



Midpeninsula Regional
Open Space District

R-24-128
Meeting 24-28
October 23, 2024

AGENDA ITEM 8

AGENDA ITEM

Partnership Agreement with the Golden Gate National Recreation Area for San Francisco Garter Snake Recovery

GENERAL MANAGER'S RECOMMENDATION

Authorize the General Manager to enter into a five-year partnership agreement with the National Park Service - Golden Gate National Recreation Area, to collaborate on implementation of recovery actions for the federally and state endangered San Francisco garter snake, with District monetary contributions not to exceed \$175,000.

SUMMARY

The Midpeninsula Regional Open Space District (District) is interested in partnering with the National Park Service - Golden Gate National Recreation Area (GGNRA) to collaborate on implementation of recovery actions for San Francisco garter snake (SFGS). Goals of the partnership include increasing the population size and genetic diversity of SFGS at GGNRA's Mori Point, increasing the genetic diversity at Russian Ridge and Cloverdale Ranch Open Space Preserves (OSPs) and establishing a new population of SFGS at La Honda Creek OSP. Implementation of specific actions towards these goals will be phased over time and guided by a detailed Implementation Plan for each phase.

Phase I of recovery actions will occur at GGNRA's Mori Point, Cloverdale Ranch and Russian Ridge OSPs. GGNRA is directly contributing and seeking grant funding for this effort. District funding in support of this partnership is anticipated to be through a contract amendment with the US Geological Survey (USGS) to continue SFGS survey and monitoring efforts and to include genetics work. All project components are subject to approval by the California Department of Fish and Wildlife (CDFW) as well as the US Fish and Wildlife Service (USFWS) prior to implementation. Both Trustee agencies have been present for initial scoping meetings and are supportive of this effort.

BACKGROUND

SFGS (*Thamnophis sirtalis tetrataenia*) is both federal and state endangered and considered a fully protected species by the state of California. SFGS are only found on the San Francisco Peninsula in small populations with the largest population physically and genetically isolated at the West of Bayshore property (near the San Francisco Airport). A primary prey species for SFGS is the California red-legged frog (CRLF) (*Rana draytonii*), which is a federally threatened species and a state species of special concern and is found throughout many District preserves.

Although much of the District's land in San Mateo County is considered suitable habitat for SFGS, to date they have only been observed in a few preserves and there are only two reproducing populations known to occur on District lands. These recovery actions are guided by the USFWS SFGS recovery plan, which calls for protection of 10 SFGS populations, with at least 200 adults needed at each for delisting to be considered (USFWS 1985).

Since 2012, the District has worked under approvals from the USFWS and CDFW to conduct research and perform management actions to recover both SFGS and CRLF. As part of ongoing recovery actions, the District currently partners with the USGS ([R-23-05](#)) to complete SFGS and CRLF monitoring, reporting, and other activities that support recovery work.

DISCUSSION

Status of SFGS on District lands

In January 2024, the District completed a Habitat Management Plan (HMP) for reptile and amphibian species at Cloverdale Ranch OSP. The District worked in partnership with USGS, who had been studying the Cloverdale Ranch SFGS population since 2007 and provided summaries of years of field research, compiled records of special status species, and provided ecological information to inform the likely effects of management actions based on the current state of knowledge of the species and their ecology. With their extensive knowledge of the site, USGS's assistance was invaluable in creating the HMP to inform future maintenance, stewardship, conservation grazing, patrol, and public access actions at the preserve. Based on USGS surveys since 2008, the Cloverdale Ranch OSP SFGS population has been confirmed to be abundant, with high genetic diversity relative to other SFGS populations based on USGS monitoring at multiple sites. Overall, habitat conditions are good at Cloverdale Ranch OSP, but bullfrog control was identified in the HMP as a need to further improve SFGS habitat conditions.

Russian Ridge OSP has slightly different habitat than both GGNRA Mori Point and Cloverdale Ranch OSP, which are both low-lying coastal areas near the Pacific Ocean. Wetland habitats at Russian Ridge OSP are at a higher elevation in the Santa Cruz Mountains and wetland habitats and adjoining upland grassland-scrub communities are surrounded by mixed evergreen forests. Habitat restoration identified in a 2012 HMP for SFGS at Russian Ridge OSP has been implemented with ongoing invasive plant management activities to improve site conditions for SFGS. Although the SFGS population at Russian Ridge OSP has a higher adult abundance estimate than the population at GGNRA Mori Point, USGS researchers found that the Russian Ridge OSP population had marginally high inbreeding coefficients and was isolated from other SFGS populations. District staff are concerned about the long-term persistence of this population if efforts are not taken to improve its genetic health.

La Honda Creek OSP currently does not have a population of SFGS, but historic populations have been documented within 0.9 miles east and west of the preserve. There are several ponds and wetlands throughout the preserve and the District has implemented several pond restoration projects to improve breeding conditions for CRLF, which bolster the available prey base for SFGS. USGS is working to complete a study assessing the feasibility of reintroducing SFGS to La Honda Creek OSP and preliminary findings indicate that the habitat appears suitable, but that increased buffers limiting land use in areas surrounding wetlands would be beneficial to further enhance habitat for SFGS. If the proposed GGNRA/District partnership is approved, La Honda Creek OSP (if deemed feasible) would be considered as a potential SFGS recipient site in future

phases to create an additional SFGS population to aid in species recovery as identified in the recovery plan for the species (USFWS 1985).

