

# **APPENDIX J**

## *Voluntary Additional Conservation*



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#### J.1 Introduction

The purpose of this appendix is to identify voluntary conservation actions that if implemented can supplement the South Sacramento Habitat Conservation Plan (SSHCP) Conservation Strategy. This supplementary conservation has the potential to benefit certain SSHCP Covered Species, other native species in the Plan Area that are not Covered Species, and some key natural communities. It also provides assistance to sustainable agriculture and the overall ecological functions of the rural landscape in the Plan Area. These supplemental conservation actions complement and reinforce the SSHCP Conservation Strategy and provide further benefits to the plan.

These supplemental conservation actions only take place as outside funding is available. It is expected that a non-profit group will be formed by local stakeholder groups to support fundraising and implementation of these voluntary conservation actions. The non-profit group will annually report supplementary conservation activities and planned activities to the SSHCP Implementing Entity for tracking purposes.

The supplemental conservation actions do not compete with, or impede, the SSHCP Conservation Strategy or use any development fees collected for SSHCP Covered Activities. The SSHCP's Technical Advisory Committee (see Chapter 9 of the SSHCP) verifies that individual actions do not compete with the SSHCP's acquisition needs for mitigation. Supplemental conservation actions only involve landowners wishing to sell conservation easements or otherwise participate, and existing farming and ranching activities continue on new conservation easements. Any conservation actions implemented on these conservation easements would be complementary to existing farming and ranching activities.

#### J.2 Supplemental Habitat Conservation

##### J.2.1 Northeast Sector of Plan Area

Protect 8,000 acres of the total oak woodland, oak savanna, and grassland<sup>1</sup> in the northeast portion<sup>2</sup> of the Plan Area. This provides conservation of habitats in an area that will receive little protection through the SSHCP Conservation Strategy as it lacks any significant populations of Covered Species. It includes grasslands with deeper soils that may be suitable for badger (*Taxidea taxus*), foraging ferruginous hawk (*Buteo regalis*), and western burrowing owl (*Athene cunicularia*). It also might benefit species not covered by the SSHCP, such as the golden eagle (*Aquila chrysaetos*), merlin (*Falco columbarius*), long-eared owl (*Asio otus*), and sharp-shinned hawk (*Accipiter striatus*).

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<sup>1</sup> Includes wildflower field habitats.

<sup>2</sup> South of White Rock Road, north of Meiss Road, and east of the Urban Services Boundary (USB).

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### J.2.2 Lands West of Interstate 5

Protect 300 acres of irrigated pasture and grasslands west of Interstate 5, especially lands within the Stone Lakes National Wildlife Refuge Acquisition Boundary. This supplemental conservation occurs primarily on lands below sea level to avoid competition with the SSHCP Conservation Strategy. This may benefit greater sandhill crane (*Grus canadensis tabida*), Swainson's hawk (*Buteo swainsoni*), and other SSHCP Covered Species, as well as several species that are not covered by the SSHCP (e.g., American peregrine falcon (*Falco peregrinus anatum*), short-eared owl (*Asio flammeus*), merlin, sharp-shinned hawk, white-faced ibis (*Plegadis chihi*)).

### J.2.3 Cropland Upland Habitat for Greater Sandhill Cranes

Conserve 2,000 acres of upland habitat adjacent to floodplain areas used by greater sandhill cranes for roosting and foraging refugia during a lower Cosumnes River flood event. These are areas outside of sandhill crane modeled habitat, as shown on Figure 3-22 in Chapter 3 of the SSHCP.

## J.3 Wildlife Movement Corridors

Conserve lands outside of the Urban Development Area (UDA) to create additional wildlife corridors beyond what is already required in the SSHCP. For each wildlife corridor, it is necessary to conserve sufficient land so that the corridor will function. It is not necessary to protect all the land in a corridor, although it is necessary to avoid a complete break of a corridor by a permanent, incompatible land use.

### J.3.1 East–West Wildlife Movement Corridors

Establish two east–west corridors south of the Cosumnes River between the vernal pool grasslands landscape in the east county and the farmland landscape in the southwest portion of the Plan Area, with an average width of 1,000 feet.

### J.3.2 North–south Farmland Wildlife Movement Corridor

Establish one wildlife movement corridor joining agricultural lands north and south of the Cosumnes River, with an average width of 1,000 feet.

### J.3.3 East County Corridor

Establish one wildlife movement corridor stretching from White Rock Road to the San Joaquin County line and also connecting with rural lands in El Dorado County just north of the Cosumnes River and also with Amador County. Much of this corridor is already protected (e.g., Howard

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Ranch) or will be protected through the northeast sector habitat conservation mentioned previously (see Section J.2.1).

### **J.4 Additional Habitat Re-establishment and Establishment**

#### **J.4.1 Riparian Habitat in Southern Plan Area**

Re-establish or establish 500 acres of riparian habitat, including mixed-riparian woodland, valley oak woodland, and mixed riparian scrub along streams in the southern part of the Plan Area, west of the vernal pool grasslands; areas that were historically riparian woodland and scrub. This may benefit SSHCP Covered Species such as the Swainson's hawk and Cooper's hawk, as well as additional species such as the yellow-breasted chat (*Icteria virens*) and least Bell's vireo (*Vireo bellii pusillus*). The re-establishment will not compete with the SSHCP Conservation Strategy, which will be focused on the Cosumnes River Corridor.

