduct field activities in development areas as part of local project permits or Lake and Streambed Alteration Agreement (LSAA) for the project. The new Specific Use permit would require amendments for this type of work.	55-e. Refer to Specific Response 55-a . As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple types of work, though this depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). Consultants do not necessarily have to identify each project (e.g., LSAA) if not known at the time of applying for a Specific Use SCP, but should let us know what counties they would like to work in, and what types of projects they expect to work on (e.g., surveys for gathering presence/absence information for Environmental Impact Reports; surveys at mitigation banks; surveys before any LSAA activity; or surveys during construction projects, e.g., highways, housing, new roads), and "moving out of harm's way" activities, including any information about collaboration with other researchers. Permits can be issued with broad authorizations for species, activities, method and locations to accommodate future unknown field sites (including LSAA-related projects), however, amendments may still be needed depending on whether or not future work fits within the scope of the permit authorizations at the time of issuance.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
9/ 55	Greg Tatarian, con't.	55-f. Consultants who work with special-status and non-special-status species would now be required to purchase two permits, plus amendments for both types of permits. These costs are excessive, punitive, and unfair.	55-f. Refer to General Response 2.1 , which discusses that both a General and Specific use permit will not always be required. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover activities that the General Use would otherwise cover. As noted in Specific Response 36-o , CDFW generally agrees that it would not be reasonable to require permitholders to obtain multiple permits with redundant authorizations.
			Amendment fees have been lowered for both the proposed General and Specific Use Individual or Entity permits, when compared to the current cost for an amendment (\$100+), and will remain as flat fees, as outlined on page 10 of the SCP Fiscal Analysis (revised June 2017) and throughout the Amended ISOR (pages 8, 23-25, etc.). CDFW believes the proposed fees for new, renewal and amendment permits are appropriate and necessary to fully recover the costs for the estimated reasonable administrative and implementation costs. Refer also to General Response 3 regarding permit fees and cost recovery, including for renewals, and their cost and issuance time.
9/ 55	Greg Tatarian, con't.	55-g. It is unreasonable and unworkable to require amendments for each client/project and wait 3+ months for review and approval (or denial).	55-g. As detailed under General Response 2.2 , Specific Use amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. While some amendments are requests for simple changes to an existing permit, some amendments may be more complex or require additional review by multiple CDFW biologists, therefore, we cannot guarantee processing all amendments in a faster timeframe compared to "new" and "renewal" permits. Refer also Specific Response 55-f.
9/ 55	Greg Tatarian, con't.	55-h. Fisheries and terrestrial wildlife are not identical. For example, "take" in the fisheries context often entails mortality, either intended or unintended.	55-h. As outlined on page 4 of the Original Proposed ISOR, there are three different review programs designated under the proposed SCP regulations, each with designated review scientists who work in three CDFW branches or regions (Fisheries Branch, Marine Region and Wildlife Branch) and are responsible for coordinating with others throughout CDFW.
		This does not equate with most terrestrial wildlife studies by consultants, particularly special-status species, where take excludes sacrifice, and is limited to capture and release, marking, recapture and related methods. In many cases in consulting, repeat surveys	Due to the differences between the biology, preferred habitat, threats, methods and procedures used for research on animals, CDFW has determined there are different concerns and precautions that must be taken when working with fisheries vs. terrestrial wildlife. Freshwater fish occur primary in highly static linear systems, whereas terrestrial wildlife occur throughout the majority of the State, including in aquatic environments where fish occur. In addition, there are policies and regulations that differ for fisheries and terrestrial wildlife, which affect CDFW's decision to issue permits.
		are inherent in a project (i.e. one consultant conducts one phase of work for a project, and another is hired to conduct later phases; or, one bat foraging or roosting area is mistnetted repeatedly for specific purposes, and/or by different bat biologists).	Most take methods used by biological consultants and other researches for capture and release of terrestrial wildlife for the purpose of identification do not typically result in injury or mortality when conducted by qualified individuals who have obtained the requisite experience with the permitted wildlife species and methods. For this reason, we included Section 650(h) in the proposed regulations regarding qualifications, which are justified on pages 21-22 of the amended ISOR.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		Concerns over over-sampling or over-manipulating a population are valid, but many terrestrial species are wide-ranging, or their study and surveys require special experience and permissions (i.e. bats).	Comment noted in regards to duplicate or repetitive work. CDFW concurs with the value of repeated studies and surveys in consulting work for terrestrial wildlife, but there may be a few extreme cases where it may not be necessary, or at least not likely to be approved. For instance, if a large number of specimens were requested to be sacrificed, and the desired information could be gathered via another method. When it comes to phasing of contract or project work, it is understood that one consultant might be conducting take with bats for one portion of the job, and another other consultant would be taking care of a second phase of work; this amounts to coordinated efforts for a given area on a given set of species. Our intent is not to limit repeated surveys and inventories, but to encourage such work on terrestrial wildlife in California. In the case of fisheries work, duplication is often seen when multiple researchers request take of salmonids in the same stream or waterbody, where a single fish has the chance to be captured more than once, depending on methods deployed by a particular researcher. For instance, a rotary screw trap to monitor outmigrating salmonids alone could result in high mortality and stress to fish in a given location. Another researcher might be seining to capture, followed by the procedures of PIT tagging of salmonids further downstream in the same watershed, and may be capturing those same individual fish that had just been released from the screw trap. Close scrutiny of take methods and procedures is critical for fish in linear systems to evaluate cumulative impacts to a population of fish, or even to the same individuals. In the case of fisheries, project phasing by multiple consultants, while
			coordinated, could be considered duplicative or repetitive work, but usually is by two or more researchers who aren't coordinated in their efforts, or are conducting take for entirely different goals or for different clients.
9/	Greg Tatarian,	55-i.	55-i. Responses are as follows:
55	con't.	 i.) Is the CDFW implementing a new database of all research studies for all taxa, across all geographic areas and habitats with the new SCP regulations? ii.) Will research study permits be denied if there is overlap and/or duplication of work conducted the same location, and/or for the same species? 	i. The current SCP Database, as noted on page 3 of the Original Proposed ISOR, has a searchable function for the species and locations covered under permits, in addition to some other items of interest, and non-searchable notes can be included in the database file for a particular permit. However, the searchable species and locations fields are not associated with each other in any meaningful way, and the location element is often not precise enough to answer important questions in the future. Improvements with the new SCP database include having the ability to track down to the level of research studies, as identified on page 5 of the FSOR. CDFW does however intend to track every single study being conducted in California during the
		iii.) Will CDFW develop a qualified Board of Scientists to review, and either accept or deny such studies for all taxa in the state? Will this same Board review all amendments and approve or deny?	application process, especially for studies involving common species or routine presence-absence surveys. However, depending on the status of particular permitted wildlife, CDFW may ask for detailed information for individual surveys on the reporting end of the process (e.g., 45-day and 90-day survey reports as required by federal T&E recovery permits). ii. The CDFW Wildlife Branch will likely not deny permits that overlap in the same study

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		iv.) Will there be a guarantee that all amendments will be approved or denied within 90 days? v.) Will there be a review process for denials of applications, either for consulting purposes or specific research studies?	area, and in fact, many permits will inherently have overlapping authorization for locations, due to the factors outlined in Specific Responses 55-a and 55-h. In most cases, CDFW will put the onus on permitholders to make a reasonable, good-faith effort to determine whether any other person or entity has an SCP allowing study of the same wildlife at the proposed study site, but ideally this information would be provided in the application, allowing the online system to track it. Permits for special status species will include conditions that prohibit permitholders from conducting work at a site under active study by another permitholder for the authorized wildlife, unless CDFW allows it. Furthermore, the standard conditions for SCPs will require permitholders to check with the landowner to determine if any other researchers are permitted to work in the same site or area. CDFW may also reserve the ability to issue a permit with certain authorization and conditions for species, activities and methods throughout a large geographic area (e.g., the range of a species). On occasion, CDFW may also deny entire permits or segments of permit requests due to overlap and/or duplication of work in the same location (e.g., to minimize disruption in the lives and movements of mountain lions and other wildlife, as well as impacts to mountain lion or other wildlife habitat). iii. CDFW does not intend to develop of Board of Scientists to review SCP applications – such a body is not necessary with the standard operating procedures developed internally by CDFW permit review biologists as specified on page 4 of the amended ISOR, and would likely require permit fees to increase instead of decrease. iv. Refer to Specific Response 55-g. v. As outlined in subsection 650(r) and (t) of the proposed regulations and pages 30-31 of the Original Proposed ISOR, CDFW has developed criteria for denying applications and reviewing requests for reconsideration.
9/ 55	Greg Tatarian, con't.	Comments 55-j through 55-t focus on aspects of the Specific Use application, form DFW 1379S. 55-j. 4b – 3): Study timeframe section is an issue for biological consulting work.	55-j. Section 4b–3 of the Specific Use SCP application has been amended in response to this comment to include "planned undertaking" which could include presence/absence or inventory surveys for terrestrial wildlife at one or more locations. Applicants can indicate that activities will occur continue unpredictably throughout the entire term of a permit.
9/ 55	Greg Tatarian, con't.	55-k. Section 4c – 1) of the Specific Use SCP application would impose an unfair and unnecessary burden for biological consultants because it could never be fully anticipated or complete.	55-k. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). In response to this comment, we have changed "literature review" to "literature cited" in the Specific Use SCP application, and specified survey protocols be provided as part of the background information for a permit application. It is not our intent to require all applicants to conduct a full written review of the available scientific literature that is relevant to their proposed activities, but we believe its reasonable request to ask

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Format, Date	Comment	Department Response
·		biological consultants and other applicants to provide a minimum level of known supporting information that could apply for a permit request, given the concerns noted above.
Greg Tatarian, con't.	55-I. Section 4c – 2) of the Specific Use SCP application is appropriate for grant applications and research projects, but consulting work occurs continually for projects that may or may not have any positive value for wildlife; take avoidance, minimization, and mitigation are the goals.	55-I. As noted in General Response 2.2, pages 59-60 of the Amended ISOR identifies several fields in the "Background and Past Findings" section that are necessary to help provide CDFW a better understanding of the importance of activities that will be performed under a permit. These fields help applicants demonstrate to CDFW the rationale for the proposed research and linkage to short-term or long-range conservation planning actions, while considering wildlife conservation and data needs.
		In regards to the value of consulting work for wildlife, presence/absence surveys or inventories that are intended to assess the potential for, or to monitor actual, project impacts on wildlife resources certainly have positive value when conducted by experienced and qualified individuals. At a minimum, any information reported to the CNDDB for species covered on the CDFW Special Animals List, or other Biogeographic Information and Observation System (BIOS) layers, will contribute to the most current information available on the State's most imperiled elements of animal biodiversity. CNDDB information is an essential element for preparing listing petition evaluations and status review reports, 5-year review reports, conservation strategies and recovery plans, environmental impact reports and assessing impacts of CEQA projects. Many biological consultants also conduct research in the true sense of scientific research (e.g., mark-recapture, radio-telemetry). The CDFW Wildlife Branch typically requires detailed reporting in standard scientific format for special status species, whether consultants are only conducting presence/absence surveys or conducting true scientific research, this information contributes towards the conservation of California's wildlife and may be used to inform CDFW and the California Fish and Game Commission on policy and management decisions regarding natural resources.
Greg Tatarian, con't.	55-m. Section 4c – 3) of the Specific Use SCP application asks how proposed activities relate to larger series of projects or research, but this does not apply to work that occurs in the consulting field.	55-m. As explained on page 60 of the Amended ISOR, this information allows the applicant to explain other permitholders who may be conducting related take activities on the same species, or other projects as listed in Section 3e of the application. This information is necessary for the CDFW to cross-check other permits that might be related to one another, and to see if some permitholders are proposing take activities that fit under, or make up, a smaller component of larger research plans or environmental documents (e.g., conducting CA red-legged frog surveys and removal of bullfrogs pursuant to a federal Biological Opinion). We understand that consulting activities may not always relate to other research activities, or that permitholders may not be aware their activities are related to a larger series of
		projects, therefore we consider the following sentence on page 9 of the Specific Use SCP application to be optional: "Explain how your proposed activities relate to a larger series of projects or research plans (explain from subsection 3e of this application), if applicable." As noted on pages 3-5 of the Amended ISOR, the permit application process allows for
		con't. application asks how proposed activities relate to larger series of projects or research, but this does not apply to work that occurs in

