

Incidental Take Statement

Statement of Regulation

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with this Incidental Take Statement.

Sections 7(b)(4) and 7(o)(2) of ESA do not apply to the incidental take of listed plant species. However, protection of listed plants is provided to the extent that ESA requires a Federal permit for removal or reduction to possession of endangered plants from areas under Federal jurisdiction, or for any act that would remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any regulation of any State law, including the California Endangered Species Act, or in the course of any violation of a State criminal trespass law.

The measures described below are non-discretionary, and must be implemented by Reclamation in order for the exemption in section 7(o)(2) to apply. Reclamation has a continuing duty to regulate the activity covered by this incidental take statement. If Reclamation (1) fails to require staff or contractors to adhere to the terms and conditions of this incidental take statement through enforceable terms that are added to water contracts, construction contracts, or Reclamation policy and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

The amount of incidental take addressed below is for those actions that are within Federal discretion for the purposes of section 7 of the ESA. As discussed in the Effects of the Proposed Action, the anticipated take from the proposed action transcends Federal discretion due to the indirect effects of the proposed action. As discussed in the Project Description, separate section 7 consultation will

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occur on projects wherein an area-specific analysis is needed. Those actions which are covered by this incidental take statement, and those which will require future incidental take authorization, are discussed in more detail below.

Included and Excluded Activities

Activities Covered by This Incidental Take Statement - Incidental take of listed species may result from normal operation and maintenance of CVP facilities, as described below in the **Amount or Extent of Take** section. These activities may include: routine maintenance activities of canals, ditches, and levees; mowing; grading and repair of roads; construction of firebreaks; spraying, drift, or runoff of herbicide or insecticide on the facilities; and use of equipment near vernal pools that does not result in fill of wetlands, penetration of hardpan, or permanent changes in hydrology. These activities may also include ordinary operations and maintenance activities similar in scope, impact, and duration to those above but not specifically listed. The actual delivery of Federal water by Reclamation to the water districts is also covered under this incidental take statement.

Activities Not Covered by This Incidental Take Statement - Incidental take of listed species that are addressed in other biological opinions, including but not limited to OCAP, Los Vaqueros, Friant and Interim, is not covered by this incidental take statement. Incidental take of listed species caused by the following activities is not covered by this incidental take statement:

- Construction of new water delivery or treatment facilities
- New water contracts
- Private actions related to the use of CVP water, including construction of private development projects facilitated by CVP water
- Indirect effects of delivery of the water in contract service areas
- Indirect effects of delivery of the water outside contract service areas
- Indirect effects of delivery of the water outside of the place-of-use
- Maintenance activities on privately owned water delivery systems
- Projects that would require Corps permits for fill of wetlands under Section 404 of the Clean Water Act
- Selenium contamination of Refuge Water Supplies
- Adverse effects of selenium on the delta smelt and giant garter snake
- Actions of individual entities in utilizing CVP water for either agricultural or municipal and industrial purposes
- Local HCP's within the CVPIA study area

Amount or Extent of Take

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The incidental take anticipated in this opinion is only in the form of harming, killing, or harassment of giant garter snake, Sacramento splittail, valley elderberry longhorn beetle, and vernal pool crustaceans, and in the form of harassment for blunt-nosed leopard lizard, giant kangaroo rat, Tipton kangaroo rat, and San Joaquin kit fox. No other forms of take are anticipated. Implementation of the Avoidance Measures in Appendix F is expected to substantially reduce, but not eliminate, the potential for incidental take of listed species resulting from operation of the CVP and implementation of the CVPIA. The actions and processes for which this incidental take statement applies include the direct effects of the continued operation and maintenance of CVP facilities for these species only.

Blunt-nosed Leopard Lizard - The Service anticipates that take of blunt-nosed leopard lizards will be difficult to quantify for the following reasons: (1) the small body size makes the finding of dead or injured specimens unlikely; (2) losses may be masked by seasonal fluctuations in numbers or other causes; (3) the secretive or diurnal nature of the species; and (4) the species occurs in burrows. For these reasons, the Service is estimating the level of take for blunt-nosed leopard lizards (in the form of harassment only) in terms of the total linear feet of habitat along canals within the affected area that may be influenced, at unpredictable locations and infrequent intervals, by operations and maintenance actions. Therefore, the Service has determined that the continued operations and maintenance of the CVP could result in the harassment of blunt-nosed leopard lizards inhabiting as much as, but no more than, 150 miles of CVP canals (each) that may result from activities such as mowing along the canals. In accordance with the project description, each mile of canal will be mowed no more than once each year.

