Solano HCP Compliance Monitoring Table

| **Project Design, Review, and Approval Avoidance and Minimization Measure Requirements for Giant Garter Snake** | **Project Impact/**  **Applicable Condition** | **Applicant Proposed Mitigation** | **Proposal Complies With Measures or Not** |
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| **GIANT GARTER SNAKE:**  **DESIGN, REVIEW, AND APPROVAL AVOIDANCE AND MINIMIZATION MEASURE IN 6.3.6.1** | | | |
| **Note:** Site design/layout avoidance and minimization measures described in Section 6.3.5.1 for the Riparian, Stream, and Marsh Natural Community are applicable to giant garter snake habitat. No species-specific avoidance and minimization measures for site design and preproject approval are required for giant garter snake habitat. | | | |
| **GIANT GARTER SNAKE:**  **IMPLEMENTATION AND CONSTRUCTION AVOIDANCE AND MINIMIZATION MEASURES IN SECTION 6.3.6.2** | | | |
| **General Note for GGS Avoidance and Minimization Measures-** The following avoidance and minimization measures are for Covered Activities within 200 feet of aquatic habitat in the Giant Garter Snake Conservation Area (Figure 4-18).  **GGS CON 1: Timing of Work-** In-channel and upland work in the Giant Garter Snake Conservation Area shall occur between May 1 and October 1. Between October 2 and April 30, in-channel work that is limited to removal of accumulated sediments and aquatic vegetation may occur in accordance with the following restrictions: (a) all excavation/dredging shall be confined to the channel bed (below the ordinary high water mark); (b) channel banks shall not be disturbed; and (c) any dredged or excavated material shall be hauled off site or placed in areas lacking rodent burrows, riprap, or other material that might provide dormant period cover for giant garter snakes. |  |  |  |
| **GGS CON 2: Best Management Practices to be Implemented During Operation and Maintenance (O&M) and Construction Activities-**   1. An Approved Biologist shall identify all areas of giant garter snake habitat to be avoided in or adjacent to the work area. The avoided areas shall be flagged, and signage stating “Environmentally Sensitive Area” shall be erected. |  |  |  |
| 1. All vehicles travelling on secondary roads (i.e., roads other than highways, city/county roads, and surface streets) within 200 feet of aquatic habitat in the Giant Garter Snake Conservation Area shall observe a speed limit of no greater than 20 miles per hour. |  |  |  |
| 1. Movement of heavy equipment shall be confined to existing roadways, and excavation equipment shall be operated from the tops of banks to minimize habitat disturbance. |  |  |  |
| 1. When mowing fields near streams or canals, workers shall start mowing farthest from the water in order to force snakes toward the water. By cutting the swath along the water last, the snakes will be allowed to maintain cover and escape. Vegetation shall be mowed to a minimum height of 4 inches. To maintain cover for garter snakes next to a canal, opposite banks shall be mowed on alternate years. |  |  |  |
| 1. All workers shall receive training from the Approved Biologist on how to recognize a giant garter snake and its habitat(s). |  |  |  |
| 1. Twenty-four hours prior to construction activities, the work area shall be surveyed for giant garter snakes by an Approved Biologist. Surveys shall be repeated if a lapse in construction activity of 2 weeks or greater occurs. If a giant garter snake is encountered during work, all work activities shall cease until the biologist has determined that the snake will not be harmed. Any sightings or incidental take shall be reported to SCWA. |  |  |  |
| 1. Dewatering shall be limited to the period between May 1 and October 1. Any dewatered habitat shall remain dry for at least 15 consecutive days prior to excavating or filling dewatered habitat. Any exceptions that may need to be made regarding this requirement need to be approved by SCWA in consultation with the Resource Agencies and may be subject to mitigation requirements. |  |  |  |
| 1. Gas cartridge rodenticides will not be used to fumigate burrows in areas supporting giant garter snake between October 1 and April 30. 9. |  |  |  |
| 1. Plastic monofilament or wire mesh straw wattles or erosion control blankets shall not be used. Only erosion control materials (blankets, rolls, mats, etc.) with a minimum 2-inch square mesh made of natural coir fibers or other netting approved by SCWA in consultation with the HCP Technical Review Committee shall be used. |  |  |  |
| **GIANT GARTER SNAKE:**  **MITIGATION MEASURES IN SECTION 6.4.6** | | | |