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			researchers/consultant, and know what research or survey work is occurring in their area. CDFW regional biologists and other taxonomic specialists are most familiar with all research projects occurring within their jurisdiction, and can identify any potential conflicts, overlapping research projects, environmental documents under review, or potential for incidental take of non-target sensitive wildlife that were not considered by the applicant.
9/ 55	Greg Tatarian, con't.	55-n. Section 4c – 4) of the Specific Use SCP application regarding conservation actions, recovery tasks, research needs may relate to project-specific studies but may not be relevant for consultants.	55-n. As noted on page 60 of the Amended ISOR, the field that requires information on how the permit relates to conservation actions, recovery tasks and research needs is necessary for CDFW to cross-check the proposed take activities to other plans or actions that might be required by law (Section 5 of the application), or as management recommendations by CDFW, federal, or other state or local agencies. CDFW determines research needs and management recommendations for SSC species and wildlife that are under consideration by the Fish and Game Commission for listing pursuant to CESA.
9/ 55	Greg Tatarian, con't.	55-o. Same comments on section 4d – 1, 2, 3) as above comments on other parts of Section 4 of the Specific Use SCP application.	55-o. As noted in Specific Response 55-a , Section 4d – 1, 2, 3) has been amended in response to comments to de-emphasize the individual "study" and apply more broadly to all types of permit activities. Refer also to page 60 of the Amended ISOR. CDFW has determined that biological consultants conducting survey and inventory activities can provide a broad overarching title for such work, rather than an individual specific study.
9/ 55	Greg Tatarian, con't.	55-p. It will be difficult to anticipate nontargeted wildlife across a range of species, localities and methods for section 4f – 1, a, b) of the Specific Use SCP application.	55-p. As noted on page 61 of the Amended ISOR, applicants are expected to generally have an idea of the species they may incidentally catch or take when conducting permitted activities. This often depends on the discriminant nature of methods employed (e.g., aquatic nets can be more indiscriminant than certain aquatic traps). This section directs the applicant to provide the most refined proposed taxonomic levels (i.e., to the family or genus, if possible) of species that could be taken incidentally as a result of their methods.
9/ 55	Greg Tatarian, con't.	55-q. Suggest changes to 4f – 1, c) by changing the past tense to future tense, and add additional wording to instruct applicants to be aware they must review the databases for every future project, and other caveats.	55-q. CDFW thanks the commenter for this suggestion. Changes have been made to section 4f – 1, c) of the Specific Use SCP application, as well as under Section 4b of each of the General Use applications – Inland Fisheries (form DFW 1379GF), Marine (form DFW 1379GM) and Terrestrial Wildlife (form DFW 1379GW),
9/ 55	Greg Tatarian, con't.	55-r. There are issues with providing environmental documents required under section "5c)" due to the timing and nature of biological consulting work.	55-r. As stated on pages 54-55 of the Amended ISOR, section 5c) of the Specific Use SCP application asks the applicant to identify any other permits or environmental documents required by law pertinent to the SCP application. This information is necessary because it helps justify permit requests and verify need, allows CDFW to track the types of environmental compliance requiring SCPs, and facilitates intra- and inter-agency coordination for compliance concerns or issues. We understand that biological consultants work on many different projects throughout the term of a permit and relevant environmental documents may be unknown, although many permitholders also work on long-term projects where environmental documents are known, and the online application system will allow these documents to be uploaded and/or referenced at the time of application, or during amendment for the term of a permit.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
9/ 55	Greg Tatarian, con't.	55-s. A project should not be permitted through the SCP process – this should apply only to an individual or group conducting permitted activities. Conflating the individual with a project in the SCP process threatens the biologist's permit resulting from project activities or actions over which he or she may have no control, and confuses the purpose of a SCP.	55-s. CDFW has determined that both a specific study(ies) and/or planned undertakings can be covered under a Specific Use SCP. Refer also to Specific Responses 36-r , 55-a , 55-c , 55-j , and 78-b in regards to study, project and planned undertaking as it applies to researchers and biological consultants.
9/ 55	Greg Tatarian, con't.	55-t. The scope and cost of the Special Use permit should automatically include General Use permit activities and species.	55-t. Refer to General Response 2.1 , which discusses that both a General and Specific use permit will not always be required. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover activities that the General Use would otherwise cover. As noted in Specific Response 36-o , CDFW generally agrees that it would not be reasonable to require permitholders to obtain multiple permits with redundant authorizations.
9/ 55	Greg Tatarian, con't.	55-u. Clearly, there are many challenges CDFW faces with regards to permitting of survey and study activities. It is understandable that CDFW wishes to streamline and update the entire process, increase efficiency, improve data collection, and increase accountability and the quality of work being conducted by permittees.	55-u. Comment noted.
9/ 55	Greg Tatarian, con't.	55-v. There will be many long-term, negative, unanticipated consequences that will cause significant hardships to consulting biologists, the program's second-largest demographic, if the SCP changes are not refined. We would all suffer the loss of important biological data collection and reporting, as well as risk damaging push-back from those private and public entities who utilize and rely on professional biological consultants to conduct a range of work allowed under SCPs.	55-v. CDFW also appreciates your time and effort to provide suggestions on the proposed regulations during the official public comment period. As noted in response to comment 55-a , we hope that any confusion or perceived negative consequences will be temporary, and that the new online application and other improvements will result in overall faster permit processing times. Any type of change as significant as proposed in the revised regulations will take some time for permitholders to adjust, but we hope the changes will result in improved customer service in the long-term. CDFW reminds permitholders that reporting is mandatory and required by statute; refer to General Response 2.2 regarding consultant-type work.
56	Monika Egerer PhD Candidate, Environmental Studies, UC Santa Cruz	56-a. The commenter opposes the SCP, particularly in regard to stance on common insect collecting.	56-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR, specifically General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	Email dated 5/8/2017		continues to require a SCP.
56	Monika Egerer, con't.	56-b. The commenter alleges that statements in the proposed regulations are not appropriate for insect collecting, and non-threatened arthropods should be excluded from the regulation.	56-b. Refer to Specific Response 56-a. CDFW hopes that the revisions made in the Amended ISOR regarding invertebrate permitting will help alleviate most of the commenter's concerns.
56	Monika Egerer, con't.	56-c. A permit for capture and release of common arthropods is unreasonable in most cases.	56-c. Refer to Specific Response 56-a.
57	Tracey Brown Professor, Dept. of Biological Sciences, CSU San Marcos Email dated 5/8/2017	57-a. Proposed subsection 650(b)(25): there appears to be overlap between the definitions of take and possess (subsection 650(b)(18)). Is capture and release of a fence lizard to show students "take"?	57-a. There is some overlap in the definitions for take and possess that was intended to make it clear that those activities described by FGC Section 86 "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" require authorization from CDFW (whether it be fishing or hunting license, special permit, or other authorization), and that activities that may happen to wildlife beyond take (i.e., procedures, marking, etc.) are part of that take action. The commenter is correct to assume that capture and handling, followed by release, constitutes take.
57	Tracey Brown, con't.	57-b. Proposed subsection 650(h)[(1)](D): did CDFW intend to refer to the Pl's role, if so, then for qualifications for the Pl, should be referenced as 650(b)(19) rather than 650(b)(18).	57-b. Comment noted. CDFW thanks the commenter for identifying this error; it has been corrected in the regulations text, as well as on the accompanying forms as part of the Amended ISOR.
57	Tracey Brown, con't.	57-c. Proposed subsection 650(i)(2)(A) – the commenter was confused by which permit use level she would need – a General or Specific, or both. Examples to illustrate the permits would be helpful, such as a FAQ or other online guidance. The commenter states concern for needing both a General and Specific Use level permit – requiring both would be cost prohibitive as a teacher.	57-c. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover activities that the General Use would otherwise cover. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2) in the Amended ISOR. General Response 3 discusses permit fees and cost recovery. Additional guidance is under development that is intended to help applicants through deciding which permit use level they might need (i.e., General or Specific Use), and other information that aim to help applicants fill out applications.
57	Tracey Brown, con't.	57-d. Proposed subsection 650(o): The commenter feels the Notification requirement of field activity to be at least 2 days, but no more than 14 days restrictive. Is notification required for every field trip? During a field season dates are not yet set, and the commenter estimates	57-d. As discussed by General Response 4 , the Notification is required primarily for CDFW Law Enforcement, and secondarily for regional biologists to know who is conducting activities in their region(s) or county(ies). General Response 4 discusses the history, as well as necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b). It is planned for an electronic format.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		needing to notify at least 13 times. How much time does it take for staff to review these? Reconsider the need and paperwork that would ensue. The commenter understands notifying for more invasive handling, aside from capture and release, but would it be possible to detach temporary possession (capture, handle release) from the notification requirement?	
57	Tracey Brown, con't.	57-e. Proposed subsection 650(o): up to three "activities" can be submitted on a single form, and asks for permitted take activity and equipment. Will this be a drop-down, or fill-in field; it's unclear how detailed it needs to be, and if the permitholder can refer to their permit. Will law enforcement contact names be provided for each area we work in? Shouldn't reports suffice, or why require so much detail, and why only 14 days?	57-e . Refer to Specific Response 57-d , where General Response 4 discusses which law enforcement contacts to send notification to, the reasoning behind a 14-day notification period, and other details. The fields for permitted take activity and equipment will either be fill-in text, or drop-down menus, depending on what was approved with the issued permit.
58	Jennifer Haire Sr. Wildlife Biologist, ICF Email dated 5/8/2017	58-a. The Specific Use appears to focus on individual studies rather than a range of activities covered under the current permit. An amendment would be required for each project requiring surveys, which could take 3 or more months, where clients expect faster and less expensively. Survey work comes in on short notice, which could mean missing survey windows (i.e., fairy shrimp, California tiger salamander). The process seems like it would work for academics and studies, but less for consultants where projects come up and survey timing is critical.	58-a. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. Refer to General Response 2.1 regarding permitting for species not covered by a SCP (i.e., CESA-listed species). As detailed under General Response 2.2 , As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. A Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face.
58	Jennifer Haire, con't.	58-b. The Specific Use application requires a large amount of specific information and justification [as outlined in sections 4a-4f of the application]. As with current permits, take methods, possession, procedures, geographic locations and descriptions are also required. This permit seems to be aimed for graduate studies and other work, and less for consultants with every-changing clients.	58-b. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. A Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
58	Jennifer Haire, con't.	58-c. The commenter is concerned about increasing permit complexity, and costs, in having to apply for two sets of forms for a General as well as a Specific Use permit. Costs may have to be passed down to the company's overhead if clients don't pay for the fees. It seems the process will create more work that may not be adequately staffed at CDFW, which causes concern for longer approval times.	58-c. Refer to General Response 2.1 , which discusses that both a General and Specific use permit will not always be required. As discussed under General Response 2.2 , Specific Use amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program.
58	Jennifer Haire, con't.	58-d. It appears the proposed process may work for research or long-term monitoring project, it isn't practical for consultants due to the nature and flow of projects. CDFW should consider a permitting process similar to USFWS, which is species-based with notification of intent to conduct surveys but doesn't require separate authorization and payment for each project.	58-d. CDFW does coordinate with USFWS permitting staff, in order to achieve our shared goals of conservation for federally listed species. Since the USFWS utilizes a species-based approach under their authority for listing of certain species, and SCPs cover nearly all wildlife in California (see General Response 2.1 regarding permitting for species not covered by a SCP, i.e., CESA-listed species), it is difficult to compare a species-based permitting system to a system built to permit a suite of taxa of differing conservation statuses. A species-based permit system means that a permit with certain authorization and conditions for species, activities and methods throughout a large geographic area (e.g., the range of the species) may be issued, relying heavily on the qualifications of the applicant, since specific studies or project locations may not be identified at the time. Similarly, CDFW reserves the right to issue a broader scope Specific Use permit for more sensitive taxa (with less detail requited by the applicant up front, but carefully conditioned by CDFW staff), and possibly require the permitholder to submit an amendment to approve or deny specific requests that fall under the scope of that permit (e.g., due to overlap with other researchers and/or duplication or replication of work in the same location), rather than deny the entire permit. However, unlike the USFWS, our jurisdiction is limited to the geographic boundaries of California and we also must consider cumulative impacts to species. For these reasons, it is difficult to compare the USFWS permitting system with the one proposed with the amended SCP regulations.
59	Steven Kutcher "Bugs are My Business," Arcadia Email dated 5/8/2017	59-a. The proposed regulations are misguided and financially burden science, with little benefit to California's wildlife.	59-a. CDFW believes the concern <i>for permitting invertebrates</i> is alleviated with the proposed exemption from permitting of most terrestrial invertebrate species; refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). General Response 3 discusses permit fees and cost recovery.
59	Steven Kutcher, con't.	59-b. The proposed SCP regulations may impede citizen science, where non-professional observers have contributed to many scientific discoveries. The commenter is concerned about placing arthropods (with exceptions of	59-b. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement. It is expected that CDFW's approach to invertebrate permitting in response to comments on the

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
		those that are endangered or sensitive) as "wildlife," since many animals depend on insects. Inhibiting their study can be detrimental to California's citizens.	Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
59	Steven Kutcher, con't.	59-c. The fee increase seems to be based on increased workload, from 1,500 or so permits a year primarily for environmental impact reports and higher education institutions. With minor exceptions, this is where the focus should be.	59-c. The commenter has noted the top two permitholder affiliation categories, as identified in Figure 1 (page 83) of the Amended ISOR. As detailed in the justification for subsection 650(g) (pages 20-21 of the Amended ISOR), amendments by Legislature to FGC sections 1002 and 1002.5 expanded the types of organizations, affiliations, institutions, etc. that are eligible to apply for an Entity permit. As outlined in General Response 1.4 , Entity permits may help spread permit fee cost among a PI, and many Authorized Individuals, and allows for collaborative efforts to help reduce the burden of the proposed fees.
59	Steven Kutcher, con't.	59-d. An alternate solution would eliminate the permitting requirement for activities not involving rare, threatened or endangered species. Non-commercial collection and observation, such as for inventorying invertebrates, often have little or no impact. CDFW should abandon policies that discourage take and gathering of data contributing to information about population declines.	59-d. Comment noted. Refer to Specific Response 59-a. It is not CDFW's intention to impede or prohibit activities of citizen scientists. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection.
59	Steven Kutcher, con't.	59-e. In expanding the definition of "wildlife," it is unclear what activities now require a permit – children collecting pollywogs, collection of mites, Boy Scout and 4H/ FFA, elementary school collections, etc. Mark recapture on mice and discovery of a new insect species, capturing and rehabilitating an injured bird and writes about a new veterinary procedure – are these lawful activities without a permit?	59-e. As stated in General Response 1.5 , CDFW does not wish to discourage the fascination and passion that amateurs and other hobbyist collectors that have led to scientific discoveries of certain species. Refer also to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement. Refer also to General Response 1.1 regarding the logic of permitting invertebrates relative to other taxa. As detailed in General Response 1.2 for invertebrates (and in general for <i>all</i> wildlife), opportunistic take or collection in any location at any time, without authorization, permit or other exemption from CDFW is inconsistent with the law. Particularly for vertebrates or other species, for which no exemptions from a SCP permitting requirement are proposed with the amended SCP regulations, some taxa might also require federal permits for take and/ or possession. For example, birds – refer to Specific Response 36-c regarding permitting under the MBTA or other laws for birds. However, given that most terrestrial invertebrates are exempted from needing a SCP, prospective sampling of unnamed taxa for taxonomic discovery is not anticipated to be affected.
			Refer also to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students, and prioritization of CDFW resources for enforcement.
59	Steven Kutcher, con't.	59-f. There should be clear statement of exemption to these changes and purpose	59-f. Much of the documentation provided with the regulatory proposal is required under the Administrative Procedure Act (APA) for approval by the Office of Administrative Law. The

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		behind these rules. The term "wildlife" only deals with organisms and not intent or justification of the regulation. Insects are not fish. If carried out, the impact of [the proposed changes] would be negative for the public and education in California.	intent and justification for the necessity of each proposed subsection of the 650 and 703 regulations, as well as each section of the twelve proposed forms associated with the package (to be incorporated by reference into regulation) are justified throughout the Original Proposed ISOR, including on page 16, the definition of "wildlife." As stated in General Response 1.2, it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes.
			As the commenter doesn't state specific aspects of the proposed regulatory package that would need more intent or justification, a specific answer is not warranted.
59	Steven Kutcher, con't.	59-g. Agriculture and land use changes, loss of habitat all cause declines to invertebrate populations, exceeding the impacts of scientific or non-commercial collection. Habitat loss is attributed to decline in most wildlife populations. As long as CDFW lacks authority or will to regulate land use decisions that affect wildlife (especially invertebrate) populations, no new regulations or fees will reverse the trend, and the current regulations are sufficient.	59-g. The benefits of the proposed regulations are outlined in Table 1 (page 9), as well as on pages 82-83 of the Original Proposed ISOR. The scope of this regulatory proposal to permit the take of wildlife for scientific, educational, or propagation purposes is separate from other statutory and regulatory authorities under which CDFW fulfills other trusteeship roles for land use actions or management for habitat loss. While CDFW is responsible as a whole for maintaining sustainable populations of wildlife and the habitats upon which they depend, and ensuring well-justified and humane treatment of all individuals, this regulatory proposal focuses on permitting the research and education engine of California.
59	Steven Kutcher, con't.	59-h. The proposed regulations provide no net benefit to the state, the USA, or residents, to arthropod species group, but only to CDFW, who demonstrate a lack of knowledge of the groups they regulate. Economically, the package is a disaster. There is no need for any state agency to regulate non-game scientific, recreational/ avocational collecting of arthropods outside of State Parks and Refuges. Other states where arthropods aren't considered wildlife have less endangered species than in California, and ample study goes on in those states.	59-h. Refer to Specific Responses 37-d and 37-e.
60	Brennan Dyer Email dated 5/8/2017	60-a. The proposed changes will stifle entomology research. Information required of insect collectors is unreasonable – insect collectors don't know where, when or what will be collected. Oftentimes specimens can only be identified to species by experts. Don't regulate terrestrial insects like vertebrates, as it is unrealistic.	60-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). Specifically, General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a permit.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
61	Marilyn Jasper Chair, Public Interest Coalition Email dated 5/8/2017	61-a. Allowing for voluntary implementation of additional measures for avoiding by-catch and harm to targeted and non-target wildlife may suffice, but CDFW should take a pro-active position with safeguards to prevent cyber poaching when using GPS, radio telemetry, trail cameras or other electronic tracking or discovery type of technology. CDFW should have a list of required methods and equipment standards, with regular inspections and testing associated with the permitting process for approval and continuation of operations.	61-a. Cyber-poaching, as described in the cited articles, is uncommon and documented mostly in Africa and is most often associated with tracking endangered wildlife with a significant black market value for purpose of poaching the animal for the carcass or parts thereof. However, CDFW do not know of any documentation indicating the practice of use of GPS tracking technology by poachers to track the animals down in North America is anything but minimal. Wildlife Enforcement officers believe the risk of a poacher hacking a collared signal then following up and using that signal to find and kill the animal remains low. Also, CDFW has not received any indication from holders of SCPs that wildlife subject to the SCPs were lost to poachers. Without evidence that cyber-poaching is an issue related to SCPs, it would be an unreasonable additional burden of effort for CDFW to codify in regulation, a requirement of collar manufacturers to employ some means of encryption into GPS/telemetry devices.
61	Marilyn Jasper, con't.	61-b. CDFW should impose strict electronic protective measures that include regular monitoring an investigation by tech savvy CDFW staff or outside contractors.	61-b. Wildlife officers are trained on the use of radio telemetry equipment and would easily recognize a person in the field who was using it and would assuredly contact that person to find out what he or she was doing with it. A person who possessed telemetry equipment along with a SCP would likely be cleared as opposed to a person who possessed telemetry equipment and a firearm or other method of take, which would indicate a need for further inquiry.
61	Marilyn Jasper, con't.	61-c. The commenter supports policies to fully recover all reasonable administrative and implementation costs for SCPs, but also charge an additional fee to cover monitoring and enforcement costs. CDFW could charge higher fees for enforcement for SCPs that have greater potential risk for wildlife impacts.	61-c. The regulation process will be completed as required by, and in accordance with, FGC Section 1050. As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), CDFW is currently only seeking to recover costs for four existing permanent scientific staff members, given the historical shortfall for this permit program.
61	Marilyn Jasper, con't.	61-d. If high-tech methods or equipment are not used for the SCP, perhaps a partial refund of fees could be considered at the end of the research, or when the permit is permanently expired. Those permits with GPS or technology with higher risk for cyber hacking that could reveal locations of targeted or non-targeted species, more frequent monitoring or enforcement may justify higher SCP fees for those permits.	61-d. The regulation process will be completed as required by APA. As CDFW doesn't see cyber hacking/ poaching as an issue at this time (Specific Response 61-a), no refunds or reduced fees would be considered for those studies that do not employ "high-tech methods or equipment." It would be unequitable to reduce fees or provide refunds, while the few remaining groups would be required to pay their fair share of fees to take wildlife for scientific, education and propagation purposes. Any situational fee reduction opens the door to other requests from the benefitted community.
61	Marilyn Jasper, con't.	61-e. CDFW should edit, redact information on research conclusions and information to avoid revealing locations of certain species to licensed game hunters and/or potential poachers.	61-e. For species that are considered sensitive to human disturbances (i.e., species tracked by CNDDB and others as deemed necessary) CDFW policy dictates a variety of methods to hide the specific location. For species not covered under CDFW policy, some editing of submitted SCP reporting data will be considered on a case-by-case basis, depending on the species, location, or other factors.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
61	Marilyn Jasper, con't.	61-f. CDFW should take make the regulations as enforceable and prosecutable as possible to allow the public to seek legal remedies in cases where the public agency may not be handling wildlife take appropriately.	61-f. CDFW Law Enforcement Division agrees and has engaged in the SCP regulation development process and strengthened the citing sections considerably, as compared to the existing, or previous regulations. The enforceability of SCP regulations are significantly stronger as currently drafted, with the addition of subsections 650(a), 650(r) (Permit denial), 650(s) (Permit revocation, suspension or modification by CDFW) and 650(t) (Requests for consideration),
62	Ian Chan Sr. Aquatic Ecologist, Garcia and Associates Email dated 5/8/2017	62-a. The proposed General and Specific Use permit structure may work well for some permitholders, but appears to be an oversight from CDFW's largest group of permitholders. CDFW should already be cognizant of the tendency to create a "catch-22" situation where clients are looking for CDFW-approved biologists (via the SCP or other mechanism) to award contracts, when CDFW seeks the details about field work/ take activities in order to approve the SCP.	62-a. Figure 1 of the Amended ISOR (page 83) was clarified to state that environmental consultants comprise the second largest group of stakeholders, when academic categories public university, private and out-of-state university are combined. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. Refer to General Response 2.1 regarding permitting for species not covered by a SCP (i.e., CESA-listed species), and specifically General Response 2.2 regarding consultant-type work.
62	lan Chan, con't.	62-b. The consultant bid-award model focuses on timely and cost effective services to clients. Administrative delays for amendments for each new project would go against this model, where clients would have to compile study-specific information for each new project [as outlined in sections 4a-4f of the application], apply for, and wait to receive the permit or amendment. This could stifle long-term process for satisfying natural resources requirements.	62-b. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2).
62	lan Chan, con't.	62-c. Much of the work consultants do is required by CDFW and other regulatory agencies, therefore requiring work be completed in a timely fashion yet then impede the ability to do so. Consultants are the main contributors for reporting occurrences, such as to CNDDB. Complicating the process for such data sharing is counterproductive.	62-c. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. Refer also to General Response 3 regarding permit fees and cost recovery.
62	lan Chan, con't.	62-d. The commenter urges CDFW to reconsider consequences of the proposed changes regarding permit structure, where the General Use and Specific Use can work for single projects [by all other permitholder	62-d. The commenter does not specify what consequences may arise from the proposed permitting structure for consultants themselves, or CDFW, therefore a specific answer is not warranted.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		affiliation categories], but would be prohibitive for consultants who work on multiple projects for multiple clients.	
62	lan Chan, con't.	62-e. The commenter urges CDFW to adapt a third permit type for environmental consultants to accommodate that not all the details in the Specific Use may be known at the time of application, but address qualifications and experience of the applicant to be able to conduct general activities. The applicant could update the SCP with new projects specific information once the project is awarded, rather than applying with the details before bidding on a project. This would still provide CDFW with detail to monitor take and meet internal concerns.	62-e. Refer to General Response 2.2 regarding the request to create a separate permit type for environmental consulting-type work.
63	Allison Rudalevige Email dated 5/8/2017	63-a. The commenter appreciates certain changes to the process: qualifications for permit applicants, online application submission, allowing for "out of harms' way" as listed on the forms, and increasing the duration of a permit from two to three years.	63-a. Comment noted. The increase in permit duration from two to three years was a result of changes to statutory authority, as noted under Goal 1 of the Original Proposed ISOR (pages 6-7).
63	Allison Rudalevige, con't.	63-b. The General Use application is designed for various classes of permitholder types (e.g., academic, business, government, etc.). However, the Specific Use application seems geared towards those permitholder affiliations, and not consultants. Section 4, aside from those categories under "science," "education," and "propagation" covers aspects of a specific research study, with title, abstract, goals, study needs, most of which isn't defined for a consultant. The need for consultant work is often much broader; the commenter states she is unsure how to fill out the Specific Use application.	63-b. Refer to Specific Response 43-g regarding selections underneath the science, education and propagation categories. As detailed under General Response 2.2 , several fields were added to the Specific Use form (DFW 1379S) to capture information necessary to ensure an application is filled to completeness, based on fields decided upon by three review programs issuing permits. There are certain flexibilities that may be made, considering the scope of what is requested (e.g., for consultants). Additional guidance is under development that is intended to help applicants through deciding which permit use level they might need (i.e., General or Specific Use), and other information that aim to help applicants fill out applications.
63	Allison Rudalevige, con't.	63-c. Commenter suggests providing three mockups of a completed application for student/ scientist with a single research project, one mockup for a government employee, and a mockup for an	63-c. CDFW thanks Ms. Rudalevige for this suggestion. As noted in Specific Response 63-b , guidance is under development, and it would be helpful to add mockups of applications based on the applicant's affiliation or line of work.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		environmental consultant to help know which fields are applicable. Allow consultants to provide more broad/ general answers to certain fields.	
63	Allison Rudalevige, con't.	63-d. The Specific Use appears to be a project-by-project permit, where additional projects would require amendments. The commenter is unclear on how to interpret "project" for completing the application, would noosing lizards for identification comprise a project, or would each site/ client be a separate project?	63-d. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). In some cases it could be more general based on activities planned for multiple clients that are similar in nature.
63	Allison Rudalevige, con't.	63-e. The commenter heard that each site/ client would require a separate amendment because each could be a "project." Such a requirement would be difficult given multiple surveys are performed for multiple clients every year. Would each require the \$89.28 [Specific Amendment] fee? How will consultants be able to obtain a permit days before, or weeks before a survey window after a contract is signed, or will applicants have to wait for the amendment to be processed, or delay construction? The commenter suggests allowing a project to constitute a type of work rather than a specific site/ client, which could allow permits to be valid for all sites/ clients. Alternately, develop a separate permit type for consultants.	63-e. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts. This also depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). A Specific Use amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. General Response 2.2 also discusses the request to create a separate permit type for environmental consulting-type work.
63	Allison Rudalevige, con't.	63-f. Student permits are valid for one year, but as most that apply are likely graduate students, who would need to renew every year. The commenter suggests student permits extend to two or three years, maintaining low fees.	63-f. Refer to Specific Response 42-f regarding permit duration. As outlined under Alterative 2 of the SCP Fiscal Analysis (revised June 2017, page 10), student fees with the proposed regulations were maintained the same as current student fees (\$25 application fee and \$50 permit fee, as noted in statute (FGC subsection 1002(d)(1)).
63	Allison Rudalevige, con't.	63-g. Upon SCP expiration with submittal of a renewal or new application, CDFW should extend the ability to continue work until the renewal or new permit is issued. This is important when renewals had in the past taken more than 12 months. Work is ongoing	63-g. Comment noted. Refer to subsection 650(k)(2) and (3) of the proposed regulations, where an extension is granted for those who have submitted a permit renewal application at least 30 day prior to permit expiration, that permitted activities can continue with written authorization from CDFW. Refer also to pages 24-25 of the Original Proposed ISOR.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		throughout the year. A permitholder can apply for renewal three months before expiration date, but there doesn't seem to be a guarantee that the new permit will be issued prior to expiration of the old one.	
64	Peter Oboyski Collections Manager, Sr. Museum Scientist, Essig Museum of Entomology, UC Berkeley	64-a. The commenter urges removal of terrestrial arthropods from SCP regulations. Including them would not help benefit and conserve state wildlife resources, and would be unrealistic, impede science and at high cost.	64-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
	Email dated 5/8/2017		
64	Peter Oboyski, con't.	64-b. The goals of the regulations may be redundant, counterproductive, unnecessarily bureaucratic, and a burden. First, the goal of protecting species designated as rare or threatened – but they're already protected.	64-b. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650. As stated under General Response 1.1 , CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP. Some of these species are federally listed, but the majority do not have a special status that grants them special protections.
64	Peter Oboyski, con't.	64-c. Second, to protect ecosystems from scientific collecting, where such collection is not expected to have an impact, life cycles outpace any collecting impact, and habitat loss and invasive species are real impacts.	64-c. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and Specific Response 51-g regarding potential impacts from scientific collecting. Refer to Specific Response 27-d regarding habitat impacts.
64	Peter Oboyski, con't.	64-d. Third, to generate information to inform land management and policy, where the State lacks infrastructure, expertise and ability to do a fragmented job of collecting, analyzing and assessing data, when major collections have compiled records available to the public (e.g., Global Biodiversity Facility (gbif.org), iDigBio), and others are under development.	64-d. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data, as well as Specific Response 42-h .
64	Peter Oboyski, con't.	64-e. Fourth, if hundreds of researchers applied for permits, contact the state for each field outing [submitted Notification of Field Work or Activity, form DFW 1379b], and submitted regular reports, State resources	64-e. As noted under General Response 1.1 , CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP, and has in turn focused its efforts on such prioritized invertebrates to meet conservation priorities and data needs.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		and funding would not be able to keep up with applications.	
64	Peter Oboyski, con't.	64-f. The proposed regulations could be detrimental in the following ways: First, to research, education and conservation, with burden on time and cost for researchers, students and propagation biologists on top of other regulations, permits and reporting requirements. Students cannot afford more fees.	64-f. As noted under General Response 1.1, CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students, as well as General Response 3 regarding fees and cost recovery. As outlined in General Response 1.4, Entity permits may help spread permit fee cost among a PI, and many Authorized Individuals, and allows for collaborative efforts to help reduce the burden of the proposed fees. Refer to Specific Response 42-f and Specific Response 63-f regarding student fees.
64	Peter Oboyski, con't.	64-g. Second, waiting for permits could harm real-time science: natural disasters, fires, pest outbreaks, invasive species don't wait for permits. Students would be done with courses by the time they receive a permit.	64-g. As noted under General Response 1.1 , CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
64	Peter Oboyski, con't.	64-h. Third, having to identify locations, species and numbers ahead of prospective sampling events.	64-h. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity. General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1).
64	Peter Oboyski, con't.	64-i. Fourth, reporting requirements are unrealistic, as processing all specimens can take years, excluding by-catch is impossible, when such by-catch species are often studied by other researchers, leading to new discoveries (again, can take years), therefore limited information for reporting would be of low value.	64-i. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data.
64	Peter Oboyski, con't.	64-j. Fifth, researchers will stop sharing specimens and data, or conduct research elsewhere, conflicting with the purpose of scientific collecting, and others may yet ignore the proposed regulations and not share their data. In all cases, the public and State lose.	64-j. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research. As addressed under General Response 1.1 , CDFW's focus to approximately 303 species or genera, or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP relieves those other terrestrial invertebrates from permitting, reporting, as well as notification and chain of custody requirements.
64	Peter Oboyski, con't.	64-k. CDFW should focus resources to support digitization of public collections (focusing on smaller groups lacking	64-k. CDFW thanks Dr. Oboyski for this insightful comment. As noted in Specific Response 42-h and Specific Response 64-e , reducing permitted terrestrial invertebrate species to 303 species or genera is expected to allow CDFW to help meet data and