Giant Garter Snake - The Service expects that incidental take of giant garter snakes will be difficult to quantify for the following reasons: (1) the snakes are secretive and notoriously sensitive to human activities, (2) individual snakes are difficult to detect unless they are observed, undisturbed, at a distance, and (3) the difficulty of detecting and tracking all operations and maintenance activities that may result in harm of listed species. For these reasons, the Service is estimating the level of take in terms of the total linear feet of aquatic habitat within the affected area that may be influenced, at unpredictable locations and infrequent intervals, by operations and maintenance actions. Therefore, the Service has determined that the maintenance mowing of CVP canals and facilities could result in the killing, harm, or harassment, annually, of giant garter snakes inhabiting approximately 450 miles of CVP canals. In addition, giant garter snakes could be harmed or killed as a result of dredging in as much as, but no more than, one linear mile of aquatic garter snake habitat (such as dredging in a canal or ditch) annually.

Giant Kangaroo Rat and Tipton Kangaroo Rat - The Service anticipates that take of giant kangaroo rats and Tipton kangaroo rats will be difficult to quantify for the following reasons: (1) the small body size makes the finding of dead or injured specimens unlikely; (2) losses may be masked by seasonal fluctuations in numbers or other causes; (3) the secretive or diurnal nature of the species; and (4) the

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species occurs in burrows. For these reasons, the Service is estimating the level of take for the kangaroo rats (in the form of harassment only) in terms of the total linear feet of habitat along canals within the affected area that may be influenced, at unpredictable locations and infrequent intervals, by operations and maintenance actions. Therefore, the Service has determined that the continued operations and maintenance of the CVP could result in the harassment of all giant kangaroo rats and Tipton kangaroo rats inhabiting as much as, but no more than, 100 miles of CVP canals (each) that may result from activities such as mowing along the canals. Each mile of canal may be mowed no more than once each year.

Sacramento splittail - The Service anticipates that take Sacramento splittail will be difficult to quantify for the following reasons: (1) finding dead or impaired specimens is unlikely; (2) losses may be masked by seasonal fluctuations in numbers or other causes; (3) the aquatic nature of the species; (4) the effects of Selenium poisoning on Sacramento splittail has not been quantified; and (5) dead or impaired specimens may not show external signs of poisoning. For these reasons, the Service is estimating the level of take for Sacramento splittail for the entire area of the water bodies directly affected by Reclamation pumping Selenium-laden water into the conveyance system. Therefore, the Service has determined that the continued operations and maintenance of the CVP could result in the killing, harm, or harassment of all Sacramento splittail that enter the Delta Mendota Canal and Mud Slough.

San Joaquin Kit Fox - The Service anticipates that take of San Joaquin kit fox will be difficult to quantify for the following reasons: (1) finding dead or impaired specimens is unlikely; (2) losses may be masked by seasonal fluctuations in numbers or other causes; (3) the secretive nature of the species; and (4) species occurs in dens. For these reasons, the Service is estimating the level of take for San Joaquin kit fox (in the form of harassment only) in terms of the total linear feet of habitat along canals within the affected area that may be influenced, at unpredictable locations and infrequent intervals, by operations and maintenance actions. Therefore, the Service has determined that the continued operations and maintenance of the CVP could result in the harassment of all San Joaquin kit foxes inhabiting as much as, but no more than, 250 miles of CVP canals (and 200 feet on the upland side of the waterline) that may result from activities such as mowing along the canals. This incidental take statement does not extend to harassment of active San Joaquin kit fox natal dens.

Valley Elderberry Longhorn Beetle - The Service anticipates that incidental take of valley elderberry longhorn beetle will be difficult to quantify for the following reasons: (1) the small body size makes the finding of dead or injured specimens unlikely, (2) the secretive nature of the species, and (3) the difficulty of detecting and tracking all operations and maintenance activities that may result in harassment of listed species. Due to the difficulty in quantifying the number of valley elderberry longhorn beetles, the Service is estimating incidental take due to the proposed project on the basis of loss of elderberry bushes. The Service has determined that continued operations and maintenance of the CVP could result in the loss of all beetles inhabiting as many as, but no more than, 200 elderberry plants, each with

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at least one stem measuring 1.0 inch or greater in diameter at ground level, or 2,000 elderberry stems measuring 1.0 inch or greater in diameter at ground level along levees and canals due to routine maintenance annually. This incidental take quantification does not extend to any activity that results in loss or destruction of riparian habitat along a natural watercourse.

Vernal Pool Crustaceans - The Service expects that incidental take of the vernal pool crustaceans (vernal pool fairy shrimp, vernal pool tadpole shrimp, and conservancy fairy shrimp) will be difficult to quantify for the following reasons: (1) the aquatic nature of the organisms and their relatively small body size make the finding of dead or injured specimens unlikely, (2) the variable sizes of resident populations over time, and (3) the difficulty of detecting and tracking all operations and maintenance activities that may result in harassment of listed species. Due to the difficulty in quantifying the number of vernal pool crustaceans that will be taken as a result of the proposed action, the Service is quantifying take incidental due to the proposed project as the number of acres of habitat that will become unsuitable for the species as a result of the action. Therefore, the Service has determined that the continued operations and maintenance of the CVP could result in the loss of all vernal pool crustaceans inhabiting as much as, but no more than 10 acres of vernal pools during a twelve-month period and no more than 0.5 acre of vernal pools in any one county during a twelve-month period. This incidental take estimation does not extend to any activity that results in fill of water of the United States under the jurisdiction of the United States Army Corps of Engineers, beyond the 10 acres identified above.

