

State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Bay Delta Region 2825 Cordelia Road, Suite 100 Fairfield, CA 94534 (707) 428-2002 www.wildlife.ca.gov GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director



Governor's Office of Planning & Research

August 24 2021

STATE CLEARING HOUSE

Ms. Katherine Holmes Solano Resource Conservation District 1170 North Lincoln Street, #110 Dixon, CA 95620 <u>katherine.holmes@solanorcd.org</u>

Subject: Ulatis Creek Habitat Restoration Project, Mitigated Negative Declaration, SCH No. 2021070447, Solano County

Dear Ms. Holmes:

August 23, 2021

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt a Mitigated Negative Declaration (MND) from Solano Resource Conservation District (Solano RCD) for the Ulatis Creek Habitat Restoration Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

CDFW is submitting comments on the MND to inform the Solano RCD, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the Project.

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA), a Lake or Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

PROJECT DESCRIPTION SUMMARY

Proponent: Solano Resource Conservation District

Objective: The Project would restore 20 acres of riparian woodland on the north bank of Ulatis Creek to improve ecological function and benefit native species. The Project anticipates planting 1,880 native trees and shrubs, 25,000 native forb and sedge plugs,

¹ CEQA is codified in the California Public Resources Code in Section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with Section 15000.

and 100 pounds of native wildflower seed. In addition, non-native invasive plant species including giant reed (*Arundo donax*), yellow starthistle (*Centaurea solstitialis*), and perennial pepperweed (*Lepidium latifolium*) would be removed and controlled at the site. Primary Project activities include removing vegetation by hand, piling and burning removed vegetative material, mowing, using herbicide, grazing, augering, trenching, installing irrigation, and planting native vegetation by hand. The Project would use mechanical equipment including a flail mower, skid steer with front-mounted auger, and all-terrain vehicles with mounted tanks for herbicide spraying.

Location: The Project is located along the north bank of Ulatis Creek approximately 1.3 miles northeast of the intersection of Hastings Road and Salem Road in unincorporated Solano County, approximately seven miles east of Travis Air Force Base. The approximate centroid of the Project is Latitude 38.29228°N, Longitude 121.76726°W and the Assessor's Parcel Numbers are 0042-310-080, 0042-310-100, and 0042-120-430.

Timeframe: The Project will take place over four years.

ENVIRONMENTAL SETTING

The Project covers 20 acres on a raised floodplain bench between Ulatis Creek to the south and an irrigation ditch to the north. The Project area inundates under high flow conditions but remains dry the rest of the year. The Project is adjacent to a previous giant reed control project and significant amounts of dead vegetation remain on-site. Invasive species such as perennial pepperweed and yellow starthistle are common in the western portion of the Project area while non-native grasses dominate the eastern portion of the Project area. Native species such as willows (Salix lasiolepis, S. laevigata, and S. exigua), cottonwood trees (*Populus fremontii*), and northern California black walnut (Juglans hindsii) occur on the bank of Ulatis Creek and the irrigation ditch. The Project area is seasonally grazed and surrounded by cultivated agricultural lands. Special-status species with the potential to occur in or near the Project area include, but are not limited to, California tiger salamander (Ambystoma californiense), listed as threatened pursuant to CESA and the federal Endangered Species Act (ESA); giant garter snake (*Thamnophis gigas*), listed as threatened pursuant to CESA and ESA; Swainson's hawk (Buteo swainsoni), listed as threatened pursuant to CESA; Mason's lilaeopsis (Lilaeopsis masonii), listed as rare pursuant to the NPPA; burrowing owl (Athene cunicularia), a California Species of Special Concern (SSC); and white-tailed kite (Elanus leucurus), a Fully Protected species.

REGULATORY REQUIREMENTS

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting lakes or streams and associated riparian habitat.

Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, **and floodplains** are subject to notification requirements. The MND identifies that the Project occurs on a floodplain bench that inundates in high flow conditions (MND pages 10 and 25). Project activities in this area, including vegetation treatment, site preparation, and plantings, would likely require an LSA Notification (see additional information below). In this case, CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

California Endangered Species Act and Native Plant Protection Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA or the NPPA, such as California tiger salamander, giant garter snake, Swainson's hawk, or Mason's lilaeopsis, either during construction or over the life of the Project. Please include the status of Mason's lilaeopsis as rare pursuant to the NPPA is included in Table 2 of the MND (MND page 29). Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA or NPPA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain an ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, & 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

Raptors and Other Nesting Birds

CDFW also has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

Fully Protected Species

Fully Protected species, such as white-tailed kite, may not be taken or possessed at any time (Fish and Game Code, §§ 3511, 4700, 5050, and 5515).

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Solano RCD in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Environmental Setting and Related Impact Shortcoming

Lake and Streambed Alteration

As noted above, the MND describes that the Project will occur on a floodplain bench that inundates in high flow conditions (MND pages 10 and 25). However, the MND does not identify that an LSA notification is required (MND page 19). Regardless of the current state of vegetation or whether the floodplain will be dry during Project activities, a substantial change to a stream requires LSA notification. The use of heavy equipment and the transformation of the vegetative community of the Ulatis Creek floodplain may be a significant impact pursuant to CEQA and a substantial impact pursuant to Fish and Game Code section 1602. As noted above, if the Project may substantially impact Ulatis Creek or the irrigation ditch, Solano RCD must notify CDFW of the activity (see: https://wildlife.ca.gov/Conservation/Environmental-Review/LSA). Lastly, similar activities conducted by the Sacramento-San Joaquin Delta Conservancy, including the treatment of giant reed in generally the same location, were previously permitted by CDFW under an LSA Agreement.

For an adequate environmental setting description and to reduce potential impacts to less-than-significant, CDFW recommends that the MND analyze floodplain/stream connectivity and include the below Mitigation Measure. Please be advised that an LSA Agreement, if issued by CDFW, will likely include the recommended mitigation measures in this letter, and those mitigation measures already included in the MND, as applicable.

BIO-10. Notification of Lake or Streambed Alteration

For Project activities that may substantially alter the floodplain of Ulatis Creek or the irrigation ditch, an LSA Notification shall be submitted to CDFW pursuant to Fish and Game Code section 1602 prior to Project implementation. If CDFW determines that an LSA Agreement is warranted, Solano RCD shall comply with all required measures in the LSA Agreement.

California Tiger Salamander

The MND identifies that the Project is within the range of California tiger salamander (CTS), listed as threatened pursuant to CESA; the Central California population is also listed as threatened pursuant to ESA (MND page 33). In addition, the Project is approximately 1.4 miles east of known CTS occurrences identified in the California Natural Diversity Database (CNDDB) and the species is within the mobility range of likely occupied CTS habitat. The Project area consists of potential marginal CTS upland habitat and is immediately surrounded by agricultural lands including irrigation ditches and streams.

CTS in central California face continuing threats from development projects such as urban development (U.S. Fish and Wildlife Service (USFWS) 2017a). The Project has potential to impact CTS through mowing, augering, trenching, and removing burrow refugia, possibly crushing CTS and substantially reducing the number of CTS, a potentially significant impact pursuant to CEQA Guidelines section 15065, subdivision (a) Mandatory Findings of Significance. CTS is considered a threatened species under CEQA Guidelines section 15380.

To reduce impacts to less-than-significant, CDFW recommends: 1) including additional CTS baseline information in the MND regarding the potential for CTS to occur onsite, and 2) including the following Mitigation Measure.

BIO-11. California Tiger Salamander Avoidance

Prior to ground disturbing activities, a qualified biologist shall survey the Project site for CTS upland refugia habitat. If burrows or other refugia habitat occur on-site, the qualified biologist shall flag them for avoidance with a minimum 10-foot avoidance buffer, where feasible.

During initial ground disturbing activities, a qualified biologist shall be on-site to monitor for presence of CTS. If CTS are observed on or near the Project area, all work shall cease, and the qualified biologist shall immediately contact CDFW and USFWS. Work shall not proceed until the Project has received CDFW and USFWS authorization.