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		resources) so information on the State's wildlife resources can be made available to the public using existing infrastructure.	conservation needs. Refer also to General Response 1.5 regarding how it is perceived that proposed permitting might fail to collect meaningful data.
65	Josiah Gilbert Lepidopterists' Society Email dated 5/8/2017	65-a. SCPs should not apply to insects, and possibly other arthropods. The draft regulations appear to have been written with larger organisms in mind, while not acknowledging the biology of insects.	65-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
65	Josiah Gilbert, con't.	65-b. Permitting creates obstacles for entomologists with little benefit to the insect resource. Scientific Collecting doesn't threaten insects because of fast reproductive capacities. Impacts from habitat are greater.	65-b. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and Specific Response 51-g regarding potential impacts from scientific collecting. Refer to Specific Response 27-d regarding habitat impacts.
65	Josiah Gilbert, con't.	65-c. Lepidopterans have rapid and prolific life cycles, compared to larger organisms with slower reproduction and lower population densities. Thus regulating larger organisms makes more sense.	65-c. Refer to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups.
65	Josiah Gilbert, con't.	65-d. Potential impacts to insects are far greater from habitat loss than by scientific collecting – development, invasive grasses, over-grazing, and other land management strategies.	65-d. Refer to Specific Response 65-b.
65	Josiah Gilbert, con't.	65-e. A "California Endangered and Threatened Species List" could protect insects at risk by unregulated scientific collecting and other threats (human disturbance, habitat loss). This could regulate those species for scientific collecting and protect species from habitat destruction.	65-e. As noted in General Response 1.1 , CDFW's Special Animals List, which includes CESA as well as federal ESA listed species, and several other sources, were consulted in development of the 303 species or genera on the "California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list" as continuing to require a SCP, while under subsection 650(u) all other terrestrial invertebrates would be exempt from SCP requirement.
65	Josiah Gilbert, con't.	65-f. Daily human interactions to indiscriminately dispatch insects – bug zappers – would not need a permit, but scientific collecting to collect data using indiscriminant methods would. The parallels	65-f. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	,	for permitting compared to larger organisms are impractical.	
65	Josiah Gilbert, con't.	65-g. Between windshield strikes/ roadkill, pest control activities and bug zappers without any scientific benefit, regulating the smaller impact of scientific collecting is antiproductive.	65-g. The referenced daily human activities would not be regulated under the SCP regulations. Refer to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.
65	Josiah Gilbert, con't.	65-h. Because of insect abundance and diversity, knowledge remains limited, and specimens are critical for identification. Capture and release can still help, but insect identification doesn't match those means for identification for other species allowed by observation or photography.	65-h. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.
65	Josiah Gilbert, con't.	65-i. CDFW should exempt insects and arthropods from the SCP requirement.	65-i. Comment noted. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
65	Josiah Gilbert, con't.	65-j. Alternately, allow unlimited catch-and-release, with a cap of 15 specimens from a given site from a given year – regardless, inability to identify for reporting in a timely manner may not work.	65-j. CDFW thanks Mr. Gilbert for his thoughts on alternative options. The proposed option for unlimited catch and release would not help meet all concerns of the invertebrate community with such a narrow permit, and is otherwise unnecessary, given the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
65	Josiah Gilbert, con't.	65-k. The commenter feels it is unnecessary and burdensome to require specimens be donated to an institution or final repository within three months of acquisition — particularly for researchers who live far away from metropolitan areas with such collections.	65-k. As noted in General Response 1.3 , increased flexibility for donation or accessioning to a museum collection under the Terrestrial Wildlife General Use permit (form DFW 1379GW) has been expanded from three months to 12 months, or as soon as reasonably possible.
66	Colleen Cleveland Email dated 5/8/2017	66-a. The commenter strongly opposes any exceptions or exemptions to the SCP regulations for groups, religious organizations, or sovereign entities.	66-a. CDFW acknowledges the commenter's opposition.
66	Colleen Cleveland, con't.	66-b. The exception for Native American tribes and their members under section 650, subdivision (u)(1) must be deleted and Native	66-b. CDFW seeks pursuant to its Tribal Communication and Consultation Policy to ensure to the maximum extent feasible that impacts on tribal interests are avoided or minimized whenever practicable and to acknowledge and respect Native American cultural resources.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		American tribes and their members should be required to follow all laws, regulations and permitting requirements for the SCP.	Native American tribes and their members when subject to state jurisdiction are required to follow SCP regulations. The proposed language incorporates the existing tribal exception under SCP regulations to authorize possession of accidentally killed and legally acquired wildlife without an SCP permit under certain circumstances.
66	Colleen Cleveland, con't.	66-c. Traditional, ceremonial, and spiritual purposes should not be included in the SCP process or be exempt from the SCP process. The commenter is concerned that wildlife will be negatively impacted unless wildlife officers are able to document traditional, ceremonial, and spiritual activities. The commenter considers such an exception to be broad, unlimited, and undefined and risks disaster for wildlife.	66-c. CDFW recognizes in its Tribal Communication and Consultation Policy that California Native American tribes have long served as stewards of the state's fish, wildlife, and plants and have practices for conserving and using these resources in a sustainable manner. Native American tribes practiced cultural activities prior to the establishment of the state and continue such practices today. Tribes directly regulate activities of tribal members on the reservation and tribal members off the reservation are subject to the same laws as everyone else. Further, there is an existing exception under current SCP regulations for federally recognized tribes to possess accidentally killed and legally acquired wildlife without a permit and outside of the presence of wildlife officers. CDFW has no evidence that the risk of impacts from the exception would be anything but low.
66	Colleen Cleveland, con't.	66-d. The commenter considers Native American traditional, ceremonial, and spiritual practices to be akin to religious activities and is concerned allowing such practices may result in unlimited impacts to wildlife.	66-d. Refer to Specific Response 66-c.
66	Colleen Cleveland, con't.	66-e. CDFW's recognition that traditional, ceremonial, and spiritual purposes may be broader than science, education, and propagation is an invalid position. Tribes, not CDFW, define these purposes, which can lead to abuse and negative impacts to wildlife.	66-e. Refer to Specific Response 66-c.
66	Colleen Cleveland, con't.	66-f. The exempt purposes are not connected to science and impose no limits on take. Other groups will demand that the exemption be extended to them and CDFW will have to expend resources dealing with religious claims. Native American traditional, ceremonial, and spiritual purposes and other religious purposes must not be exempt because anyone can claim to be a member of a religious organization or Native American. It is irresponsible to allow these purposes to be defined by each tribe.	66-f. The exception under the proposed section 650, subdivision (u)(1) does not authorize take. Rather, the exception specifies that certain accidentally killed or legally acquired dead wildlife may be possessed without an SCP permit. It recognizes that tribes and their members may lawfully acquire wildlife while outside of state jurisdiction. Federal courts have long recognized that tribes are distinct, independent political communities. (<i>Worcester v. Georgia</i> (1832) 31 U.S. 515, 559.) The FGC Section 12300 states that code provisions are not applicable to enrolled tribal members under certain circumstances. CDFW acknowledges in its Tribal Communication and Consultation Policy that federally recognized tribes have a unique political status and jurisdiction and exercise governmental powers over activities and members within their territory. Further, a tribe as a distinct political entity has the power to determine its own tribal members. This exception derives from the unique status of tribes and their members under existing federal and state law and is not based on membership in a religious organization.
66	Colleen Cleveland, con't.	66-g. CDFW should make the SCP regulations as restrictive as possible and include all entities in the required permitting process. SCP	66-g. CDFW has strengthened the citing sections considerably, as compared to previous regulations. The enforceability of SCP regulations are significantly stronger as currently drafted.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		regulations must be fully enforceable with full prosecution for violations. Penalties should include permanently prohibiting violators from receiving future SCP approvals.	
67	Heather Johnson Email dated 5/8/2017	67-a. Create a reduced fee for "renewals with no change" since review for content would not be required, only time for application input and output.	67-b. Contrary to the commenter's assumption, review may be required during renewal of a permit, particularly for submitted reports, and evaluating continued work relative to that of other permitholders within a given area. Refer to General Response 3 regarding renewals, and their cost and issuance time.
67	Heather Johnson, con't.	67-b. Create a third permit type for environmental consultants to conduct capture and release for presence/ absence work. The permit should cover general collecting and standard exceptions because many consultants capture/release common species when surveying for special-status species.	67-b. Refer to General Response 2.2 regarding the request to create a separate permit type for environmental consulting-type work.
68	David Wyatt Professor, Field Ecology Program, Sacramento City College Email dated 5/8/2017	68-a. The commenter hopes the final regulations provides a single permit process to avoid unnecessary multiple General and Specific Use permits. Funding to reimburse permit fees has been difficult, leading to instructors paying for fees themselves, and which would be more costly with need for more permits. The commenter urges CDFW to consider take o multiple taxa for education and training under one permit process.	68-a. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple types of work, though this depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). Refer to General Response 3 regarding permit fees and cost recovery, and the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
68	David Wyatt, con't.	68-b. The commenter is concerns about the proposed revisions for permitting. Insects are highly abundant, and their collection is part of teaching of entomology as taught for museum collection. Because of passive methods used, it is impossible to predict numbers and species that would be captured	68-b. CDFW believes the concern is alleviated with the proposed exemption from permitting of most terrestrial invertebrate species. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
68	David Wyatt, con't.	68-c. Students would not be able to pay for and receive a permit for the semester they take a class, given the 3-3.5 month timeframe to get a permit. It would be impossible to teach taxonomy and curation through just collections, since field collecting adds to existing collections. Excluding from permitting non-	68-c. Refer to Specific Response 68-b, and to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. Refer also to General Response 1.2 regarding CDFW's existing and proposed authority to regulate the taxa of invertebrates under Title 14, Section 650.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		listed terrestrial and/or freshwater arthropods would address this concern.	
68	David Wyatt, con't.	68-d . The time to receive issued permits has been a nice change from past issuance delays considering staffing shortfalls at CDFW. However, it would be difficult in the 90-100 days for private consultants to bid on projects.	68-d. Comment noted. As identified in the Original Proposed ISOR, page 5, CDFW has made it a priority even under current procedures to review and issue permits within 90-100 days. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
68	David Wyatt, con't.	68-e. The SCP Fiscal Analysis alleges that the economic impact of permit fees with the regulatory proposal is negligible, but this isn't the case with individual proprietors. When regulatory fees can't be passed on to the client or contractor in a timely manner, or at all, the financial falls to the individual consultant. Passive surveys not requiring a permit could take the place of surveys involving capture and release (e.g., mist-netting for bats to supplement acoustic surveys). The commenter seeks a better way to implement the permit structure where consultants may not be as affected.	68-e. CDFW considered a couple alternatives for the permitting structure, as identified during pre-notice outreach, and discussed in the SCP Fiscal Analysis (revised June 2017), Alternatives 1 and 2 (pages 8-12). As detailed under General Response 2.2, a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face. Refer also to Specific Response 55-a regarding CDFW's amendments to subsection 650(i)(2) of the regulations to expand on the meaning of "planned undertaking" for clarity in how consultants might apply a Specific Use permit.
68	David Wyatt, con't.	68-f. The commenter thanks CDFW for the opportunity to provide comments, and applauds an online system, hoping concerns can voiced can be addressed.	68-f. CDFW has strived to address the diversity of needs from stakeholders in the regulated community with this process, from pre-notice outreach through three notice periods with this rulemaking over the period of three years.
68	David Wyatt, con't.	68-g. The commenter is concerned for education in that techniques may be abandoned due to the proposed regulations.	68-g. CDFW believes most concerns are alleviated with the proposed exemption from permitting of most terrestrial invertebrate species; refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
69	Robert Zuparko Essig Museum of Entomology, UC Berkeley, and Cal Academy of Sciences	69-a. The commenter attended the Public Hearing on the proposed regulations, held on May 8, 2017 in Sacramento. The commenter states that he wasn't aware the proposed database would focus on those species reported through the SCP taken under the authority of issued permits. The database at best would be piecemeal, focusing on the narrow taxonomic groups that certain	69-a. Comment noted. Refer to General Response 1.5 regarding how it is perceived that proposed permitting might discourage research, and fail to collect meaningful data, as well as Specific Response 42-h .