| **General Notes about GGS Mitigation Requirements:** The following mitigation measures are for Covered Activities within 200 feet of suitable giant garter snake aquatic habitat in the Giant Garter Snake Conservation Area (Figure 4-18). |  |  |  |
| **GGS MIT 1: O&M Habitat Mitigation-** The Solano County Water Agency (SCWA), Reclamation District No. 2068 (RD 2068), Maine Prairie Water District (MPWD), Dixon Resource Conservation District (Dixon RCD), the City of Vallejo Water Division, and Solano Irrigation District (SID) shall acquire, enhance/restore, and manage 85 acres of aquatic and 22 acres of associated upland habitat for giant garter snake as mitigation for ongoing O&M activities for their facilities in the Giant Garter Snake Conservation Area (Figure 4-18). |  |  |  |
| **GGS MIT 2: Mitigation for Direct and Indirect Impacts to Giant Garter Snake Habitat-** Compensatory mitigation for unavoidable direct and indirect impacts to suitable aquatic and associated upland habitat (i.e., 200 feet from the edge of aquatic habitat) in the Giant Garter Snake Conservation Area (Figure 4-18) shall be provided as follows:   1. **Aquatic Component Direct Impacts.** Restore aquatic habitat at a **ratio of 3:1** (mitigation-to-impact) and restore upland habitat adjacent to restored aquatic habitat at a **ratio of 2:1** restored upland acres to restored aquatic acres. |  |  |  |
| 1. **Aquatic Component Indirect Impacts.** Restore aquatic habitat at a **ratio of 1.5:1** for avoided wetlands within 200 ft of proposed development, and restore upland habitat adjacent to restored aquatic habitat at a ratio of 1:1 restored upland acres to restored aquatic acres. |  |  |  |
| Upland mitigation requirements may be substituted by providing additional giant garter snake aquatic habitat at a **ratio of 0.5:1** (additional aquatic habitat: required upland mitigation), if a sufficient portion (generally 20 to 25 percent) of the reserve is composed of associated upland habitat.  **Note for GGS MIT 2:** Upland mitigation requirements are based on required aquatic habitat mitigation. Mitigation requirements for direct impacts to uplands within 200 feetof giant garter snake aquatic habitat are specified as part of the broader Valley Floor Grassland and Vernal Pool Natural Community or Swainson’s Hawk/Agricultural Community conservation requirements. The 175 acres of restored and enhanced aquatic habitat for giant garter snakes **(**Objectives GGS 1.2 and 1.3) will also contribute to the conservation of the Covered Species tricolored blackbird, and Special Management Species Modesto song sparrow and yellow-headed blackbird. GGS MIT 2 meets Goal GGS 1 and Objective GGS 1.2 and 1.3. |  |  |  |
| **GGS MIT 2- Temporary Impacts.** Temporary impacts associated with Covered Activities affecting giant garter snake habitat shall not require direct compensation provided activities comply with GGS CON 1, GGS CON 2, RSM CON 4, and all temporarily disturbed habitats shall be restored to original conditions within 1 year at a minimum **1:1 ratio**. This Mitigation Measure GGS MIT 2 meets Goal GGS 1 and Objectives GGS 1.2 and 1.3. |  |  |  |
| **GGS MIT 3: Invasive Species, Water Quality Control, Species Introduction, and Barrier Removal Enhancement Program-** All development projects that create new or increase impervious surfaces shall provide funding to contribute toward a grant funding program (see Chapter 5.0 Objectives RSM 2.1, GGS 1.1, and CM 1.1) to implement cost-share programs to control invasive species, implement additional water quality control measures, establish new populations/occurrences of Covered Species, and remove in-stream barriers. Costs shall be based on a per-acre basis of new or increased impervious surface.  **Note:** GGS MIT 3 is intended to contribute to mitigation for unavoidable, cumulative adverse effects of increased urban development runoff on downstream receiving waters and associated Covered Species. |  |  |  |

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| BA = Biological Assessment | BMP = Best Management Practices |
| CDFW = California Department of Fish and Wildlife | Dixon RCD = Dixon Resource Conservation District |
| DPS = Distinct Population Segment | ESU = Evolutionarily Significant Unit |
| HCP = Habitat Conservation Plan | MMP = Mitigation and Monitoring Plan |
| MPWD = Maine Prairie Water District | NOAA NMFS = National Oceanic Atmospheric Association National Marine Fisheries Service |
| NPDES = National Pollutant Discharge Elimination System | O&M = Operation and Maintenance |
| RD 2068 = Reclamation District 2068 | RSM = Riparian, Stream, and Freshwater Marsh |
| RWQCB = Regional Water Quality Control Board | SCWA = Solano County Water Agency |
| SID = Solano Irrigation District | SWPPP = Storm Water Pollution Prevention Plan |
| USFWS = United States Fish and Wildlife Service |  |