Giant Garter Snake

The MND describes that giant garter snake (GGS), listed as threatened pursuant to CESA and ESA, may occur within the Project area (MND pages 34, 37, and 38). The Project area consists of potentially suitable upland habitat adjacent to a stream and drainage ditch that are hydrologically connected to nearby GGS occurrences in CNDDB. The nearest documented GGS occurrence is approximately four miles to the east. The MND also identifies that a Programmatic Biological Opinion from USFWS was reviewed as a supporting environmental review document for the Project, and that a

letter of concurrence or Biological Opinion will be required from the USFWS for terrestrial species protected under ESA, presumably GGS (MND pages 10 and 19). Therefore, it appears that the Project may result in take of GGS under ESA and CESA.

The MND includes two Mitigation Measures specifically for GGS protection and avoidance, BIO-4 and BIO-5. These measures identify that ground disturbing activities are limited to the GGS active season (May 1 to October 1), and that a qualified biologist shall survey the area for GGS prior to any ground disturbing activities. In addition, these measures identify that CDFW and the USFWS will be consulted if GGS are present in the Project area. These measures minimize impacts to GGS for most Project activities but may not fully avoid take. For example, GGS may still use burrows during the active season (Halstead et al. 2015). Augering and trenching could crush GGS in burrows. In addition, the activity of piling and burning dead vegetation may create GGS refugia during the piling stage and cause injury or death of GGS during the burning stage, which must occur during late fall or winter when GGS are inactive.

The range of GGS in California has been reduced by approximately 95% due to loss and degradation of habitat and continues to be threatened by urban and agricultural development and water management practices (USFWS 2017b). The Project has potential to impact GGS through mowing, augering, trenching, removing burrow refugia, and piling and burning vegetation, possibly injuring or crushing GGS, substantially reducing the number of GGS, a potentially significant impact pursuant to CEQA Guidelines section 15065, subdivision (a) Mandatory Findings of Significance. GGS is considered a threatened species under CEQA Guidelines section 15380. The existing Mitigation Measures do not address all potentially significant impacts to GGS. To reduce impacts to less-than-significant, CDFW recommends including the following Mitigation Measures in addition to the measures already identified in the MND.

BIO-12. Giant Gartersnake Avoidance and CESA ITP

The Project shall avoid take of GGS, including but not limited to flagging burrows or other refugia that may be occupied by GGS, and avoiding ground disturbing activities within a minimum of 10 feet from refugia. If take of GGS cannot be avoided, which may be determined by CDFW through additional review of the Project when processing an LSA Agreement, Solano RCD shall consult with CDFW pursuant to CESA and obtain an ITP.

BIO-13. Prevent Giant Garter Snake Entanglement

The Project shall prohibit use of erosion control materials potentially harmful to GGS, such as monofilament netting (erosion control matting) or similar material.

BIO-14. Disposal of Vegetative Debris

All natural debris composed of vegetation that is planned for pile and burn treatment shall be piled a minimum of 650 feet² away from potential aquatic GGS habitat. Alternately, vegetative debris shall be immediately hauled off-site for disposal.

Swainson's Hawk

The MND identifies that Swainson's hawk (SWHA), listed as threatened pursuant to CESA, may occur within the Project area, which provides suitable foraging habitat (MND page 35). Potentially suitable nesting trees exist in the vicinity of the Project site. In addition, the MND notes there are CNDDB occurrences of nesting SWHA within three miles of the Project (MND page 35), and the California Wildlife Habitat Relationships Predicted Habitat Suitability for the site is Medium and High Suitability. The MND relies on general pre-construction nesting bird surveys identified in Mitigation Measure BIO-6, and the likelihood that activities will occur outside of the nesting season, to avoid potential impacts to SWHA. BIO-6 does not provide adequate survey techniques to effectively identify nesting SWHA in and near the Project area. In addition, the timing of the Project could overlap with SWHA nesting season.

The breeding population of SWHA in California has declined by an estimated 91% since 1900 and the species continues to be threatened by on-going and cumulative loss of foraging habitat (CDFW 2016). SWHA could be disturbed by Project activities, resulting in potentially significant impacts to SWHA through nest abandonment or reduced health and vigor of young. To reduce impacts to less-than-significant, CDFW recommends including the following Mitigation Measure.