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	Email dated 5/8/2017	researchers obtaining permits decide to focus on, rather than holistic approach for a given genus or taxonomic group. Economically important species might find a use for such a database, but for the majority of insects, CDFW wouldn't benefit and could be counterproductive to maintain such a limited database.	
69	Robert Zuparko, con't.	69-b . At the hearing, it was communicated that CDFW is a beneficiary of the database in terms of endangered and listed species, but the benefits for others beyond those particular species would be limited due to the scattered and piecemeal manner of documenting take for permitholders.	69-b. As outlined in General Response 1.1 , CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017) was developed with CDFW's Special Animals List, and existing Nature Serve designations in CDFW's database (the CNDDB). This would allow for focused data for those 303 species or genera that continue to require a SCP.
70	Sal Chinnici Manager, Forest Sciences, Humboldt Redwood Co. Email dated 5/8/2017	70-a. The commenter appreciates CDFW's commitment to reform what has been a frustrating process for certain organizations, including industrial timberland owners. The proposal for online form and reporting is a positive step to modernization.	70-a. Comment noted. It is anticipated that an online application system alone will increase efficiencies, as well as providing a more detailed application forms that request information up front to ensure applications are complete.
70	Sal Chinnici, con't.	70-b. The commenter doesn't think comments previously provided to reduce regulatory overlap, time and cost have been addressed. CDFW should step back to look at size, complexity and cost of the proposed process to not stifle scientific investigations.	70-b. CDFW thanks Humboldt Redwood Co. for the input and engagement during pre-notice outreach meetings.
70	Sal Chinnici, con't.	70-c. The commenter recognizes that CDFW is authorized to require SCPs, but hope that proposed regulations can meet both CDFW's needs, while not burdening wildlife and fisheries biologists, which could inadvertently stifle research and monitoring efforts.	70-c. It is not CDFW's intent to discourage research through permitting, but understands the sentiment. The permitting and reporting mechanism is intended to inform management and conservation priorities of those species taken by permit. Refer also to General Response 2.3 regarding the thought of the proposed regulatory package disincentivizing research on private lands.
70	Sal Chinnici, con't.	70-d. The commenter states concern for a proposed regulatory process that requires increased funding, at the expense of those collecting data. Other comments that follow include regulatory overlap and time.	70-d. Refer to General Response 3 for permit fees and cost recovery.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
70	Sal Chinnici, con't.	70-e. CDFW should take into consideration for review of a project and SCP processing if an applicant already has a federal permit. If so, CDFW should evaluate whether a SCP is needed, or if expedited processing can occur.	70-e. Similar to the logic applied for birds in Specific Response 36-b (Ornithological Council) , and as referenced in Specific Response 58-d . CDFW would not be doing its due diligence under CEQA, and would be abdicating its role as Trustee agency for the State's wildlife, if the regulatory decision were to defer solely to federal recovery permits rather than issuing a state SCP. CDFW frequently issues permits with authorizations and conditions that are more restrictive than the associated federal permits, with need for reporting format, including CNDDB reporting. For avian-related federal permitting authority, refer to Specific Responses 36-c , 36-f , 36-g , and 36-l .
70	Sal Chinnici, con't.	70-f. Time and complexity of the SCP process can be reduced by eliminating lengthy permit review when applying for projects that are minimally invasive and short in duration. Also, allowing research to continue if renewals are submitted at least 30 days prior to permit expiration (as done by USFWS) will help. Renewals should have a reasonable time frame, such as 45 days, if renewal applications are submitted more than 30 days prior to permit expiration, and CDFW should eliminate the need to notify other regions or offices by circulating approved SCPs amongst the appropriate offices.	70-f. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. The General Use permit attempted to address pre-notice outreach feedback (including from the commenter) to create a streamlined permit with reduced scrutiny for more common species and less invasive methods. Refer to Specific Response 63-g regarding an extension granted for those who have submitted a permit renewal application at least 30 day prior to permit expiration, that permitted activities can continue with written authorization from CDFW. Refer also to General Response 3 regarding renewals, and their cost and issuance time. As discussed in General Response 4 , the Notification is required primarily for CDFW Law Enforcement, and secondarily for regional biologists to know who is conducting activities in their region(s) or county(ies). General Response 4 discusses the history, as well as necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b).
70	Sal Chinnici, con't.	70-g. Costs can be reduced by eliminating regulatory overlap and complexity. Fees to renew permits should be eliminated, and entity permit application process should be refined. SCP renewals should be treated a ministerial process if all permit terms are met, and permit fees should only be charged to process changes in projects.	70-g. Refer to Specific Response 70-e regarding regulatory overlap (with federal permits), and 70-f regarding permit structure. Contrary to the commenter's assumption that renewals should be ministerial review may be required during renewal of a permit, particularly for submitted reports, and evaluating continued work relative to that of other permitholders within a given area. Refer to General Response 3 regarding fees, cost recovery, and renewals, and the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
71	Len Liu Consulting Biologist Email dated 5/8/2017	71-a. The commenter states he has a SCP for Ridgway's Rail and California Black Rail, and is concerned about the proposed SCP changes.	71-a . Both Ridgway's Rail and California Black Rail are listed as Endangered under CESA. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits, and what is allowed under each. Refer to General Response 2.1 , and Specific Response 36-h regarding permitting for species not covered by a SCP (i.e., CESA-listed species), and specifically General Response 2.2 regarding consultant-type work.
71	Len Liu, con't.	71-b. SCPs appear to be project-based with the proposed regulations. While this make sense for academic studies, this would be unworkable for consultants who often work with	71-b. Only the Specific Use permit is a study-based permit, or groups related activities under a planned undertaking. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		small lead times for bidding on projects for clients. The application would need to happen prior to the bid, which would cause financial burden.	a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. Refer to General Response 3 regarding permit fees and cost recovery, and the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
71	Len Liu, con't.	71-c. The permit fee for SCPs has increased dramatically – at last renewal, the cost was \$104, and now the proposed General Use is \$230 and \$340 for a Specific Use permit, estimating a 500% increase in fee. It doesn't seem appropriate to burden those who assist with conservation and scientific efforts.	71-c. The commenter did in fact pay for his last permit renewal in 2014, which included a \$104 application fee. As stated in Table 2 of the SCP Fiscal Analysis (revised June 2017, page 3), SCP fees as of 2013 were by statute at a non-refundable \$100 application fee, and a \$300 issuance fee, as adjusted pursuant to FGC Section 713. The 2017 application fee is \$105.83, and permit fee is \$315.75 (\$421.58 combined). As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), Alternatives 1 and 2 (pages 8-12, and Attachment 3), the ramifications of the minimum cost recovery options to maintain the existing permit structure (Alternative 1) would potentially increase existing SCP application and permit fees by another 97% to recover costs for minimum staff – just four existing permanent staff members (from 2017 Individual and Entity fees of \$421.58, jumping to \$808.52, and from Student fees of \$79.32, jumping to \$151.35). Thus the proposed General Use combined application and permit fee for Individual and Entities (\$230.10) is 45% lower than the existing 2017 combined SCP fees, and the Specific Use combined application and permit fee for Individual and Entities (\$340.70) is 19% lower than the 2017 combined SCP fees.
71	Len Liu, con't.	71-d. The permit process is significantly longer, from 4 to 12 pages for the Specific Use application, when such detail doesn't seem warranted for individuals with qualifications and meeting CDFW standards. There is no apparent justification for the regulatory burden.	71-d. Refer to General Responses 2.1 and 2.2 regarding the difference between the General and Specific Use permits, and what is allowed under each permit use level. All fields of the General and Specific Use application and respective amendment forms are justified on pages 40-66 of the Second Amended ISOR. The size of the package on paper appears voluminous, primarily due to the application forms having duplicative information. When implemented in an online system, the forms should be much more streamlined in their workflow. The designated timeframes for review (completeness and content) are required for the reviewing staff to accommodate the permitting needs of hundreds of applications for issuance of permits within the specified 90-100 days.
71	Len Liu, con't.	71-e. The commenter understands the Specific Use permit is intended to avoid duplication of work in a given area by more than one researcher. However, if the work is project-specific, duplication is often necessary to meet regulatory needs. A GIS-tracking system would be the best way to identify areas where permitholder overlap geographically.	71-e. A Specific Use serves more purposes than for the perceived need to simply avoid duplication or replication of work by multiple permitholders in a given area. As detailed under General Response 2.2 , several fields were added to the Specific Use form (DFW 1379S) to capture information necessary to ensure an application is filled to completeness, based on fields decided upon by three review programs issuing permits. There are certain flexibilities that may be made, considering the scope of what is requested (e.g., for consultants). Refer to Specific Response 55-h regarding CDFW's intent behind duplication or replication of work.
71	Len Liu, con't.	71-f. The proposed regulations seem to be biased towards academic studies and do not meet the needs of consultants to fulfil survey requirements to meet clients' timelines.	71-f. Refer to General Response 2.2 regarding consultant-type work.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
72	Naoko Munakata LA County Sanitation Districts Email dated 5/8/2017	Mr. Munakata comments focus on how collections under NPDES by sanitation departments are permitted under a SCP 72-a. Subsection 650(f)(1): The Sanitation Districts strongly support the change for the roles of an Executive Signatory on an Entity permit, as it allows Entity permits to remain active if the permitholder were to leave the Entity organization.	72-a. CDFW appreciates and notes this support, and agrees that the ability to keep the permit in house at the entity's organization, should staff leave, which relieves some stress and reduces paperwork for both the permitholder and CDFW.
72	Naoko Munakata, con't.	72-b. Subsection 650(h)(3), ISOR page 21: The two references needed for the PI and Authorized Individuals is excessive for organizations that are required by NPDES permit to perform sampling. This will also likely inundate CDFW with multiple letters of recommendations from certain individuals, and will result in individuals writing recommendations for one another.	72-b. Refer to Specific Response 2-a regarding the need for documenting qualifications.
72	Naoko Munakata, con't.	72-c. ISOR page 55, Table 9, section 4b-2 – Study Information. There should be an option for "Permit-required (NPDES, EPA, State, or Other) Monitoring" as a need for the study in the application and the regulations.	72-c. NPDES permits are only a makeup a small proportion of the total number of permits issued by CDFW as a whole. It seems excessive and burdensome for CDFW to provide a specific permit for a few permit holders in state. Furthermore, permit-required monitoring falls under "science" as defined in the regulation, so adding a fourth purpose category would be redundant.
72	Naoko Munakata, con't.	72-d. ISOR page 55, Table 9, section 4c – Background and Past findings; ISOR page 56, Table 9, section 4d: Executive Summary. There should be an option for "Permit-required (NPDES, EPA, State, or Other) Monitoring" where monitoring activities have been ongoing for 45+ years – an abstract for the work done would be extensive.	72-d. While we appreciate that the NPDES permits are comprehensive, and over a long time period, there is still a need for CDFW to understand the background and goals of the NPDES permits and program, as permits vary between regions. Consistent with requirements with other permitholders, the elements required for an abstract as noted in the referenced section of the ISOR for the Specific Use application (DFW 1379S), long-term monitoring, in addition to the required objectives, main goals, taxonomic groups, take an analysis methods, locations, could provide a brief summary of past findings, and could mention the NPDES authority and environmental regulations. CDFW does not expect the applicants with NPDES permits describe the permits in detail, just a brief description of program and why there is a need for an SCP.
72	Naoko Munakata, con't.	72-e. ISOR page 55, Table 9, section 4c – Targeted and Non-target wildlife are two fields required of the applicant to identify the nature of the proposed activity (ies) as it relates to wildlife resources. Most of the Sanitation Districts NPDES-required monitoring involves collections in which either wildlife is not targeted but captured with trawls or sediment	72-e. Identification to family or genus levels would suffice based on best guess from past data from previous NPDES monitoring efforts in those locations. Higher-level taxonomic groupings will be included in the drop down menu of the referenced section in the Specific Use application. It is not expected that epifauna from sediment samples will need to be captured in fine detail. This is the case currently with reporting of specimens, and is planned to remain the case in the future.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		grabs. The species and quantities can vary substantially from station to station and from year to year. The proposed CDFW system automated form drop-down list will not be able to adequately capture the Sanitation Districts' diversity, abundance, and variability of samples.	
72	Naoko Munakata, con't.	72-f. ISOR, page 58, Table 9, section 4f-5 — For benthic infaunal work, all animals collected are immediately preserved and therefore sacrificed, but numbers and species are not known until after collection and several months of identification work. For trawl events, animals are returned to the ocean after identification, but due to many factors including the trauma incurred while sampling or length of time needed to take measurements, not all individuals are alive; this varies by species and water depth. Attempting to quantify this number would likely result in greater mortality.	72-f. It is not expected that all organisms be quantified as part of surveys when it is not practical to do so. As far as CDFW is concerned, an educated estimate would suffice when undertaking this type of work.
73	Brad Kelley Fairfax Email dated 5/8/2017	73-a. Insect identification and monitoring is critical to understand human-mediated environmental consequences. The proposed regulations stifle monitoring, especially at the level of citizen science, community colleges, and hobbyists.	73-a. It is not CDFW's intention to impede or prohibit activities of citizen scientists. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. Refer also to General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
73	Brad Kelley, con't.	73-b. Along with suggestions from Kipling Will that follow, the commenter requests that hobbyists, students and citizen scientists be excluded from the proposed regulations, or have a very low cost annual permit or license.	73-b. As detailed in General Response 1.2 for invertebrates (and in general for <i>all</i> wildlife), opportunistic take or collection in any location at any time, without authorization, permit or other exemption from CDFW is inconsistent with the law. However, given that most terrestrial invertebrates are now exempted from needing a SCP as detailed in General Response 1.1 , prospective sampling of unnamed taxa for taxonomic discovery is not anticipated to be affected.
73	Brad Kelley, con't.	73-c. Recommends CDFW exclude non- endangered or non-threatened terrestrial or freshwater arthropods from the permitting process, as is the case for plants, since it is impossible for CDFW to provide meaningful oversight for insects or arthropods.	73-c. Refer to Specific Response 50-h, and Specific Response 30-e.
73	Brad Kelley, con't.	73-d. Recommends CDFW exclude permits for representatives of a university, college, school,	73-d. Refer to Specific Response 50-i, and Specific Response 30-f.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		incorporated city, state or federal government agency, publicly owned zoo, or wildlife or research organization.	
73	Brad Kelley, con't.	73-e. Recommends CDFW issue an Arthropod's Collector's Permit for Scientific Purposes, for the above permitholder affiliation categories via an online registry.	73-e. Refer to Specific Response 50-j, and Specific Response 30-g.
73	Brad Kelley, con't.	73-f. For an Arthropod Collector's Permit, clear rationale for its need and elements for reporting should be defined to evaluate outcomes.	73-f. Refer to Specific Response 50-k.
73	Brad Kelley, con't.	73-g. If permits are needed at all, CDFW should consider formation of advisory committee with representatives from museums, zoos, parks, research organization to craft a set of regulations that work and protect wildlife.	73-g. Refer to Specific Response 50-k, and General Response 6 regarding pre-notice outreach efforts conducted prior to initiating the rulemaking.
74	Joel Pagel Raptor Ecologist Email dated 5/8/2017	74-a. Suggested CDFW consider that anyone who will be entering a nest site, via contract or prior arrangement for the principle investigator, or as the PI by means of fixed or placed ropes, free-climbing, ladders, or high-lift or boom mechanisms must be permitted via a SCP. The person who is independently conducting the activity should have the requisite skill set and experience to determine when to enter a nest site.	74-a. Under the existing and proposed regulations, CDFW evaluates the qualifications of all personnel to assure they are qualified for the research activities being requested, including nest access and entry by free-climbing or other methods. For access to most raptor nest sites in trees or cliffs, it is difficult for a PI to be immediately present at the nest site for direct supervision if a climber is hired to conduct the nest access and entry. In such cases, the climber must obtain their own SCP to be covered for the take activities, or the climber could be named as an authorized individual (Independent Researcher) on an Entity SCP, via the List of Authorized Individuals. In the latter case, the PI for the research project is responsible for all take and injury to adults or juvenile birds, egg damage or loss, nest abandonment, or nest predation that occurs as a result of the activity. There may be situations where an experienced PI and experienced climber with a long term research teamwork history could work together under an Individual SCP for nest site access and entry, with direct on-site supervision and communication being accomplished via radio and/or live camera methods, but CDFW would have to approve the research proposal, methods (including supervision and communication techniques), and experience and qualifications of all personnel prior to approving an Individual SCP. See also FGC sections 3503 and 3503.5.
74	Joel Pagel, con't.	74-b. Based on the current permitting system, SCPs are not necessary for purposeful overflights, reconnaissance, or survey work at and proximal to raptor nests. The commenter asserts a high level of skill and experience is necessary for conducting survey flights to determine raptor nest occupancy and to independently judge when to fly at or near a	74-b. Because of the special statutes protecting nests, eggs, and raptors, CDFW requires a SCP for conducting scientific research on raptors via these methods. Also, as noted above for Specific Response 74-a , CDFW evaluates all research proposals, methods, and qualifications of personnel prior to approving SCPs. In regard to fixed or rotary winged aircraft, even the expertise and wildlife awareness of the pilot is important, as other wildlife species (e.g., bighorn sheep) could be injured or killed by aircraft noise and presence during raptor nest site research via aircraft. Safety of the pilot and crew is vital during aerial flights, and there are many hazards to be aware of (e.g., powerlines, birds in flight, other aircraft)