#### **J.4.2 Hedgerows in Cropland**

Establish an additional 10,000 linear feet of hedgerows in cropland beyond what is already required in the SSHCP.

### **J.5 Voluntary Species Management Measures**

The following suggests supplemental conservation actions for tricolored blackbird (*Agelaius tricolor*) and the western burrowing owl.

#### **J.5.1 Tricolored Blackbird**

The tricolored blackbird population has been surveyed frequently in Sacramento County. During the 1990s, it was discovered that population levels had diminished greatly. By 1999, a number of sites that had colonies year after year were no longer occupied and there were no large (15,000–20,000 bird) colonies surveyed (Cook 1999). Later surveys, from 2008 to 2014, also show a low number of birds until 2014, when there was a relatively large increase from the prior three survey periods, but still below historical averages when compared to surveys conducted in the 1990s (see Table J-1).

In 2014, Sacramento County had over 20% of the entire, state-wide population at the time of the late April survey. Many of the Plan Area colony sites are within the SSHCP UDA (Meese 2014) particularly in the Jackson, Bradshaw, and Grant Line Road area, where they were found nesting in Himalayan blackberries (*Rubus armeniacus*) (Witham, pers. comm. 2015).

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**Table J-1**  
**Historical Breeding Tricolored Survey Results from Sacramento County**

Year	Number of Birds
1992	86,142
1993	64,510
1994	96,365
1997	32,387
1999	16,671
2008	3,551
2011	6,105
2014	29,272

Sources: Cook 1999; Meese 2014; Witham, pers. comm. 2015.

The SSHCP has objectives for conservation of acres of modeled foraging habitat. In addition, there is an objective to conserve, within the SSHCP Preserve System, at least five extant colony sites occupied in recent years, to protect one colony site prior to the take of a colony site, to establish two new potential colony sites for every colony site that is taken, to conserve at least one “large” colony site that has supported a minimum of 1,500 birds, and to experiment on ways to protect colony sites from predation.

The voluntary measures in this appendix go beyond these SSHCP objectives. In addition, they recognize that while many active colonies over the last few years have been located within the UDA, the potential for long-term conservation within this boundary is very limited. Ultimately, the landscape within the UDA will be built out except for approximately 7,500 acres of Vernal Pool Grassland preserves, stream corridors, and few additional landscape linkages. Therefore, the long-term focus for conservation is outside the UDA, including some historic sites that still possess water sources and adequate foraging habitat.

The voluntary conservation measures include conserving and establishing at least 30 existing or potential colony sites with suitable nesting substrates outside the UDA and by the last 5 years of the permit period, maintain an annual average of 50,000 breeding birds within the SSHCP Preserve System.

### **J.5.2 Western Burrowing Owl**

In the Plan Area most sightings of western burrowing owl occur from within the UDA and there are very few recent (2014 and 2015) breeding season sightings. Within the UDA occurrences of western burrowing owl are known from the Cordova Hills Master Plan project area, the Regional San. Bufferlands and in and around the Mather Field area. The SSHCP database includes all known occurrence information (Figure 3-27 in the SSHCP). Some occurrences have been

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recorded from outside the UDA; however the vast majority of the SSHCP Plan Area outside of the UDA has not been surveyed for owls. It is thought that many of the occurrences outside of the UDA are wintering only and there are indications that western burrowing owl are absent altogether from seemingly suitable grassland sites where ground squirrels are active (Gardner, pers. comm. 2014).

The SSHCP Conservation Strategy for the western burrowing owl includes the protection of seven sites known to support western burrowing owl, management to enhance habitat, establishment of ground squirrel colonies, and possible use of artificial burrows. Additional management actions include providing the short vegetation height required by the owls and provision of artificial sentinel perches.

The voluntary conservation measures include conserving, on average, at least 60 breeding pairs by the last 5 years of the permit period.

### **J.5.3 Other Species**

Determine additional management measures required for other Covered Species, such as the northern harrier (*Circus cyaneus*) and loggerhead shrike (*Lanius ludovicianus*), as well as additional at-risk species, using the latest scientific and management research and modifying over time as knowledge improves.

### **J.6 Develop a Program to Assist and Encourage Sustainable Agriculture Practices**

Work with area farmers, the Natural Resources Conservation Service, and others to encourage and financially assist sustainable agricultural practices, including provision of native pollinator food sources and refugia. Provide incentives to farmers to maintain the cropland mosaic that is important for sandhill crane, Swainson's hawk, and other Covered Species. Work to minimize impacts on sandhill crane and Swainson's hawk from agricultural operations.

### **J.7 Develop and Implement an Outreach, Education and Stewardship Program**

The purposes of this program are to build long-term support for the SSHCP, to provide volunteer support for habitat establishment and re-establishment projects and a docent program, and to develop a "citizen scientists" project to assist with the SSHCP monitoring program (Chapter 8 of the SSHCP). It will include field trips for elected officials and their staff, members of various organizations, and interested citizens.

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### J.8 References

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- Gardner, T. 2014. Personal communication from Todd Gardner (California Department of Fish and Wildlife) to Richard Radmacher (County of Sacramento). June 2014.
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