BIO-15. Swainson's Hawk Surveys

If Project activities are scheduled during the nesting season for SWHA (March 1 to September 15), prior to beginning work on the Project, a qualified biologist shall conduct surveys according to the *Recommended timing and methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.*³ Survey methods should be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys shall be conducted: 1) within a minimum 0.5-mile radius of the Project site or a larger area if needed to identify potentially impacted active nests, and 2) for at least the two survey periods immediately prior to initiating Project-related

² GGS are known to move up to 600 feet from the water's edge in search of refugia for brumation (Halstead et al. 2015).

³ Swainson's Hawk Technical Advisory Committee, 2000. <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline</u>

construction activities. Surveys shall occur annually for the duration of the Project. The qualified biologist shall have a minimum of two years of experience implementing the survey methodology resulting in detections. If active SWHA nests are detected, the Project shall implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a qualified biologist. If take of SWHA cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP. CDFW Bay Delta Region staff is available to provide guidance on the ITP application process.

Burrowing Owl

The MND identifies that burrowing owl (BUOW), an SSC, may occur within the Project site, which provides potentially suitable foraging habitat (MND page 35). The MND also notes that there are documented occurrences of BUOW within three miles of the Project site according to the CNDDB (MND page 35). In addition, the California Wildlife Habitat Relationships Predicted Habitat Suitability for the site is High Suitability for BUOW. The MND relies on general pre-construction nesting bird surveys identified in Mitigation Measure BIO-6 to avoid potential impacts to BUOW. BIO-6 does not provide adequate survey techniques to effectively identify BUOW in and near the Project area.

The Project could result in BUOW nest abandonment, loss of young, reduced health and vigor of owlets, or injury or mortality of adults. BUOW are a California Species of Special Concern due to population decline and breeding range retraction. Based on the above, the Project may potentially significantly impact BUOW. To reduce impacts to less-than-significant CDFW recommends the following Mitigation Measures.

BIO-16. Burrowing Owl Habitat Assessment, Surveys, and Avoidance

Prior to Project activities, a habitat assessment shall be performed following Appendix C: Habitat Assessment and Reporting Details of the CDFW *Staff Report on Burrowing Owl Mitigation*⁴ (CDFW 2012 Staff Report). The habitat assessment shall extend at least 492 feet (150 meters) from the Project site boundary or more where direct or indirect effects could potentially extend off-site (up to 500 meters or 1,640 feet), and include burrows and burrow surrogates. If the habitat assessment identifies potentially suitable BUOW habitat, then a qualified biologist shall conduct surveys following the CDFW 2012 Staff Report survey methodology. Surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted commensurate with the type of disturbance anticipated, as outlined in the CDFW 2012 Staff Report, and include burrow surrogates such as culverts, piles of concrete or rubble, and other non-natural features, in addition to burrows and mounds. Time lapses between surveys or Project activities shall trigger subsequent surveys, as determined by a qualified

⁴ CDFW, then Department of Fish and Game, 2012. <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline</u>

biologist, including but not limited to a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections. Detected nesting BUOW shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report and any passive relocation plan for non-nesting owls shall be subject to CDFW review.

Please be advised that CDFW does not consider exclusion of BUOW (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure for the reasons outlined below. Therefore, to mitigate the impacts of potentially evicting BUOW to less-than-significant, Mitigation Measure BIO-15 outlined below should require habitat compensation with the acreage amount identified in any eviction plan. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of excluded owls is unknown. BUOW are dependent on burrows at all times of the year for survival or reproduction; therefore, eviction from nesting, roosting, overwintering, and satellite burrows or other sheltering features may lead to indirect impacts or "take" which is prohibited under Fish and Game Code section 3503.5. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented to avoid "take."

BIO-17. Burrowing Owl Habitat Mitigation

If the Project would impact an unoccupied nesting BUOW burrow or burrow surrogate (i.e., a burrow known to have been used in the past three years for nesting), or an occupied burrow (where a non-nesting owl would be evicted as described above), the following habitat mitigation shall be implemented prior to Project construction:

Impacts to each nesting site shall be mitigated by permanent preservation of two occupied nesting sites with appropriate foraging habitat within Solano County, unless otherwise approved by CDFW, through a conservation easement and implementing and funding a long-term management plan in perpetuity. The same requirements shall apply for impacts to non-nesting evicted owl sites.