Upon implementation of the following reasonable and prudent measures, Reclamation will become exempt from the prohibitions described under section 9 of the ESA for direct effects of routine operations and maintenance activities of the CVP, for the species, forms of take, and areas described in this section. Individual users of the Federal water will not be exempt from section 9 of the ESA under this incidental take statement, but are expected to receive incidental take permits via the section 10(a)(1)(B) permit process or by separate section 7 consultation. No other forms of take are expected to occur. Therefore, this exemption does not extend to other forms of take other than that described for the blunt-nosed leopard lizard, giant kangaroo rat, giant garter snake, San Joaquin kit fox, vernal pool crustaceans, Tipton kangaroo rat, or valley elderberry longhorn beetle.

Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

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The following reasonable and prudent measures are necessary and appropriate to minimize the direct impact of the take of terrestrial species and the direct and indirect effects of maintenance on all listed species.

- I. Protect listed species on lands held or managed by Reclamation.
- II. Quantify and monitor Selenium contributions to the Madera Canal, Mud Slough, San Joaquin River, and the Sacramento and San Joaquin River Delta in collaboration with the Service.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of ESA, Reclamation must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

- I. Reclamation shall protect listed species on lands held or managed by Reclamation by implementing the following:
 - A. Prior to selling or transferring the deed of Reclamation lands, Reclamation shall implement the following:
 1. The land shall be surveyed for proposed, threatened, and endangered species according to FWS protocols (see guidelines for botanical surveys in Appendix 8). Even if not occupied by proposed, threatened, or endangered species, an assessment shall be prepared to determine the suitability of the land for use in recovery of listed, proposed, and special status species. Recovery plans shall be utilized during the writing of the assessment. Reclamation shall consult informally with the Service during this process.
 2. Reclamation shall not sell or transfer properties that are identified in recovery plans as needed to achieve recovery, or the corridors necessary to connect these lands, except to agencies satisfactory to the Service and after consultation with the Service.
 - B. Reclamation must implement take avoidance measures in Appendix F on all lands held or managed by Reclamation within the CVPIA-PEIS study area and must implement the compensation measures in Appendix G for the blunt-nosed leopard lizard, giant

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garter snake, giant kangaroo rat, San Joaquin kit fox, Tipton kangaroo rat, vernal pool crustaceans, and valley elderberry longhorn beetle.

1. Reclamation must ensure that the avoidance measures found in Appendix F are followed by Reclamation staff.
 2. Reclamation must ensure the completion of operations and maintenance manuals for the CVP, the distribution of the manuals to the necessary parties, and the implementation of the measures in the manuals.
 3. Reclamation must ensure the implementation of Service-approved O&M plans, and all of the protective measures for listed species that are identified in the plans, including distribution and implementation of O&M manuals and implementation of Integrated Pest Management plans by the following dates:
 - a. April 31, 2000 for area administered by the South-Central California Area Office,
 - b. September 30, 2000, for the area administered by the Central California Area Office,
 - c. March 31, 2001, for the area administered by the Northern California Area Office
 4. Reclamation must follow and comply with the compensation measures in Appendix G for routine operations and maintenance of CVP facilities where: impacts of these activities to the blunt-nosed leopard lizard, giant garter snake, giant kangaroo rat, San Joaquin kit fox, Tipton kangaroo rat, vernal pool crustaceans, and valley elderberry longhorn beetle are unavoidable, and the action is in conformance with this biological opinion.
 5. Reclamation shall notify the Service when incidental take of listed species as provided for in this opinion has or may occur; Reclamation shall only proceed with take provided for in this opinion after receiving and agreement from the Service to append the action to this opinion; and Reclamation shall provide the Service with yearly summaries of actual incidental take of listed species as provided for in this opinion.
- C. When Reclamation is using the standard habitat creation and preservation measures (Appendix G), and has an area that they wish to set aside in perpetuity for the protection of listed species, the following conditions shall be met:

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1. A Service-approved conservation easement shall be placed on the conservation area for the protection of listed species and their habitat in perpetuity from further development. The easement shall include, but not be limited to, provisions and responsibilities of Reclamation for the protection of conservation area including any future transfers of the easement or fee interest that may be anticipated. The easement shall specify the purposes for which it is established. The Service shall receive a true copy of the recorded conservation easement within 30 days of its recordation. The easement shall be held by a third party approved by the Service. The easement shall include a list of prohibited activities that are inconsistent with the maintenance of the preserve for the listed species. To address the possibility of the third-party easement holder vacating the easement, the easement shall contain a reversion clause that reverts the title to Reclamation until another third party is found to hold the easement.
 2. Reclamation shall establish an adequate endowment fund for monitoring and perpetual management and maintenance of the conservation area. The principal in the endowment must generate sufficient revenue to cover the costs of alien species removal, maintenance of fencing, monitoring of the habitat and species, and remediation of indirect effects in perpetuity. The endowment amount must be prior-approved by the Service, to address sufficiency, and the endowment shall be made to a Service-approved entity. Specific actions covered under the endowment shall be addressed in the Management Plan (further described below). A third party selected by Reclamation and approved by the Service shall work with Reclamation to determine what amount of money is necessary for an endowment fund to adequately finance the monitoring and perpetual management and maintenance of the preserve and mitigation area.
 3. A Management Plan for the conservation area shall be completed. A draft of the Management Plan shall be submitted to the Service for review and approval. The Management Plan shall include, but not be limited to, explanations of how the conservation area will be managed in perpetuity for the benefit of special status species.
 4. Appropriate Contaminants assessment, and remediation if necessary, shall be conducted on all set-aside lands.
- D. Reclamation must protect denning San Joaquin kit foxes.

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1. Reclamation shall not mow canal levees more frequently than once each year.
 2. Prior to mowing in kit fox habitat--including canal levees--from north of San Louis Reservoir to Los Vaqueros Reservoir, Reclamation must survey for kit fox dens and report den location and den activity to the Service. For all dens detected, the avoidance measures in Appendix F must be followed.
- E. Reclamation shall not fumigate rodent burrows in potential giant garter snake, kangaroo rat, blunt-nosed leopard lizard, or San Joaquin kit fox habitat.
- II. Reclamation shall quantify and monitor selenium contributions to the Delta Mendota Canal, Mud Slough, San Joaquin River, and the Sacramento and San Joaquin River Delta and associated effects on listed species in collaboration with the Service by implementing the following:
1. Reclamation shall help identify the source of selenium contamination in the Delta Mendota Canal, Mud Slough, San Joaquin River, and the Sacramento and San Joaquin River Delta.
 2. If selenium concentration in refuge water supplies exceeds the 2ug/l monthly mean standard and this contamination is a result either directly or indirectly from Reclamation actions, Reclamation shall identify and implement corrective actions and initiate separate formal consultation with the Service.
 3. Reclamation shall provide quarterly reports to the Service on locations of monitoring and monitoring results. These reports can be in conjunction with the monitoring and reporting required under the January 20, 1998, Interim Water Contract Renewal Opinion amendment (Service file #1-1-98-I-383).
 4. Reclamation will commit to funding a monitoring program to assess the effects of selenium loading from the San Joaquin River on Sacramento splittail, delta smelt, and giant garter snake using the lower San Joaquin River and Sacramento-San Joaquin Delta. Such a program should determine tissue concentration for these species (or appropriate surrogates) collected from these areas. Data will be made available by August 2000 to be included in the analyses of effects of long-term water contract renewals.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take on a species that might result from the proposed action. If, during

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the course of the action, the level of incidental take described above is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

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Reporting Requirements

Reclamation shall notify the Service immediately if dead or injured endangered species are found during implementation of actions or on Reclamation land and must submit a report including date(s), location(s), habitat description, and any corrective measures taken to protect the individual(s) found. If endangered animals are captured, the report shall also include photographs of the individuals, condition of the individual, length of time held, release location, and any other pertinent information.

For all endangered species encountered during construction and construction-related activities, Reclamation shall submit locality information to the California Department of Fish & Game (CDFG), using completed California Native Species Field Forms or their equivalent, within 90 calendar days of the species being observed. Each form shall have an accompanying scale map of the site (such as a photocopy of a portion of the appropriate 7.5 minute U.S. Geological Survey map) and shall provide at least the following information: township, range, and quarter section; name of the 7.5- minute or 15-minute quadrangle; dates (day, month, year) of field work; number of individuals and life stage (where appropriate) encountered; and a description of the habitat by community-vegetation type.

For those projects requiring a Service-approved biologist or where mitigation is required, a post-construction compliance report prepared by the Service-approved monitoring biologist shall be forwarded to the Chief, Endangered Species Division, at the Sacramento Fish and Wildlife Office within 60 calendar days of the completion of each project and shall include the file number of this consultation on the cover sheet (1-1-F-98-1). This report shall detail (1) dates that construction occurred; (2) pertinent information concerning the applicant's success in meeting project mitigation measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on federally listed species, if any; (5) occurrences of incidental take of federally listed species, if any, (including handling and relocation); and (6) other pertinent information.