Status of SFGS recovery on GGNRA lands

Within GGNRA, SFGS is only found within Mori Point in San Mateo County. The population is identified as having a high local extinction risk. A recent USGS study found an effective population size of 9-13 adults with high inbreeding and genetic diversity that has declined over time. GGNRA is funding actions to improve habitat conditions at Mori Point, including the expansion of native grassland habitat through removal of asphalt, concrete debris, and non-native trees. In addition, GGNRA is seeking \$389,076 in grant funds to cover SFGS habitat enhancements and a population assessment of the Mori Point population and donor site(s). GGNRA has developed a detailed implementation plan in support of this work to reduce risk of local extirpation that includes rearing young snakes at the San Francisco Zoo and releasing SFGS at multiple sites. The GGNRA project requires several partnerships, including with the San Francisco Zoo, USGS, San Francisco Parks and Recreation, District, USFWS and CDFW. Future phases of work may also include the California Department of Parks and Recreation, and San Mateo Resource Conservation District. Based on USGS research, both Cloverdale Ranch and Russian Ridge OSPs could be considered as both potential donor and/or recipient sites.

If GGNRA is awarded grant funding, SFGS offspring from donor populations will be released at recipient populations to increase the population size and/or genetic diversity of SFGS. Baseline monitoring and genetic assessments will occur at both donor and treatment sites before implementation. If the District Board of Directors (Board) authorizes the General Manager to enter into a partnership agreement, the District and GGNRA will work together with the USFWS and CDFW to develop and implement a collaborative SFGS population enhancement plan prior to implementation. The plan will address head starting (raising young snakes in captivity at the San Francisco Zoo until they reach a size where they are more likely to survive when released back into the wild), translocations, population augmentation, habitat enhancement, and effectiveness monitoring components.

Partnership Benefits

This proposed partnership is in direct support of the District's mission to "*protect and restore the natural environment and provide opportunities for ecologically sensitive public enjoyment and education.*" This partnership also aligns with the overarching goal of the Board-approved Resource Management Policies, Wildlife Management (WM) Chapter to: "Maintain and promote healthy and diverse native wildlife populations." Partnering with GGNRA would promote direct recovery efforts for three existing SFGS populations and could result in the creation of a new population to contribute significantly to species recovery. Existing permits from USFWS and CDFW issued to the District that cover SFGS habitat enhancement and effectiveness monitoring do not currently include head starting, translocations, or population augmentation actions, which are needed to improve recovery outcomes. Participating in this effort will elevate District participation in region-wide SFGS recovery planning discussions and pave the way for future species recovery efforts with additional partners at other sites during future phases.

FISCAL IMPACT

The partnership agreement includes a minimum commitment for District funding of \$25,000 in FY25 and \$50,000 per year after that for three additional years, for an anticipated total District

contribution of \$175,000. There is sufficient funding in the current budget to cover the cost of the recommendation in FY25. Funds for future year costs will be recommended in future fiscal year budgets as a part of the annual Budget and Action Plan process. If approved, an amendment to the USGS contract will come to the Board for approval later this fiscal year once it is known how much other outside funding GGNRA and USGS are able to secure. This recommended action is not funded by Measure AA.

PRIOR BOARD AND COMMITTEE REVIEW

- January 11, 2023, the Board authorized a Partnership Agreement with USGS ([R-23-05](#)); [meeting minutes](#).
- November 20, 2013, the Board authorized initial SFGS surveys at Russian Ridge ([R-13-105](#)); [meeting minutes](#).

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

In feasibility discussions with CDFW and the USFWS, it was identified that activities occurring on non-federal lands (District) would be Categorically Exempt from the California Environmental Quality Act (CEQA) at sites where SFGS already occur (Cloverdale Ranch and Russian Ridge OSPs). For activities occurring on federal lands (Mori Point), GGNRA would be the lead agency under the National Environmental Policy Act (NEPA) and those activities are to be covered by a Categorical Exclusion under NEPA.

Based on the above discussions with regulatory agencies overseeing recovery actions associated with this Partnership Agreement, the work under this agreement would be Categorically Exempt from CEQA under Section 15333, which exempts small habitat restoration projects that do not exceed five acres in size to assure the restoration, enhancement, or protection of wildlife. CEQA for future phase work (if feasible) at La Honda Creek OSP where SFGS do not currently occur (but may have in the past), will only take place after any necessary additional environmental review has occurred.

NEXT STEPS

If approved, the District will enter into a partnership agreement with GGNRA to identify, permit and implement SFGS recovery actions.

Attachment(s)

1. Map of partnership sites

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Midpeninsula Regional Open Space District



Preserve

Protect

Restore

Educate

Enjoy



Midpen mission:

To acquire and preserve a regional greenbelt of open space land in perpetuity, protect and restore the natural environment, and provide opportunities for ecologically sensitive public enjoyment and education.

Coastside mission:

To acquire and preserve in perpetuity open space land and agricultural land of regional significance, protect and restore the natural environment, preserve rural character, encourage viable agricultural use of land resources, and provide opportunities for ecologically sensitive public enjoyment and education.