The Project may implement alternative methods for preserving habitat with written acceptance from CDFW.

Mitigation Measures and Related Impact Shortcoming

The MND identifies Mitigation Measure BIO-6 to avoid potentially significant impacts to nesting birds (pages 8 and 40). CDFW recommends making the following deletions in strikethrough and additions in **bold** to reduce impacts to less-than-significant.

BIO-6. Nesting Bird Surveys and Avoidance

During the nesting season (February 15 – August 15 February 1 – August 31), a qualified biologist shall conduct surveys for nesting birds 24 hours prior to: 1) the use of mechanical equipment that disturbs the ground (augering, trenching), 2) Arundo biomass removal, or 3) mowing activities. Surveys will be repeated whenever 15+ 7 or more days elapse without work at the site. If nests are located, impacts shall be minimized by establishing appropriated non-disturbance buffer zones in consultation with CDFW/USFWS. The qualified biologist shall and monitoring monitor nests to ensure that nesting birds are not disturbed and nests are not jeopardized.

In addition, the MND identifies Mitigation Measure BIO-7 to avoid potentially significant impacts to special-status plants that could occur in the area. CDFW recommends replacing the existing BIO-7 with the below measure to reduce impacts to-less-than significant:

BIO-7. Special-Status Plant Survey and Avoidance

A qualified biologist shall conduct surveys during the appropriate blooming period for all special-status plants that have the potential to occur on or adjacent to the Project area prior to the start of ground-disturbing activities and prepare a report documenting survey findings. More than one year of surveys may be necessary. Surveys and reporting shall be conducted following *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*⁵. If special-status plants are found during surveys, the Project shall be re-designed to avoid direct and indirect impacts to special-status plants. If impacts to any special-status plants cannot be avoided completely during construction, the Project shall provide mitigation including on-site restoration, off-site habitat preservation, or another method accepted in writing by CDFW. The Project shall obtain an ITP from CDFW for any impacts to Mason's lilaeopsis. The qualified biologist shall be knowledgeable about plant taxonomy, familiar with plants of the region, and have experience conducting botanical field surveys according to vetted protocols.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNNDB field survey

⁵ Department of Fish and Wildlife, 2018. <u>https://www.wildlife.ca.gov/Conservation/Survey-</u> <u>Protocols#377281280-plants</u>

form, online field survey form, and contact information for CNDDB staff can be found at the following link: <u>https://wildlife.ca.gov/data/CNDDB/submitting-data</u>.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the Solano RCD in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Amanda Culpepper, Environmental Scientist, at (707) 428-2075 or <u>amanda.culpepper@wildlife.ca.gov</u>; Ms. Andrea Boertien, Environmental Scientist, at <u>andrea.boertien@wildlife.ca.gov</u>; or Ms. Melanie Day, Senior Environmental Scientist (Supervisory), at <u>melanie.day@wildlife.ca.gov</u>.

Sincerely,

-DocuSigned by:

Stacy Sherman Stacy Sherman Acting Regional Manager Bay Delta Region

ec: Office of Planning and Research, State Clearinghouse (SCH No. 2021070447)

REFERENCES

- Halstead, B.J.; Wylie, G.D.; and Casazza, M.L. 2015. Literature review of giant gartersnake (*Thamnophis gigas*) biology and conservation. U.S. Geological Survey Open-File Report 2015-1150. <u>http://dx.doi.org/10.3133/ofr20151150</u>
- USFWS. 2017a. Recovery Plan for the Central California Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. <u>https://www.fws.gov/sacramento/outreach/2017/06-</u> <u>14/docs/Signed Central CTS_Recovery_Plan.pdf</u>

USFWS. 2017b. Recovery Plan for the Giant Gartersnake (*Thamnophis gigas*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. <u>https://www.fws.gov/sacramento/documents/20170928_Signed%20Final_GGS_Recovery_Plan.pdf</u>