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		nest site to correctly determine occupancy and/or nesting chronology. The commenter encourages CDFW to require study plans and revelation of requisite experience for use of all reconnaissance and nest monitoring using fixed or rotary winged aircraft for scientific research on raptors.	while simultaneously conducting the research and avoiding take of target and non-target wildlife. See also Specific Response 74-c , regarding CDFW's role in regard to aircraft, protection of wildlife, and the Airborne Hunting Act, along with FGC Section 3003.5.
74	Joel Pagel, con't.	74-c. Concerned about the relatively new scientific technique of using drones (unmanned aerial vehicles) for conducting nest visitations for the purpose of photographing or documenting nest contents, and for other research on raptors and other birds. Drones (un-manned aerial vehicles) are a relatively new tool which may be used for scientific work related to raptors and other birds. Because of spinning blades and their small size, they present a probable danger to many species of raptors. Raptors are known to dive on and destroy drones, which can lead to injury. The commenter invokes the Airborne Hunting Act, and CDFW's role under the act, relative to scientific research and use of drones with cameras to ascertain nesting status or chronology. The commenter strongly recommends that CDFW use SCPs as the legal mechanism to regulate permissible drone use at and proximal to raptor nesting territories and nests.	74-c. While CDFW encourages the judicious use of drones for wildlife research and monitoring by experienced researchers, there are scientific and legal concerns that make it necessary to require researchers obtain SCPs to protect wildlife. Drones, fixed-wing aircraft, and helicopters are all considered aircraft. FGC Section 3003.5 prohibits the pursuit of any birds and mammals with the use of any motorized vehicle, including aircraft (there are at least two regulation sections that allow for exceptions; but are not related to scientific research; Title 14, sections 251 and 251.2, CCR). The federal Airborne Hunting Act (AHA) and associated federal regulations further prohibit the use of aircraft (any contrivance for flight in the air) to take (capture or kill by shooting) or harass any wildlife. Harass is defined to mean "disturb, worry, molest, rally, concentrate, harry, chase, drive, herd or torment". One exemption in AHA allows for states to issue permits for airborne harassing of wildlife for purposes of administering or protecting land, water, wildlife [emphasis added], domestic animals, human life or crops. Contrary to the usage of the word "hunting" in the AHA, the states may not issue permits to use aircraft for sport hunting. However, CDFW's issuance of SCPs to take or harass wildlife, for the purpose of protecting land and wildlife, connects the AHA to SCPs and scientific research. Additionally, aircraft/drones may not be used on CDFW lands to take or disturb wildlife, except under special circumstances, including scientific research (Title 14, Section 550, CCR). See also: Title 14, Section 251 (Prohibition on Pursuing or Shooting Birds and Mammals from Motor-Driven Air or Land Vehicles, Motorboats, Airboats, Sailboats or Snowmobiles); 251.2 (Permits to Pursue, Drive, Herd, or Take Birds and Mammals); and 251.1 (Harassment of Animals).
74	Joel Pagel, con't.	74-d. To avoid negative impacts to raptors and their nest sites, the commenter strongly encourages CDFW to use SCPs as a means to regulate the placement, purposes, and Pls who may use fixed still and/or video cameras at raptor nests. Only those scientists with a bona fide research purpose should be allowed to place, replace, or enter nest sites to obtain data-cards from a fixed still or video camera.	74-d. As noted above under Specific Response 74-a , under existing and proposed SCP regulations, CDFW evaluates all research proposals, methods, and qualifications of personnel prior to approving SCPs, including research involving nest access, and the placement of any type of camera or device that could negatively affect nest success, or lead to nest abandonment, or take of adult or juvenile birds or their eggs. And, as noted under Specific Response 74-b , because of the special statutes protecting nests, eggs, and raptors, and due to the sensitive nature of nest sites for reproduction essential to biologically sustainable populations of wildlife (see FGC sections 1801 and

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Comment

	Format, Date	Comment	Department Response
	,		1802), and because of our trustee role for wildlife, Multiple nest entries for data card removal or for other scientific research devices increases the likelihood of nest abandonment, nest failure, or predation on eggs, young, or adults.
75	Sharon Lawlor Professor, Entomology and Nematology, UC Davis Email dated 5/8/2017	75-a. The proposed regulations appear to increase costs and difficulty for scientists to conduct research benefitting California's natural resources. The commenter acknowledges longer applications have been cumbersome to process, perhaps there are better ways to simply administration than separate applications for every project. It seems it would only lead to increased paperwork and costs. Perhaps projects could be combined as long as they focus on similar taxonomic groups and methods.	75-a. Refer to the SCP Fiscal Analysis (revised June 2017), Alternatives 1 and 2 (pages 8-12) for cost recovery options evaluated, which in turn helped inform the proposed General and Specific Use permit structure. Refer to amended subsection 650(i)(2) and pages 22-24 of the Amended ISOR regarding clarifications to the permit structure. Refer also to General Response 2 regarding the proposed permit structure – differences between the General and Specific Use permits, and what is allowed under each. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple types of work, though this depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). Review of a Specific Use amendment, when additional details are available, would meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
75	Sharon Lawlor, con't.	75-b. Applications could be streamlined for entomological collections of "non-game" invertebrates by only requiring permits for specific locations where endangered taxa occur, and for studies that target taxa of concern. Entomological collections are less likely to deplete populations than vertebrates, since insects have large populations and are broadly distributed.	75-b. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the logic of permitting invertebrates relative to other wildlife groups, and the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
75	Sharon Lawlor, con't.	75-c. Rules for take have been difficult for entomologists considering methods used to capture these small animals. CDFW would save time and effort to eliminate permit requirements for entomologists, but retain permit requirements for habitats and invertebrate taxa of special concern.	75-c. Comment noted. General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1). As addressed under General Response 1.1 , CDFW's focus to approximately 303 species or genera, or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP relieves those other terrestrial invertebrates from permitting, reporting, as well as notification and chain of custody requirements.
76	Douglas Forsell Retired, U.S. Fish and Wildlife Service Email dated 5/8/2017	76-a. My impacts to bird populations for research was negligible compared to impacts of some of minimally regulated take that I have studied including hundreds of thousands of birds drowned in legal and illegal gillnets, or those killed by poachers, introduced predators, oil spills, and contaminants. Additionally loss of habitat including food resources is widely considered the reason for the decline of most migratory birds, not research.	76-a. CDFW concurs with your concern for the higher level impacts, multiple threats, and cumulative impacts facing many bird species (and other taxa), compared to impacts of scientific research. We encourage research and educational activities on all taxa in the state, and work hard to form long-term working relationships with researchers, natural history museums, nature centers, and other permitholders for the greater good of wildlife conservation in the state. We also value open communication and coordination with permitholders, many of whom directly assist CDFW in research and conservation efforts. Such partnerships are vital in the face of limited financial resources for wildlife research and conservation, and wildlife-related educational opportunities for the public. We also strive to lessen any perception that our trustee role, or our SCP regulations, are strictly coming from an overzealous regulatory angle.

Department Response

Commenter Name,

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
76	Douglas Forsell, con't.	76-b. The Ornithological Council has presented CDFW with many excellent suggestions and a number of ways to streamline the work of the agency without jeopardizing the protection of wildlife. Recommend adoption of the changes proposed by Ornithological Council.	76-b. Refer to Specific Responses to comment letter 36 (Ornithological Council).
76	Douglas Forsell, con't.		76-c. CDFW concurs with your recommendation, as voiced by others as well, for us to streamline the permit process as much as possible. In that regard, as noted in our responses to other commenters, we routinely rely on other permits that applicants may have to lessen our review time, though there are special considerations for our listed, fully protected, and special concern taxa that we must take into account, along with our trustee role under CEQA. CDFW acknowledges the need for more conservation and recovery activities for threatened and endangered species, and many of our SCP stakeholders also engage in separate studies on listed species, including propagation activities as part of recovery efforts. In this regard, our communication, coordination and collaboration activities with many of our SCP stakeholders also benefits listed species. The new SCP fees that went into effect in 2013 is one example of CDFW obtaining cost-recovery for activities that require we exercise our trustee role and make discretionary decisions (wildlife studies in this case), on activities with the potential for significant and cumulative impacts on the environment, in the absence of our oversight. We triage our permit review and issuance by applying more attention to any project that has a higher likelihood of potential impacts to listed, candidate, fully protected, and other special status species, or where justification for direct sacrifice is lacking. We have also streamlined permit production by further developing template language for permits for many types of research activities on various taxa, including special concern taxa. We continually evaluate other time and cost-saving options for the benefit of our stakeholders, and to allow us to conduct essential work on listed species, and explore other funding sources and public donations (e.g., the Rare and Endangered Species Tax Check-off program:
			https://www.wildlife.ca.gov/Tax-Donation) to assist us in our listed species recovery work. It is important to note that a significant amount of time is spent with permitholders verifying that all required reporting information is submitted to us in compliance with current and past permits, and to ensure reporting information for species designated as Special Animals (including endangered species) is submitted to the CNDDB. The scientific reports and CNDDB information needs to be reviewed for quality control, filed and archived, and is then utilized for many purposes, including a) distribution and range maps; b) updating special concern species accounts; c) species listing status reviews; d) 5 year reviews for threatened

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
			and endangered species; e) recovery plans, and other conservation and management documents prepared by CDFW and USFWS.
76	Douglas Forsell, con't.	76-d. CDFW should be make research permits as minimally burdensome as possible because the data collected will usually help CDFW manage wildlife. In doing so it will free researchers to do research rather than work on obtaining several levels of permits, and free up CDFW biologists to identify and mitigate more substantial threats to wildlife populations.	76-d. The rulemaking will make the research permits less burdensome to the diverse stakeholder group of our regulated community. Refer to Specific Responses 76-a , 76-b and 76-c .
77	Diana Humple Avian Ecologist & Banding Coordinator, Point Blue Conservation Science Email dated 5/8/2017	77-a. Many members of the ornithological community, as well as Point Blue, submitted comments in response to the 2015 pre notice outreach period. As many of these suggestions were not incorporated, we again urge the CDFW to consider the ideas we and others submitted, which were equally thoughtful and constructive. We appreciate the role of the permitting regulations in protecting wildlife populations and we share the CDFW's commitment to bird conservation.	77-a. CDFW also appreciates the Point Blue's time and effort to provide suggestions on the proposed regulations during the public comment periods. CDFW considered all comments and suggestions during the pre-notice period, and incorporated into the regulatory proposal those comments and suggestions that helped achieve the rulemaking's five goals (as outlined on pages 6-12 of the Original Proposed ISOR).
77	Diana Humple, con't.	77-b. Supportive of OC's request for a registration system with an accelerated process for ornithological research, in lieu of a full permit, because the USFWS and USGS already review and scrutinize applications, screen qualifications and process permits for research on birds protected under the MBTA and federal ESA.	77-b. Refer to Specific Response 36-c.
77	Diana Humple, con't.	77-c. The general permit seems unduly restrictive for ornithological research, and no justification is given for excluding six of the 23 orders of birds, along with eight entire families. None of Trochilidae , for instance, are of conservation concern in California. Training unique to hummingbirds is required for the federal permit; it is unclear how the shift of this family to the specific use permit enhances conservation or serves the purposes of CDFW. Permittees may now need to obtain	77-c. Refer to Specific Response 36-m.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	,	two permits instead of one if research involves hummingbirds.	
		The commenter requests CDFW revise the regulations and minimize the taxonomic exclusions in the general permit.	
77	Diana Humple, con't.	77-d. The proposed General Use SCP allows mist nets and government-issued/approved metal leg bands; commenter requests to include additional capture and marking methods under if authorized under the applicant's federal banding permit.	77-d. Refer to Specific Response 36-n.
77	Diana Humple, con't.	77-e. If a researcher has obtained protocol approval from an IACUC, the commenter suggests CDFW allow the applicant to simply attach the approved protocol. That document will include all specifics requested by the application forms.	77-e. Refer to Specific Response 36-v.
77	Diana Humple, con't.	77-f. The commenter recommends defining terms, e.g., "independently conduct" any permitted activities. Additionally, the terms "direct supervision" and "adequate supervision" need definitions. Without definitions, these terms are subject to inconsistent and arbitrary application by CDFW and its enforcement agents.	77-f. Refer to Specific Response 36-cc.
77	Diana Humple, con't.	77-g. The commenter is concerned that the general permit regulation does not allow the applicant to request approval for more than eight authorized individuals at the time of the initial application. The number of authorized individuals for both general and specific permits should be increased to at least 20 per permit. An entity permit will likely cover a suite of projects so there will likely be a need for more than eight authorized individuals.	77-g. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a.
77	Diana Humple, con't.	77-h. The commenter recommends less restrictive and less frequent notification requirements. We question the need for notification when the activity is to take place on private or public property with the	77-h. Refer to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b). The timeframe for notification has been reduced from a minimum of 48 hours, to 36 hours prior to activity in the field, as indicated on pages 29-30 of the Amended ISOR. The necessity of form 1379 is justified on pages 68-69 of the Second Amended ISOR.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Commenter Name,

Co	ommenter Name, Format, Date	Comment	Department Response
		landowner's permission, and for repeated submissions of this form for research activities at research stations or other fixed sites such as MAPS stations. It should be sufficient to submit a broad version of this form once each year for a suite of sites and covering a range of dates, personnel, and activity, as done for the USFWS for our Recovery Permit authorization.	
		Submission of this form every two weeks is burdensome, especially to provide the level of detail requested. While the proposed regulation has eliminated some of the above specific requirements, the notification form itself still requires this information. Field work often has to be canceled due to weather.	
78	Leslie Field Supervisor of Mammals, Sacramento Zoo Email dated 5/8/2017	78-a. We applaud the application update and going towards a more electronic approach to the applications and reporting.	78-a. Comment noted.
78	Leslie Field, con't.	78-b. In our case – the permit started out being needed by the state to move turtles to another AZA facility. It has evolved to being used to take in "salvage" animals that cannot be released.	78-b. SCPs are currently, and will continue to be, issued to possess and transport live non-releasable wildlife in captivity for purposes such as public educational display at Zoos, and such specimens may be acquired from the wild, other researchers, rehabilitation facilities, or other acceptable sources approved by CDFW. Under Section 650(b) of the proposed regulations, "display" means to place or locate wildlife, or the nests of wildlife, so that public viewing is allowed" and "education" means formal academic instruction, informal interpretive programs, cultural or ceremonial activities, or other educational programs." Furthermore, the definition of "propagation" means captive breeding, captive rearing, and other activities that help sustain or increase wildlife populations for scientific, conservation, management, or educational purposes." The term "salvage" under SCPs is typically referred to as collecting animals encountered dead in the field or incidentally killed during permitted activities. "Emergency salvage" is a term typically used for SCPs when referring to rescue activities involving special concern wildlife that are stranded in locations posing imminent death (e.g., such as desiccation during severe drought of a waterbody critical to the survival of western pond turtles), and such activities would fall under the scope of "propagation" under Section 650.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
			Therefore, in addition to any scientific activities that may be conducted, there are education and propagation activities that could trigger the need for the Sacramento Zoo to continue to apply for an SCP for maintaining pond turtles in temporary or permanent captivity.
78	Leslie Field, con't.	78-c. Would we need this permit and an amendment for the various activities? Our use is long term, but not a study question or project with a single objective. Is there consideration for AZA facilities and CDFW for a different arrangement outside this permit? Is there a better "fit" for a permit given the proposed changes?	78-b. In response to the comments regarding the definition of "study" and its usage in the Specific Use SCP application, we have made changes to subsection 650(i)(2) of the regulations to expand on the meaning of "planned undertaking," in addition replacing the word "study" with "permit" at various locations of the application or emphasizing "planned undertaking" alongside "study." As stated on page 8 of the Amended ISOR, the Specific Use permit is proposed for an individual study, or a planned undertaking involving multiple studies and/or activities with one or more taxonomic groups. Furthermore, the Specific Use SCP application and Amended ISOR now clarify that a planned undertaking may consist of multiple studies and/or activities of a similar nature, and the planned undertaking can be included under a single permit, provided the PI has the required expertise and maintains adequate supervision of all people covered under the permit.
			The Specific Use SCP is the appropriate permit type for the Sacramento Zoo to collect, acquire, and maintain western pond turtles in captivity in conjunction with zoological exhibition and education for the purpose of enhancing their survival. An amendment may be needed for the Zoo's SCP for changes such as adding new activities, methods, procedures, location, or kinds of wildlife other than the pond turtle. Additional information about amendments is contained on pages 27-28 of the Amended ISOR.
			CDFW has determined there are not any other appropriate permitting mechanisms for maintaining non-releasable or releasable western pond turtles in captivity for scientific, education or propagation purposes as allowed under Section 650. Pond turtles could also be held temporarily in captivity for rehabilitation purposes pursuant to Section 679, however, such specimens could not be held long-term or used for educational display purposes. Animals that are designated restricted species listed under 671(c) can be alternatively be covered under a Restricted Species – Native Species Exhibiting Permit for the purpose of public educational display under certain circumstances (i.e., specimens not suitable for release into the wild are accepted from rehabilitation facility), however, the only turtle considered a restricted species is the snapping turtle.
79	Chris Scholin Monterey Bay Aquarium Research Institute (MBARI) Letter dated 5/8/2017	79-a. Much of MBARI's planktonic research activities involve the collection of very small to microscopic marine organisms. Concerns regarding these types of activities and the new forms and regulations for General Use (Marine). It is not clear if each tow is limited to 2 liters of water filtered or if this statement means the final water sample volume containing marine plankton, clarification would	79-a. CDFW's Marine Region agrees with statement to remove volume limits to plankton samples within the Marine General Use Permit. CDFW has provided clarification of volumes of samples that are allowed to be kept under the Marine General Use permit (form DFW 1379GM). Refer to page 47 of the Amended ISOR, and section 4c (pages 6-7) of the Marine General Use application. Refer also to Specific Response 10-a for additional clarification on water sampling.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	, , , , , , , , , , , , , , , , , , , ,	be helpful. Any organisms greater than 1 centimeter in size must be released at the site of capture and is assumed that this means organisms not listed on the collecting permit. Clarification would again be helpful.	
79	Chris Scholin, con't.	79-b. Is there a provision for employing autonomous instruments that collect water?	79-b. The commenter is referring to the take allowance and gear specifications outlined in the Marine General Use application. Autonomous instruments would not fall under any of the methodologies outlined in the permit type and we would refer the commenter to apply for a Specific Use permit to cover this type of sampling.
79	Chris Scholin, con't.	79-c. Regarding water samples to collect microscopic marine organisms, it is not clear if collecting, for example, a 20-liter carboy of water with a bucket (not a tow net) is permitted. Will this still be accurate under the new regulations?	79-d. The type of equipment is not specified in the General Use permit since there are many types of sampling containers that could be used to collect water. As long as the permitholder stays within the volume limits, the permitholder may collect water with the style of equipment that best suits specific needs.
79	Chris Scholin, con't.	79-d. In general, the focus of the proposed regulations appears to be related to macroscopic fauna and flora and the permit doesn't' seem to cover collecting phytoplankton. We suggest adding an additional section under General Use authorizations (M4) covering plankton collection with tow nets, bottle sampling, and unattended (autonomous) instrumentation to reflect the macroscopic species covered in M1-M3.	79-d. CDFW appreciates this comment, but refers the commenter to the specific use permit, which may be best suited for the type of sampling they are doing. If your sampling techniques fall outside of the authorizations outlined in M1-M3, then the Specific Use permit would be best suited for you. There is a provision in the General Use permit that allows plankton and water sampling that is covered under Section 4c on the application that we refer you to which may suit your needs. If this still doesn't, then we will refer you to apply for a Specific Use Permit.
79	Chris Scholin, con't.	79-e. Although the CDFW provides a separate application procedure to increase the number of individuals allowed to be collected on SCPs, the limits proposed for the General Use (Marine) seem too low and will create an extra burden for applicants for most educators and scientists requesting a permit for education and research activities. For fish, collections limited to 20 individuals (all species combined) may make it difficult for many researchers to meet the requirements of their research needs and CDFW without a Specific Use permit. For marine invertebrates, the daily and yearly limits for the numbers of individuals are so low	79-e. Refer to General Responses 2.1 and 2.2 regarding the difference between the General and Specific Use permits, and what is allowed under each permit use level.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
	·	that it will be very difficult for many if not most studies without a Specific Use permit. It is clearly difficult to find the right balance for collection limits that both protect our resources and allow reasonable effort to prepare and process scientific collecting permits applications, but the proposed limits seem too restrictive and will require most collectors to apply for Specific Use permits for even general education and research activities.	
79	Chris Scholin, con't.	79-f. Trawls: Neither of the new marine forms (General or Specific Use) addresses pelagic trawl operations. As this is a common method for conducting basic scientific research, it would be helpful to see this addressed along with General Use authorizations. Additionally, section 4f.1.b of the Specific Use form requires an estimate of quantities of expected incidental by-catch. What level of detail would CDFW expect to see, for example, with a mesopelagic trawl? Is it sufficient to choose "0" for unknown?	79-f. Pelagic-trawling projects would not fall under a Marine General Use permit, as there is a potential to capture more than the daily allowance and yearly allowance of a species. This type of project would fit best within the Specific Use Permit, which is similar to the current SCP permit. If there were high uncertainty in what you are likely to capture I would suggest providing an explanation of why this is likely and provide a best estimate of likely catch. Ongoing monitoring projects a useful guide to estimate catch is to use previous catch records to estimate take.
79	Chris Scholin, con't.	79-g. Reporting requirements: Quarterly reporting requirements under the General Use authorizations seem burdensome, particularly given other requirements, such as 48-hour pre-collection notification prior to each collection as well. Given that MBARI is an organization that has many researchers holding permits, ensuring quarterly reports are filed for each researcher will create a significant workload beyond current levels. Furthermore, given typical indications of low agency staffing levels, will staff be available at the agency level to process and utilize the data from all SCP holders on a quarterly basis? If collections reports are needed more frequently than at the end of the 3-year permit term, then submission of an annual report may be more manageable for the agency and permittees alike.	79-g. As noted under Specific Response 11-d, the permitholder is anticipated to be able to track the status of a permit, reporting requirements, and approved Lists of Authorized Individuals within an online "dashboard" within the application system. Refer to General Response 4 regarding the necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b). The timeframe for notification has been reduced from a minimum of 48 hours, to 36 hours prior to activity in the field, as indicated on pages 29-30 of the Amended ISOR. The necessity of form 1379 is justified on pages 68-69 of the Second Amended ISOR.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
80	Cal-Neva American Fisheries Society Executive Committee Email dated 5/8/2017	80-a. CDFW is not considering the needs of the permittee.	80-a. CDFW conducted a pre-notice outreach to the public between fall 2012 and spring 2015 to help inform improvement for SCP administration and operation. CDFW received and considered over 400 individual comments in that period. As noted in General Response 6 , CDFW then released its draft regulatory changes for a 45-day public comment period and held a public meeting on May 8, 2017 when it received oral comments from the public. As mentioned in the Original Proposed ISOR, the goal of the program is to provide a cohesive, organized permitting framework with adequate funding and staffing, and internal policies that ensure consistent practice. This would be to the benefit of permitholders by improving the level of service to permitholders, a top concern voiced during pre-notice outreach. CDFW also sought to address several other concerns raised during the pre-notice outreach as detailed in Goal 5 the Original Proposed ISOR.
80	Cal-Neva, con't	80-b. CDFW staff should apply for and receive an SCP for its own activities.	80-b. The Legislature has determined that CDFW does not need a permit if it takes wildlife for scientific, propagation, or other specified uses (refer to FGC Section 1001).
80	Cal-Neva, con't	80-c. Law enforcement or emergency activities should be exempt from SCPs.	80-c. SCPs are required if wildlife would be taken for scientific, propagation, or educational purposes. Law enforcement and emergency activities does not fit into those three types of activities.
80	Cal-Neva, con't	80-d. CDFW should charge a higher fee in order to receive a SCP in five days.	80-d. CDFW understands permitholders' desire to receive their permits under a quicker timeframe than current. CDFW established the General Use Permit type to reduce the time required for permit review, conditioning, and issuance; and with a lower fee than the Special Use Permit type. SCP fees have already dramatically increased due to the 2012 statute changes. Moreover, CDFW received pre-notice comments to lower fees. In light of comments to lower fees, CDFW is hesitant to create an additional type of permit with a significantly higher fee in order to fund additional staff to process permits in a certain timeframe which may extend processing time for other applicants.
81	Jeff Hall Director, Research Policy Development, University of California, Office of the President Email dated 5/8/2017	81-a. As the most common permitholder type, researchers and students are the most significant contributors of research data that CDFW uses to manage wildlife resources. UC researchers are willing to provide volunteer review assistance to enhance permit review quality and reduce CDFW costs. The prenotice outreach letter (submitted April 16, 2015) stated UC believes the proposed fee structure should be adjusted to reflect researchers' and student ability to pay.	81-a. All permitholder affiliation categories, as identified in Figure 1 (page 83) of the Amended ISOR, contribute significant data to help CDFW manage wildlife resources as part of its trustee responsibility. While academic researchers and university researchers produce scientific products and publications, and other data that help inform management of populations, most other permitholder affiliation categories also produce data that CDFW heavily relies on, particularly for California SSC, and other species groups. As noted in Specific Response 55-i, CDFW does not plan to establish an external review board of scientists to review SCP applications. Review involving species and subject matter experts within CDFW provide more than adequate review and conditioning. Professors and researchers enjoy little free time, and permit review can be a time-consuming task, requiring dedicated staff members. The time to train and engage others outside CDFW in review processes would likely contribute to increased permit fees for coordination, rather than help reduce fees. The SCP Fiscal Analysis (revised June 2017), as well as Tables 3, 4, and 5 in the Original Proposed ISOR, detail how permit review time and effort are broken out by CDFW staff involved – in order to keep fees as low as proposed with the package, any additional coordination and review compilation time would increase such fees.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	1 Jilliat, Date		As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program, and at this time, not to hire additional staff. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
81	Jeff Hall, con't.	81-b. The commenter acknowledges the environmental consultant and research stakeholder group, who prepare environmental documents or permits required by law. This group has the ability to pay higher permit fees, and they also benefit from the data that academic researchers generate. Other CDFW user groups, such as commercial and sport licensed fishers and game hunters also benefit from data generated from academics. The statute governing SCP fees is permissive, and would allow CDFW to levy higher permit fees for consultants, researchers and contractors to offset lower fees for academic researchers and students. UC requests that academic, non-profit and students be exempt from SCP application and permit fees, or that fees are significantly reduced, and offset by charging other users. Given that academic-generated data also informs not just the State but sport and commercial entities, CDFW could increase sport and commercial licensing fees to generate funding to offset revenue lost from SCP fee exemption or reduction proposed by the UC.	81-b. As noted in Specific Response 81-a, academic researchers and students are not the only ones who produce data needed to inform CDFW's trustee management responsibilities. Comments received on this rulemaking package from the environmental consulting community (consulting biologists, independent consultants, principals of consulting companies, etc.) have all stressed that permit cost is a concern to them as well, for various reasons. It is the intent of the legislature that the CDFW programs be largely supported by fees paid by those who utilize its public trust resources. (FGC 710.5(a).) The authorizing statute identifiedwithout further distinction public, private, or nonprofit entities, or persons as SCP recipients, and specified fee requirements. The statutes also carved out fee exceptions and exemptions but expressly authorized full recovery of reasonable administrative and implementation costs. In the absence of statutory language to the contrary we cannot conclude the legislature intended to shift the cost-recovery burden from one group to the others. Permitting fees are properly addressed through the own applicants' budgetary process. CDFW understands the challenges faced in academia with grant funding limitations, spending allowances or restrictions and high costs of overhead. However, any situational exemption or reduced fees opens the door to other requests for fairness with the benefitted community. As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), the Legislature included the requirement for selffunding. CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program. Sport and commercial license fees are required to be used for purposes that do not include subsidizing the scientific collecting permit program. (See FGC 711(a).) As outlined in General Response 1.4, Entity permits may help spread permit fee cost among a PI, and many Authori
81	Jeff Hall, con't.	81-c. The proposed regulations decrease amendment fees by approximately 58%, however, amendments may be required for Specific Use permits to change a study scope, need, benefit, or timeframe. The proposed forms are more detailed, and while definitions	81-c. Refer to General Responses 2.1 and 2.2 regarding the difference between the General and Specific Use permits, and what is allowed under each permit use level. The commenter is inaccurate in his statement of what aspects of a Specific Use permit can be amended, pursuant to subsection 650(I)(3) of the proposed regulations, which includes "number and kind of wildlife to be taken or possessed, activities, methods, procedures, timeframe and location." The Specific Use Amendment form (DFW 1379SA) includes other

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		are provided, it is unclear if the process will be streamlined.	related fields that might be adjusted, but the fundamental scope of the study or planned undertaking are not amendable.
			Refer to Specific Response 71-c regarding the permit fees and minimum cost recovery goals, as well as Specific Response 71-d regarding the fields on the General and Specific Use application forms, and streamlining when implemented online.
81	Jeff Hall, con't.	81-d. CDFW does not differentiate permit uses based on research value provided. The permit user categories are now much more numerous, 5 categories with 21 subcategories. UC doesn't see the reason for this level of information and recommends grouping subcategories to form "Scientific Researchers" (university faculty, students, public museums, and some NGOs), and "Environmental Consultants" (privately-funded consultants and researchers, an contractors who work in environmental compliance). Then fees as requested above could be structured.	81-d. The commenter is correct in that CDFW does not favor one permitholder affiliation category over another with regards to the proposed fees, whether considering the value provided through reporting and findings (as discussed in Specific Response 81-a), or otherwise. As justified in need for Section 2 – Permitholder Information (page 41 of the Original Proposed ISOR), CDFW broke down categories by permitholder affiliation on all General Use and Specific Use application forms to better classify the diversity of permitholders who obtain SCPs. The sub-categories come from an economic standpoint (e.g., for consideration of taxpayer funded organizations, and separating out private or out-of-state universities from California public universities), or to further refine user groups. The subcategories allow CDFW to tack those types of organizations or institutions who use SCPs as part of their work. The commenter appears to have a simplistic view of the diversity of permitholder categories who obtain SCPs, as government agency staff, utilities, businesses and other for-profits do not fit into one of the two referenced categories. Refer to Specific Response 81-b regarding the commenter's proposed re-structuring of fees.
81	Jeff Hall, con't.	81-e. UC appreciates the ability for multiple individuals to be authorized under one permit, but the proposed number (8) is inadequate for researchers supervising students or technicians in the field. Faculty regularly have 8-12 graduate students, 2-4 technicians, and a post-doc. UC recommends removing this limit of 8 and instead including a field to justify why more are requested. This would reduce the review burden on CDFW to not have to review the same study multiple times to approve numbers of persons named on permits.	81-e. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a. Removing the limit would not relieve CDFW's review burden, because though the study wouldn't need as in-depth review, the cost to review of qualifications for any individuals above the eight already included with the permit fees would then not be recouped, which would hinder CDFW's attempt at cost recovery. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost.
81	Jeff Hall, con't.	81-f. While the proposed faster review of permits (40 days to determine completeness, 60 days for decision to approve or deny) is faster than current, it remains inadequate for students' calendars. Recourse for when the 100-day review limit is not met is not specified	81-f. Each student in a quarter or semester-long course would not necessarily be expected to obtain their own SCP. The General Use permit was created for non-sensitive or common species using standardized or generally non-invasive methods, for which a professor (as an Entity, or an Individual permitholder) could apply for, and request TAs and GSRs whom the professor has trained, in the application to work under adequate supervision as Authorized Individuals. These TAs and GSRs, as Authorized Individuals, could then directly supervise

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name,	Commant	Donartmont Posnense
	Format, Date	Comment	Department Response
		in the proposed regulations. Most quarters or semesters are done well before the 100-day process. CDFW should accommodate an academic year timeline through regulations that expedite approval of temporary workers and students. A permit for common species, with only an expiration date, list of species and numbers could be issued. A PI on such a permit could delegate authority to unnamed students and temporary TAs, GSRs, etc. trained by the PI to work under the PI's permit.	students taking the course (and who do not need to be named on the PI's permit). General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost. A separate permit for class collections as suggested by the commenter was not within the scope of the proposed regulations, or within the capabilities of CDFW to program. It is expected that CDFW's approach to permits for adequate supervision, as noted above, would be adequate in most situations. It could be considered unequitable to create a separate permit type for one constituent group. Refer also to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals.
81	Jeff Hall, con't.	81-g. Expedited approval could also come when studies are IACUC or federally-approved. IACUC reviews (which are more restrictive than CDFW permits) could reduce burden on CDFW taff to shorten permit review time. IACUCs could also be used to handle modifications, revisions and reports. UC would be open to entering into an MOU with CDFW for this purpose.	81-g. Refer to Specific Responses 36-e regarding comparison of IACUC protocol details to CDFW application detail, and Specific Response 36-v regarding streamlining CDFW review to cross-reference IACUCs when they do contain the details needed to complete CDFW application fields.
81	Jeff Hall, con't.	81-h. CDFW doesn't provide details about the proposed online system, or implementation date. Several off-the-shelf systems existing, such as UC natural Reserve Systems (NRS) for research permits. UC would consider partnering with CDFW for such a system for SCPs.	81-h. CDFW thanks UC for extending this offer to assist with an online system. CDFW has spent considerable time in developing the proposed application forms, from identifying data needs to considering stakeholder input from pre-notice outreach through three notice periods with this rulemaking over the last three years. A custom system is under development in-house to meet the diverse needs of the three different review programs through which SCPs are issued (Inland Fisheries, Marine, and Terrestrial Wildlife – as described on pages 3-5 of the Original Proposed ISOR), which suggests that an "off-the-shelf" system would need extensive customization as well. As further discussed under General Response 2, as well as Specific Responses 2-a, 3-b, and 23-b, the informational needs have been separated for the Authorizations allowed under each General Use application by review program, and consolidated for the Specific Use application (for which take can be requested that can cross review programs). As noted on page 72 of the Original Proposed ISOR, CDFW looked to several other states and federal agencies for guidance in online permitting. The goals of information to be tracked in the SCP database to run queries, and for other functionalities, e.g., provide for an Individual, Entity and Student permitholder profiles, to connect Authorized Individuals to PIs, and to requested take activities, and several other aspects of the SCP nuanced structure would likely not match with, or be easy adjusted from, any off-the shelf- system. The SCP application system is planned to be rolled out with the effective date of the regulations, which will be determined by OAL upon completion of the rulemaking pursuant to the APA.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
81	Jeff Hall, con't.	81-i. UC appreciates the removal of a number [of a species] per locality restriction with the General Use form. However, the requirement to include that information is still in the Specific use form, and should be deleted there as well.	81-i . Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover take of certain numbers of wildlife, though this depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2).
82	Patricia Brown Bat Biologist Email dated 5/8/2017	82-a. Commenter doesn't support the proposed changes to the SCP system as currently written. The goal of SCP for bats was originally to protect the bats from unnecessary disturbance, while facilitating research of trained biologists that could provide valuable natural history information on bats to aid in their management and conservation.	82-a. Comment noted. The stated goal of protecting bats from unnecessary disturbance of bats and facilitating research of qualified biologists remains the same for SCPs under the revised regulations. Bat permits will include generally include conditions to increase coordination with other bat researchers, minimize harm of bats during handling and marking activities, minimize disturbance to bat roosts and hibernacula, prevent the possible spread of White-nosed Syndrome, and limit the number of bats that may be incidental injured or killed during permitted activities, and conditions that encourage permitholders to obtain appropriate pre-exposure rabies vaccinations.
82	Patricia Brown, con't.	82-b. Arizona Game and Fish issues a free annual permit to qualified biologists, and Nevada Division of Wildlife charges for two year out of state permits. During the renewal process, the applicant presents the current project design and area where the project is to be conducted. This is to avoid geographic overlap, redundancy and potentially more disturbance on animals in a given area. If a project changes between permit applications, it can be rapidly amended.	82-b. Throughout the SCP regulation change process, CDFW has evaluated the permit systems of other agencies. CDFW has determined that we will only issue permits for the duration outlined in FGC Section 1002, and that issuance of free permits will not meet full cost recovery goals, as outlined in the SCP Fiscal Analysis (revised June 2017). SCPs can be amended fairly rapidly under the proposed changes. As outlined on pages 24 and 27-28 of the Amended ISOR, if a research project changes during the term of a permit, including but not limited to changing the authorized species and/or wildlife groups, methods, procedures, locations, goals and objectives and personnel, the Specific Use SCP amendment form can be submitted to make such changes, as long as the fundamental scope of the original permit is not changed and the PI is able to continue carrying out all required duties under the permit. The application timeline outlined in subsection 650(e) of the proposed regulations specifies CDFW's intent to issue permits within 100 days of receiving an application, including amendment applications. While some amendments are requests for simple changes to an existing permit, some amendments may be more complex or require additional review by multiple CDFW biologists, therefore, we cannot guarantee processing all amendments in a faster timeframe compared to "new" and "renewal" permits.
82	Patricia Brown, con't.	82-c. Some California bats are Species of Concern. Therefore all bat research in the last 30 years has required a Memorandum of Understanding (MOU) since in bat sampling via mist-netting or harp traps the species captured is not predictable. The level of MOU has been tiered to the amount of potential disturbance to the bats and the skill required	82-c. In accordance with amendments to FGC sections 1002 and 1002.5 in 2012, MOUs are now only issued for species listed as threatened, endangered or candidate under the California Endangered Species Act (CESA), or for species designated as Fully Protected under state law. In recent years, MOU authorization was required for research on Townsend's big-eared bats during its CESA candidacy period; however, currently all bat research activities in California are now covered under SCPs. Despite the change in the SCP statue, and although we no longer categorize the levels for

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		for the procedure. Mist netting away from a roost was been the least restrictive, with more scrutiny given to roost entry and telemetry or tagging activities. Permit applicants are required to exhibit an understanding of bat biology and capture methods that will not harm the bats.	bat permits, CDFW continues to carefully consider all proposed research activities on bats, and we apply extra scrutiny during review for activities that may potentially cause higher levels of disturbance and activities that are more likely to cause harm or death (e.g., entry of roosts or hibernacula, radio-telemetry, invasive sampling techniques). In addition to a description of the purpose, methods and locations for any requested bat work, CDFW also closely screen the qualifications for each of the individuals who will be conducting the bat research, describing the specific expertise with each species or taxa group and field methods/survey protocols for such species (e.g., # individuals handled per species), and quantifying the length of experience conducting the work (e.g., number and description of field days/projects). CDFW typically requires bat permitholders to work intensively on multiple bat capture projects at several locations, often over multiple field seasons, before authorizing independent capture work. Additionally, CDFW has required applicants to submit two letters of recommendation from permitted bat biologists under whom you have worked as a standard procedure for many years. This helps validate the paper record of an applicant's experience and training.
82	Patricia Brown, con't.	82-d. All bat surveys will now require a Specific use permit, and if an amendment is required, this could take three months or more to issue. Since both consultants and scientists studying bats often have windows of opportunities for projects that open and close rapidly either because of funding or access opportunities, the time line of permits and amendments could jeopardize research or a project.	82-d. Yes, that is correct, CDFW has made the determination to designate all bats as "Prohibited Wildlife," as indicated on the proposed General Use SCP application for Terrestrial Wildlife. Refer also to Specific Responses 55-a and 55-d .
82	Patricia Brown, con't.	82-e. Concerned the proposed changes of requiring a proposal per project with fees for application and approval will diminish the ability of scientists and consultants to respond rapidly to projects that affect bat conservation. If the rationale for requiring this change in permits is to raise funds and increase fees, the amount of time and personnel to process the permits may offset any revenue generated.	82-e. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system. Refer to General Response 3 regarding permit fees and cost recovery. Refer also to Specific Responses 55-a and 55-d .

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		Ultimately the information gathered for bats and other wildlife could decline, and with it perhaps the ability of the CDFW to manage our wildlife in the face of environmental impacts on several fronts, including the looming threat of advancing White Nose Syndrome for bats.	
83	Tim Lacy Principal/ Sr. Wildlife Biologist LSA Email dated 5/8/2017	83-a. The commenter assumes their biologists will have to have both a General Use permit for common species and a "Special" [Specific Use] permit for special-status species surveys.	83-a. Refer to General Response 2 regarding the difference between the General and Specific Use permits, and what is allowed under each permit use level. Specifically, refer to General Response 2.1 , which discusses that both a General and Specific use permit will not always be required.
83	Tim Lacy, con't.	83-b. The commenter understands that a [Specific Use] permit would be required for each new study for State-listed threatened, endangered, or SSC, and that it could take three or more months to review approach, methods, location and purpose (in a detailed study plan). This may work for students and academics, but is unworkable for consultants, who do not generate projects themselves, but rather fulfill projects on behalf of clients to comply with federal, state and local regulations.	83-b. Comment noted. Refer to General Response 2.1 , and Specific Response 36-h regarding permitting for species not covered by a SCP (i.e., CESA-listed species). As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
83	Tim Lacy, con't.	83-c. Consultants often don't receive contracts or requests for studies within the proposed timeframes to review SCPs, which could be difficult to meet narrow survey windows. Certain clients' projects may be delayed while study plans are under the permit process review. Private sector projects could have to extend timeframes for a year or more due to permit review to have biologists conduct surveys within the optimal survey windows. Such delays could conflict with CEQAmandated timeframes under the Permit Streamlining Act. Delays to gather special-status occurrences could lead to funding	83-c. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

Co	ommenter Name, Format, Date	Comment	Department Response
		deadlines (i.e., Caltrans), additional costs to project applicants and extended review times, which could impact the subject species.	
83	Tim Lacy, con't.	83-d. One project with strict deadline was a Caltrans project to conduct California freshwater shrimp surveys, where Caltrans required the work to be conducted within two weeks of contract. Accommodating such a request would not be feasible under the proposed rules and could result in delays for transportation projects.	83-d. As both a California and federally- Endangered species, take authorization for California freshwater shrimp is governed under different, though often complimentary, statutes. Refer to General Response 2.1 regarding permitting for species not covered by a SCP (i.e., CESA-listed species).
83	Tim Lacy, con't.	83-e. Actual survey data is best to inform presence or absence of sensitive species, rather than presumed presence. If preparation of environmental documents makes habit of assuming presence rather than conclusion of absence from survey work [that isn't happening, inferred because of permitting], it could lead to compromised impact analysis, and increased taxpayer burden for those who eventually pay for projects.	83-e. Assumed presence can, in some cases, be an unnecessary factor for environmental document preparation for projects (in terms of mitigation requirements, and other factors) There are several steps that can occur prior to reaching a conclusion of assumed presence, and prior to engaging in take of the targeted wildlife, including extensive desktop review (from historical aerials to help determine land use changes and habitat suitability), conference with local experts, consultation with CDFW or other local agencies, etc. On the other hand, negative survey findings are only a glimpse of the picture as well, since surveys can miss detections, depending on the species, optimal survey windows, etc. Several of these steps attempt to be addressed through protocol-level surveys or agency guidance, many of which are drafted for CESA and/or federally-listed species. There are other situations where regulatory agencies require that the project proponent assume presence, due to inconclusiveness of some surveys, or other factors. As mentioned in General Response 2.1 , take of CESA-listed species come under different, but complimentary statutes. Take for such surveys for California SSC or other non-CESA listed species would be covered by SCP.
83	Tim Lacy, con't.	83-f. The proposed system would be unworkable for the majority of consulting biologists. The commenter suggests that CDFW adopt a permitting system similar to that of the USFWS, where for federally-listed species, a consulting firm would hold a Section 10 permits with Authorized Individuals approved to carry out different activities independently for each species. Individual projects are approved by a short letter, email or phone call after specifics for project are known, anywhere from 2 days to 2 weeks in advance. Reporting after 30 or 90 days details the projects and findings.	83-f. Refer to Specific Response 58-d.
83	Tim Lacy, con't.	83-g. With consultants comprising the second largest permitholder group, CDFW should	83-g. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple projects or contracts a consultant might face, and

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		revisit the proposed regulations to address needs of wildlife professionals for continued efficient service to clients for compliance with environmental laws, and to provide CDFW with occurrences of special-status species.	CDFW reminds permitholders that reporting is mandatory and required by statute.
84	Christopher Grinter Collection Manager, Entomology, California Academy of Sciences Email dated 5/8/2017	84-a. Any new regulations should focus on 1) expanding knowledge and 2) increasing protection of terrestrial arthropods.	84-a. Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
84	Christopher Grinter, con't.	84-b. The commenter recommends that non-protected species are removed from the general permit requirement.	84-b. Comment noted. Refer to General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017). As detailed on page 23 of the Amended ISOR, the General Use permit is intended to permit the incidental by-catch of the prioritized terrestrial and vernal pool invertebrates during activities that are otherwise exempt from needing a SCP. The Specific Use would cover the targeted take of such prioritized species.
84	Christopher Grinter, con't.	84-c. Regulating and restricting ability to take invertebrates contradicts CDFW goals and mission statement. From researchers to citizen scientist, several types of people are engaged to collect vouchers, photo document occurrences, and collect data. The proposed regulations would hamper ongoing research across the state.	84-c. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection and prioritization of CDFW resources for enforcement.
84	Christopher Grinter, con't.	84-d. Numbers of collections per taxa at a site should be increased, or left to the discretion of the PI. It is standard to collect a minimum "series" of specimens to document diversity, variation, and genders, and to discovering new species.	84-d. Given that most terrestrial invertebrates are exempted from needing a SCP, prospective sampling of unnamed taxa for taxonomic discovery is not anticipated to be affected. CDFW appreciates the work that academic and research entomologists conduct to help identify and classify California's broad terrestrial invertebrate and insect diversity. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
84	Christopher Grinter, con't.	84-e. Collections of invertebrates rarely approach a concern for potential effect on	84-e. Comment noted. A general guideline is to avoid approaching take of 10% of the local population size, which is often difficult to know, but can be estimated in the field given

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		population size, and that is in comparison to what is known on a few critically endangered invertebrates – absent data on tens of thousands of species.	habitat suitability and local conditions.
84	Christopher Grinter, con't.	84-f. Collection is easily limited to less than 10% of the location population, but not all habitats are sampled, often limited to linear transects. Passive sampling techniques critical for inventory baseline surveys still impact far less than 10% of a study area, and do not capture all passing insects.	84-f. CDFW agrees with this rationale; refer to Specific Response 84-e , and to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity.
84	Christopher Grinter, con't.	84-g. The Special Permit [Specific Use permit] would be appropriate for species of concern or specified sensitive habitats, such as Threatened, Endangered, other status, vernal pools, etc.	84-g. As summarized under General Response 1.1 , it is expected that CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
84	Christopher Grinter, con't.	84-h. CDFW should notify researchers of general locations where species of concern might be encountered for researchers to take measures to avoid those areas, or use methods that can preclude their take. A non-punitive system should be in place for researchers to report accidental take of listed or non-listed SSC. Projects to monitor such species of priority should be encouraged.	84-h. Both the General Use applications, and the Specific Use applications, include fields where applicants must verify that they have conducted a search of CDFW, or other available resources on sensitive wildlife species that may occur within the location they intend to take wildlife to minimize potential impacts (refer to pages 44, 46, 49, and 61 of the Amended ISOR). Relevant biological information in the general research area prior to conducting field work can be searched by using Rarefind, CNDDB Quick Viewer, BIOS, or other reliable sources for known occurrences of special status plants, animals, or natural communities at the site before conducting the research. Certain review programs also require the permitholder to coordinate their field activities with the landowner, at which time the landowner may inform the permitholder of any special considerations.
84	Christopher Grinter, con't.	84-i. Subsection 650(j): Authorized Individuals. Though permit fees seem to be lower than current, the number of Authorized Individuals included with permit fees, based on the average of eight people listed on current permits could drive permit costs up for natural history museums.	84-i. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a .
84	Christopher Grinter, con't.	84-j. Six curators and multiple other researchers, post-docs, collection staff and volunteers would exceed the 8 Authorized Individuals + one PI, leading to the need for several permits to cover collection and documentation of arthropod diversity. This would be an increase in paperwork for CDFW as well as applicants, who would have to	84-j. As noted under General Response 1.1 , CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP, and has in turn focused its efforts on such prioritized invertebrates to meet conservation priorities and data needs. Refer to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a .

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		reduce number of people listed, or pursue researcher where permitting burden is less, and thus not addressing California arthropod biodiversity needs.	
84	Christopher Grinter, con't.	84-k. A web-based system could offset the increased paperwork burden that seems apparent with going from two to twelve forms. The commenter hopes that the system will work to decrease permit processing time.	84-k. The proposed regulations are intended to facilitate a streamlined an efficient process, when implemented in an online system; it is anticipated that an online application system alone will increase efficiencies, as well as providing a more detailed application forms that request information up front to ensure applications are complete. The size of the package on paper appears voluminous, primarily due to the application forms having duplicative information. When implemented in an online system, the forms should be much more streamlined in their workflow.
84	Christopher Grinter, con't.	84-I. Subsection 650(m), permit fees. In instances when non-profits have fees waived, how will the proposed permit structure affect research and education? If students have to pay for permits, they may consider alternate career options. The proposed permitting requirements further burden already-stressed non-profits, where permits should be free (or not required) for students, teachers, museum educators and others whose goal is education. Educators should be allowed to supervise unlimited student collections on non-threatened and endangered species under existing permits.	84-I. As detailed in the justification for subsection 650(g) (pages 20-21 of the Amended ISOR), amendments by Legislature to FGC sections 1002 and 1002.5 expanded the types of organizations, affiliations, institutions, etc. that are eligible to apply for an Entity permit. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection, including considerations of permits for students. General Response 3 discusses how student permits have always included a fee, and mentions how Entity permits may help spread permit fee cost among a PI, and many Authorized Individuals to allows for collaborative efforts to help reduce the burden of the proposed fees. See also Specific Response 30-f .
84	Christopher Grinter, con't.	84-m. the General Use permit, localities for collection are not known at the time of application. It should be sufficient to agree to avoid certain areas of concern (habitats, e.g., vernal pools) could increase confidence that permitted activities do not harm threatened, endangered, or other species of concern. Such an "off limits" list would reduce the burden of CDFW in reviewing permitting localities. Additional localities could be added during reporting as knowledge of status and distribution of arthropods emerges.	84-m. Refer to General Response 1.3 regarding indiscriminant methods used to collect terrestrial invertebrates and insects precluding the ability to identify species and numbers prior to sampling, and for reporting timeframes and taxonomic specificity. General Response 1.3 further discusses flexibilities in providing details in permit applications for those species that continue to require a SCP (refer to General Response 1.1). CDFW has reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
84	Christopher Grinter, con't.	84-n. It is important for Special permits [Specific Use permits} to list locations to provide information on habitats of special concern, but a simple, cost-free way to append new locations after submitting the application	84-n. As detailed under General Response 2.2 , a Specific Use permit or amendment are anticipated to be able to cover multiple types of work, though this depends on the nature of the take request, such as the taxonomic groups or species status, proposed methods or procedures, and proposed locations, as detailed under subsection 650(i)(2). Review of a Specific Use amendment, when additional details are available, would meet the current

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
		(or approval to list all exhaustively) so new collection plans do not have to wait for costly amendments.	review timeframe of 90-100 days, as is current practice under the existing permit system. Refer to General Response 3 regarding permit fees and cost recovery
84	Christopher Grinter, con't.	84-o. Subsection 650(o): Notification. Should notification be a requirement- clarification warranted for the utility of this function, and should it be necessary for private lands or non-state jurisdictions or other reporting permit systems?	84-o. As discussed by General Response 4 , the Notification is required primarily for CDFW Law Enforcement, and secondarily for regional biologists to know who is conducting activities in their region(s) or county(ies). General Response 4 discusses the history, as well as necessity and requirements pertaining to Notification of Field Work or Activity (form DFW 1379b).
84	Christopher Grinter, con't.	84-p. For General permits, researchers would have to obtain permission to access land based on jurisdiction, The commenter would like to understand why notification is allowed for private land, particularly for citizen scientists and students collecting on their own property, where enforcement officers are unlikely to encounter permitholders. For Special Permits [Specific Use permits], preplanned collections seem to warrant notification for public lands. In cases where the commenter works with private landowners, opportunities to visit those lands may come up unexpectedly, so relevance for notifying for private lands ahead of time is not understood. Weather and seasonal conditions may throw off field schedules, unless nearby locations can be visited in the same timeframe, otherwise opportunities are missed.	84-p. Refer to Specific Response 84-o. It is expected that CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP, where the rest are relieved from permitting and notification requirements for the remaining terrestrial invertebrates, as noted in subsection 650(u)(5). The timeframe for notification has been reduced from a minimum of 48 hours, to 36 hours prior to activity in the field, as detailed in the justification for subsection 650(o) (pages 29-30 of the Amended ISOR). As discussed under General Response 4, the Notification is required primarily for CDFW Law Enforcement officers, and secondarily for regional biologists to know who is conducting activities in their region(s) or county(ies) – and this is pertinent whether on public, or private lands.
84	Christopher Grinter, con't.	84-q. Subsection 650(q): possession and transfer of wildlife [via Chain of Custody]. How should material be transferred taken without applicable permits, would such materials be listed on form DFW 1379c in lieu of a permit? Specimens are sent to unaffiliated researchers all the time, therefore it is important to know if permits should be amended to add such unaffiliated names, or what increase in paperwork would be like. The permit and Chain of Custody would have to accompany each specimen, burdening museum collections.	84-q. As addressed under General Response 1.1 , CDFW's focus to approximately 303 species or genera, or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP relieves those other terrestrial invertebrates from permitting, reporting, as well as notification and chain of custody requirements. Refer also to Specific Response 35-e .

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
84	Christopher Grinter, con't.	84-r. Subsection 650(r): permit denial. The commenter is concerned about language that may result in denial for duplication of previously document research, acknowledging that habitat destruction, invasive species, climate change patterns may argue for the need for continual update of past research to adapt knowledge and responses, even if appears duplicative. If research is considered for denial based on duplicative research, the commenter recommends the formation of an independent review board that weighs in consideration from peers for costs and benefits of the proposed research.	84-r. As addressed under General Response 1.1 , CDFW's focus to approximately 303 species or genera, or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP relieves those other terrestrial invertebrates from permitting, reporting, as well as notification and chain of custody requirements. For those 303 species or genera to continue to require permitting, General Response 2.2 mentions several fields were added to the Specific Use form (DFW 1379S) to capture information necessary to ensure an application is filled to completeness, based on fields decided upon by three review programs issuing permits. Refer to Specific Response 55-h regarding CDFW's intent behind duplication or replication of work. As noted in Specific Response 55-i , CDFW does not plan to establish an external review board of scientists to review SCP applications.
84	Christopher Grinter, con't.	84-s. The regulatory package states that complex permits with multiple PIs and Authorized Individuals are proposed to break into more manageable permits of smaller scope, but this would only work if the time to review such separate permits is less than the time to review one larger permit. It is possible that the increase in permits would increase administrative burden to CDFW, though the applicant or research team may have to apply for different permits with different due dates, etc.	84-s. Comment noted. If the proposed permit structure (i.e., General and Specific Use, with the level of detail required) were not paired with online implementation, then the time to process more permits perhaps wouldn't be shortened. The inefficiencies of the current system, as stated under Goal 2, and on pages 4-10 of the Original Proposed ISOR led to the development of application forms with the regulatory proposal are intended for online implementation. It is anticipated that an online application system alone will increase efficiencies, as well as providing a more detailed application forms that request information up front to ensure applications are complete. As noted under Specific Response 11-d , while more than one permit may be required, the ability to manage them compared to the current system is expected to benefit CDFW, as well as applicants and permitholders.
84	Christopher Grinter, con't.	84-t. With estimates of 600 permits per year, it is not clear from the proposed regulatory package how additional personnel will be allocated to review permits, based on the estimate that 12 permits would need to be processed a week.	84-t. There are insufficient funds to hire even temporary Scientific Aids to process permit applications. As stated in General Response 3 – (fees and cost recovery), and detailed in the SCP Fiscal Analysis (revised June 2017), CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program, and at this time, not to hire additional staff. By facilitating more streamlined permits (i.e., General Use) and separating out work from more focused permits (i.e., Specific Use), CDFW anticipates being able to complete the phases of review (completeness and content) for issuance of permits within the specified 90-100 days.
84	Christopher Grinter, con't.	84-u. The commenter supports easier renewals for "no change" permits, as applicants continue activities over time. The commenter suggest extending permit duration to five years for Individual permits and 10 years for entity permits, which would reduce administrative burden at CDFW.	84-u. Refer to Specific Response 63-g regarding an extension granted for those who have submitted a permit renewal application at least 30 day prior to permit expiration, that permitted activities can continue with written authorization from CDFW. Contrary to the commenter's assumption, review may be required during renewal of a permit, particularly for submitted reports, and evaluating continued work relative to that of other permitholders within a given area. Refer to General Response 3 regarding renewals, and their cost and issuance time. Lastly, refer to Specific Response 42-f regarding permit duration.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
84	Christopher Grinter, con't.	84-v. The expanded inclusion of invertebrates into the regulatory framework written for vertebrates and endangered species will cost science in the state. Though CDFW is not mandated to issue permits, the expansion of regulations to obtain money from the overworked, underfunded research backbone on the state seems to meet the need for a "one-size-fits all" approach for permitting, while neglecting the realities of invertebrate biology and current knowledge of such populations. The commenter's research institution, partially funded by taxpayers exists to better understand the natural environment, so the expansion of restrictions would burden many, since compliance would be difficult given limited resources.	84-v. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes. As summarized under General Response 1.1 , it is expected that CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP. Lastly, refer to General Response 2.1 regarding permitting for species not covered by a SCP (i.e., CESA-listed species).
84	Christopher Grinter, con't.	84-w. The commenter also expresses concern for citizen scientists, who appear to fall under the proposed regulation, volunteer their time to photograph, identify and share records, though collections are often necessary to confirm identification. The commenter asks for clarification on these activities.	84-w. It is not CDFW's intention to impede or prohibit activities of citizen scientists. Refer to General Response 1.4 regarding the audience engaged in invertebrate or insect collection. As detailed in General Response 1.2 for invertebrates (and in general for <i>all</i> wildlife), opportunistic take or collection in any location at any time, without authorization, permit or other exemption from CDFW is inconsistent with the law. However, given that most terrestrial invertebrates are now exempted from needing a SCP as detailed in General Response 1.1 , prospective sampling of unnamed taxa for taxonomic discovery is not anticipated to be affected.
85	Robert Douglas Sr. Biologist/ Forest Science Manager, Mendocino Redwood Co. Email dated 5/8/2017	85-a. CDFW should be lauded for its honest attempt to reform [the SCP] process that had been a source of frustration for the last ten years for academic, non-profit, private consulting and timberland organizations. However, it seem the proposed permit structure (i.e., General and Specific Use permits) establishes a "pay to play" framework to recoup costs for CDFW staff review time.	85-a. CDFW thanks the commenter for recognizing efforts that had gone into this regulatory proposal towards improvements and clarifications for existing SCP operations. Refer to General Responses 2.1 and 2.2 regarding the difference between the General and Specific Use permits, and what is allowed under each permit use level. All fields of the General and Specific Use application and respective amendment forms are justified on pages 40-66 of the Second Amended ISOR. The commenter is correct in saying that costs must be recouped for respective review time needed, depending on what is requested for take. As stated in General Response 3 regarding fees and cost recovery, the statute governing SCPs (FGC sections 1002 and 1002.5) allows the CDFW to "fully recover, but not exceed, all reasonable administrative and implementation costs of the department relating to those permits". CDFW is currently only seeking to recover costs for four existing permanent staff members, given the historical shortfall for this permit program.
85	Robert Douglas, con't.	85-b. The regulatory proposal fails to evaluate why so much time is needed for permit review, particularly for activities with non-listed species, or projects previously approved by CDFW. Permit renewals involved questions similar to	85-b. As noted on page 5-6 of the Amended ISOR, CDFW has faced challenges over the years in regards to adequate funding and staffing for SCPs, and this issue has contributed to past delays in processing new, renewal and amendment SCP applications. In addition, high turnover in temporary Scientific Aid staff may have resulted in duplicative questions

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

С	ommenter Name, Format, Date	Comment	Department Response
	Format, Date	those of first-time applicants for activities already approved with long-term monitoring programs. The process needs simplicity, not more complexity.	asked in regards to renewal applications over the years. More recently, and moving forward with online application system and other improvements with the new SCP regulations, CDFW anticipates that the processing timeframe for most new permits, renewals and amendments will continue to be about 90-100 days. Over the years, CDFW has also developed programmatic permit template language that may be custom-fitted depending on the particular request to help minimize processing times and consistently process permits. In general, renewals may take less time to review, however, some renewals may contain substantial amounts of new information, even for projects previously approved by CDFW, that will necessitate a longer review period, or CDFW may have a large number of pending applications to be reviewed at any given time. One of the most common delays with processing of renewal applications is due to lack of reporting information required in past permits, including reports that are incomplete and inadequate in regards to items outlined in the reporting conditions. Therefore, CDFW cannot make a guarantee that all renewals can be processed faster than a new permit application, especially for non-listed species that CDFW may be concerned about (e.g., California SSC and other "Prohibited Wildlife"). Given the volume of SCP applications CDFW receives, 90-100 days is a reasonable amount of time for processing an application, asking for any additional information, screening qualifications as needed, writing permit conditions, and verifying all reporting is complete. Furthermore, with the addition of Section 650(k)(2) of the proposed regulations, permittees may request to continue conducting previously permitted activities provided they have complied with past reporting requirements, and no reasons for denial, suspension, or revocation pursuant to subsections 650(r) and 650(s) have been identified. Therefore, any delays in processing a renewal SCP should not affect permittees' ability to continue conducting field work.
85	Robert Douglas, con't.	85-c. The commenter is concerned for how the regulatory proposal may affect Mendocino Redwood Co. (MRC) monitoring and research programs, most of which are voluntary. If the proposal is implemented in its current form, MRC may re-evaluate how the programs are administered in consideration of costs and benefits, and may choose to curtail some unnecessary projects. Effects for third parties conducting research on MRC lands, and for reporting of data gathered on public trust resources to CDFW may carry over. Has CDFW considered in its proposal the value timberland owners contribute to conservation and management of forest species?	85-c. CDFW values open communication and coordination with permitholders, many of whom directly assist CDFW in research and conservation efforts. Such partnerships are vital in the face of limited financial resources for wildlife research and conservation, and wildlife-related educational opportunities for the public. As noted in Specific Response 74-a , this regulatory proposal isn't intended to extend past our authority in implementing trusteeship responsibilities. It is unfortunate that MRC would consider cutting its monitoring programs due to concerns for permitting. These responses to comments are aimed to clarify for the record perhaps some of the concerns MRC and others might have on impacts to research programs. As noted in Specific Response 81-a and 81-b (UC of California), CDFW values the working relationships and collaboration with not just timberland, or academic, or one over the other, but <i>all</i> SCP permitholders and researchers as part of the permit and reporting process; the benefit is for management and conservation of California's resources.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
85	Robert Douglas, con't.	85-d. Ten employees and 15 projects are included with MRC's current entity permit (SC-6943), 10 employees with 15 projects. It is assumed that MRC would need three General Use Entity permits to cover the three review programs, and between 8-12 special use [Specific Use] permits to cover projects, as well as additional fees for more than 8 employees on each permit, and for yearly amendments to add four to six seasonal employees. It is unclear how CDFW would parse out such projects requiring different permits, or how MRC's administrative resources would need to be allocated to complete such applications and reporting, despite online forms/ entry.	85-d. Refer to General Response 2.1 , which discusses that both a General and Specific use permit will not always be required. General Response 3 also discusses the benefit of Entity permits as it relates to the LAI with regards to permit fees and cost. It could be reasonable to request that in MRC's case, the aquatic research studies focusing on inland fisheries be separated out from the terrestrial vertebrate research studies, which would provide a minimum of two Specific Use permits under separate Pls Robert Douglas, and David Ulrich. As noted in Specific Response 36-o , CDFW generally agrees that it would not be reasonable to require permitholders to obtain multiple permits with redundant authorizations. Thus another way to consider MRC's studies is that the Authorizations or general capture/ release activities covered under the General Use for the Terrestrial Wildlife General Use level permit (form DFW 1379GW) could be included with the Specific Use request for those particular taxonomic groups (i.e., amphibian work). Refer also to General Response 5 regarding the size of the List of Authorized Individuals and amendments to add additional Authorized Individuals, as well as Specific Response 1-a – the flat fees for the General and Specific Amendments could cover the addition of several permanent or temporary personnel.
85	Robert Douglas, con't.	85-e. CDFW's current proposal disincentivizes private landowners to monitor wildlife on their own properties. Until 30 years ago, little was known about wildlife diversity on private timberlands; MRC built research programs whereby biologists freely collaborate with public and private entities to fill in this gap to address conservation and management information needs, and serve public interest (e.g., education).	85-e. It was never CDFW's intent to discourage research through permitting, but understands the sentiment. The permitting and reporting mechanism is intended to inform management and conservation priorities of those species taken by permit. Refer also to General Response 2.3 regarding the thought of the proposed regulatory package disincentivizing research on private lands.
85	Robert Douglas, con't.	85-f. MRC is unable to support the proposed SCP regulations, and encourages CDFW to reconsider its proposal, directly engage with stakeholders to listen to their concerns and offer alternate proposals for private landowners with monitoring and research programs.	85-f. Comment noted. Refer to General Response 6 regarding pre-notice outreach efforts conducted prior to initiating the rulemaking, where CDFW tried to weigh in feedback from the public on the proposed regulations to the extent feasible, while balancing goals (i.e., cost recovery) for the rulemaking.
86	Dave Johnston Associate Wildlife Ecologist and Bat Biologist, H.T. Harvey & Associates Email dated 5/8/2017	86-a. The commenter requests CDFW extend the comment period, stating he possesses a MOU for bats and wasn't aware of the proposed changes until recently.	86-a. Refer to General Response 6 regarding the request for extension on the comment period. Refer also to Specific Response 82-c regarding bat MOUs.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
86	Davis Johnston, con't.	86-b. The commenter states the Specific Use may not be conducive to conservation of special status species. Government agencies, as well as private entities approach H. T. Harvey & Associates to provide appropriate and immediate mitigation for such species. If special [Specific Use] permits take 3 months for approval to move special status species out of harm's way, then agency personnel and private entities are not likely to provide any mitigation at all.	86-b. Refer to General Response 2 regarding the proposed permit structure – General and Specific Use permits. As identified in the Original Proposed ISOR, page 5, CDFW has made it a priority even under current procedures to review and issue permits within 90-100 days. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
86	Davis Johnston, con't.	86-c. The commenter again requests CDFW extend the comment period to be able to respond responsibly.	86-c. Refer to General Response 6 regarding the request for extension on the comment period.
87	William Rainey Berkeley Email dated 5/8/2017	87-a. The proposed structure requiring submission of Specific permits new locales or investigations is a time burden that could preclude short term investigations aimed to decrease potential impacts from development on bats, while gathering natural history information for such species.	87-a. Comment noted. As detailed under General Response 2.2 , a Specific Use amendment would not be required for each new project or contract, or client that a consulting company or organization may have, and amendments are anticipated to meet the current review timeframe of 90-100 days, as is current practice under the existing permit system.
88	Robert Lane Professor Emertius, Dept. of Environmental Science, Policy & Management, UC Berkeley Email dated 5/8/2017	88-a. The commenter expresses his surprise and disappointment that CDFW now requires a permit for collection of terrestrial arthropods. The commenter has been collecting insects and ticks for decades to study disease to protect public health.	88-a. As stated in General Response 1.2 , it has always been under CDFW's purview and within its authority to require a SCP for the take of invertebrates for scientific, education and propagation purposes. Lastly, refer to General Response 1.1 regarding CDFW's proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
88	Bob Lane, con't.	88-b. The commenter doesn't grasp how a permit process that makes sense for big-game or other vertebrates could be applied to invertebrates. Entomologists, professors and other biologists seem to have been left out of the planning process [for these regulations]. Permit requirements and the cost are cumbersome.	88-b. As stated in General Response 1.2, CDFW's existing and proposed authority to regulate invertebrates under Title 14, Section 650, where CDFW could have made more effort to engage entomologists, professors and other invertebrate biologists in the process. However, as noted in General Response 6 , many of these researchers may not have been known to CDFW, as they weren't existing permitholders (not realizing a SCP may have been required for their invertebrate take), or for other reasons. As summarized under General Response 1.1 , it is expected that CDFW's approach to invertebrate permitting in response to comments on the Original Proposed ISOR have reduced the perceived hardship by reducing the number of species (approximately 303 species or genera) or

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
			habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP.
88	Bob Lane, con't.	88-c. The commenter concurs with comments provided by Dr. Kipling Will, Pete Oboyski and Robert Zuparko (UC Berkeley). The commenter believes that collecting permits for terrestrial arthropods should not be required unless the targeted arthropod is endangered or threatened.	88-c. Comment noted. Refer to Specific Responses to comment letters 50 (Dr. Will), 64 (Dr. Oboyski), 51 and 69 (Dr. Zuparko). Refer to General Response 1 regarding CDFW's approach to invertebrate permitting, and specifically General Response 1.1 regarding the proposed exemption for permitting by SCP under subsection 650(u) all terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list (dated June 12, 2017).
88	Bob Lane, con't.	88-d. The commenter cites an instance where the Center for Disease Control (CDC) researcher sought to sample ticks on State Parks lands, and would have to be charged fees to do so, in addition to applying for a State Parks permit. The CDC, as the lead agency for public health surveillance, should not have to pay for activities that benefit public health. With help from CDFW staff, the commenter came to understand that take of arthrpods has always required a SCP, and the CDC staff were able to "piggy back" on an Entity permit with the CA Dept. of Public Health for regular surveillance activities for arthropod carriers of disease.	88-d. As stated in General Response 1.2 , CDFW's existing and proposed authority to regulate invertebrates under Title 14, Section 650. Refer to General Response 1.1 regarding how CDFW has reduced the perceived hardship (whereby ticks could be studied without a SCP) by reducing the number of species (approximately 303 species or genera) or habitats (vernal pools) where collection of terrestrial invertebrates continues to require a SCP. In this situation, the CDC may still be required to obtain a Department of Parks & Recreation permit, pursuant to other state authorities or statutes to regulate the take of wildlife. The Entity permit was envisioned to be utilized in such a manner as the commenter states. General Response 3 discusses how Entity permits may help spread permit fee cost among a PI, and many Authorized Individuals to allows for collaborative efforts to help reduce the burden of the proposed fees.
88	Bob Lane, con't.	88-e. The commenter urges CDFW to delete regulations requiring permits for terrestrial arthropods except for those endangered or threatened. It would be in CDFW's best interest to invite entomologists to the discussion regarding future processes for permitting.	88-e. Comment noted - refer to General Response 1 regarding CDFW's approach to invertebrate permitting. The proposed exemption for permitting by SCP most terrestrial invertebrates except for those that are covered on the California Terrestrial and Vernal Pool Invertebrates of Conservation Concern list is anticipated to open a discussion regarding establishing priorities, or focusing conservation efforts for invertebrates and insects in California, with input from the entomological community.
89	Sarah Lozano Principal, Dudek Email dated 5/8/2017 (after 5pm cutoff- 11:29pm)	89-a. The commenter understands that a General Use permit is intended for non-special status species with low impact methods, while a Specific Use would be necessary for project-specific information involving take involving special status species and more invasive methods.	89-a. Refer to Specific Response 11-a.
89	Sarah Lozano, con't.	89-b. New clients, projects, or changes in existing projects, species or survey areas would be required for the Specific Use. An amendment would take at least 100 days to	89-b. Refer to Specific Response 11-b.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
		obtain, but could be longer if the application is deemed incomplete. There are separate fees for General, Specific Use and their amendments.	
89	Sarah Lozano, con't.	89-c. The proposed tiered permit structure is not workable for environmental consultants. To wait a minimum of 100 days for an amendment would be burdensome on this stakeholder group, and CDFW's workload might push it beyond this timing.	89-c. Refer to Specific Response 11-c.
89	Sarah Lozano, con't.	89-d. Academics and researchers often have discrete projects over known durations that can be anticipated in advance. Consultant work is often of varied duration, requiring quick turnaround. The proposed changes would require a wait of minimum of 12 weeks under the proposed changes, and higher fees, relative to the existing system which relies more on the qualifications of the applicant warranting them working on multiple projects over a permit period. Additional burden is placed on the applicant or PI to track all approved staff, permit statuses and reporting associated with the new process.	89-d. Refer to Specific Response 11-d.
89	Sarah Lozano, con't.	89-e. It is unclear the standards for qualifications which could lead to arbitrary approval or denial of an application. where greater scrutiny would be warranted for species more sensitive to handling. Certifications or trainings by societies should be taken into consideration. The commenter is concerned about restricted pools of consultants or researchers found qualified and competent by CDFW to work with certain species, when others could be as well to minimize delays to projects.	89-e. Refer to Specific Response 11-e.
89	Sarah Lozano, con't.	89-f. CDFW should recognize federal take permits for the same species to substitute for the state SCP, where CDFW could be a recipient of all reports required by the federal permit.	89-f. Refer to Specific Response 11-f.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

C	ommenter Name, Format, Date	Comment	Department Response
89	Sarah Lozano, con't.	89-g. SCP renewals should be ministerial, given permitholders meet all permit terms. Amendments should be issued within 30 days.	89-g. Refer to Specific Response 11-g.

Appendix B. Specific Responses to Comments – Scientific Collecting Permits, Original Proposed ISOR

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