

TransNet EMP Land Management Grants 10th Cycle Call for Projects

MSP Roadmap Management Priorities and Objectives for 2022-2026

For Questions Contact:

Kris Preston: kpreston@usgs.gov

Sarah McCutcheon: smccutcheon@usgs.gov

The *Management and Monitoring Strategic Plan for Conserved Lands in Western San Diego County: A Strategic Habitat Conservation Roadmap* (MSP Roadmap: https://sdmmp.com/mssp_doc.php) has 2017-2021 management and monitoring objectives. These objectives are being updated for 2022-2026 for 54 plant species, 9 invertebrates, 31 vertebrates, 9 vegetation communities, and 8 types of threats. **Priority management actions** have been identified for a **subset of these species, vegetation communities, and threat types** for the **10th Cycle of the TransNet Environmental Mitigation Program Land Management Grants Program**. This list provides a brief description of these 2022 management priorities.

Grant applicants, please visit the San Diego Management and Monitoring Program (SDMMP) TransNet Emp Land Management Grant page: (https://sdmmp.com/view_project.php?sdid=SDMMP_SDID_187_6171a1a00730f).

Download the 2021 Process and Instructions: 10th Cycle of TransNet Environmental Mitigation Program Land Management Grant Program Call for Projects. Follow the instructions for using this management priorities and objectives list and the *TransNet* Grant Program's MSP Priorities Viewer 2022-2026.

MSP Species

The highest priority species for management are those that require species-specific management actions to ensure their persistence in the MSP Roadmap Area (MSPA). These species management categories are defined below and further explained in the MSP Roadmap (Sections 2.7 & 2.8) and species webpages:

SL – Species whose persistence in the MSPA is at risk of loss without immediate management actions above and beyond that of daily management activities.

SO – Species whose persistence of 1 or more significant occurrences in the MSPA is at high risk of loss without immediate management action above and beyond that of daily maintenance activities.

SS – Species with occurrences that are considered more stable and their persistence is at lower risk of loss compared to SL and SO species, however, these species still require species-specific management actions.

Rare Plants:

MSP rare plant species identified as **highest priority for management are included** in either the **Framework Rare Plant Management Plan** (F-RPMP; AECOM, CBI and SDMMP 2020:

https://sdmmp.com/view_project.php?sdid=SDMMP_SDID_187_5e9cef1e5aa07) or the **City of San Diego's Vernal Pool Monitoring and Habitat Management Plan** (VPMHMP; City of San Diego 2020:

<https://www.sandiego.gov/planning/programs/mscp/vphcp>). These species have a prioritized management strategy based on comprehensive analyses of available information, such as occurrence status and threats, regional population structure, genetics, habitat relationships, and Best Management Practices (BMPs). Management needs

have been identified for these species, including enhancing and restoring existing occurrences or establishing new occurrences, pre-fire management to reduce fire risk, and post-fire management to facilitate population recovery. Highest priority species for management are:

- **Nuttall's acmispon** – Implement priority management actions in the F-RPMP.
- **Orcutt's spineflower** - Implement priority management actions in the F-RPMP.
- **Otay tarplant** – Implement priority management actions in the F-RPMP.
- **Salt marsh bird's-beak** – Implement priority management actions in the F-RPMP.
- **San Diego thornmint** – Implement priority management actions in the F-RPMP.
- **Short-leaved dudleya** – Implement priority management actions in the F-RPMP.
- **Willow monardella** – Implement priority management actions in the F-RPMP or developed in consultation with San Diego Management and Monitoring Program (SDMMP) for new prioritized enhancement and restoration sites based upon 2021 survey and habitat assessment data.
- **Vernal pool plants** - Implement high priority management priorities for MSP SL and SO vernal pool species (California Orcutt grass, Otay mesa mint, San Diego button-celery, San Diego mesa mint) as described in the City of San Diego's 2020 VPMHMP.

MSP rare plant species that are **second priority for management** are **not included in the F-RPMP** but have occurrences that are at **risk based upon IMG monitoring**. These are MSP SL, SO, and SS Species (see MSP Roadmap Section 2.7 & 2.8 and species webpages) and are vulnerable due to limited distribution, small occurrences and/or high level of threats to some or all occurrences. Management actions for these species include routine management to enhance occurrences, and pre- and post-fire management. Until a regional management strategy is developed for a species, establishing new occurrences for these species is not a priority. While routine management is considered a local (preserve land manager) responsibility, EMP funds can be used for invasive plant control, fencing, and other measures to manage these threats at occurrences.

- **Aphanisma** - Implement routine management to enhance existing occurrences.
- **Blochman's dudleya** - Implement routine management to enhance existing occurrences.
- **Dehesa nolina** - Implement routine management to enhance existing occurrences or manage to enhance postfire recovery.
- **Encinitas baccharis** – Implement routine management to enhance existing occurrences or manage to enhance postfire recovery.
- **Orcutt's hazardia** – Implement routine management to enhance existing occurrences.
- **Parish brittlescale** - Implement routine management to enhance existing occurrences.
- **San Diego ambrosia** - Implement routine management to enhance existing occurrences.
- **San Miguel savory** - Implement routine management to enhance existing occurrences or manage to enhance postfire recovery.
- **Shaw's agave** - Implement routine management to enhance the natural (non-translocated) occurrence.

- **Thread-leaved brodiaea** - Implement routine management to enhance existing occurrences.
- **Variegated dudleya** - Implement routine management to enhance existing occurrences or manage to enhance postfire recovery.

The **remaining MSP rare plant species are low priority for management** in this 10th Cycle of EMP Land Management Grants. This is because they are either relatively stable with more occurrences, larger populations, and reduced threats compared to second priority species or there is insufficient data to determine regional status and management needs. Management for these species can be included if they occur at project sites reducing threats to other higher priority MSP species or to vegetation communities.

Chaparral nolina, coast wallflower, Gander's ragwort, heart-leaved pitcher sage, Jennifer's monardella, Mexican flannelbush, Orcutt's bird's-beak, Orcutt's brodiaea, Parry's tetradlea, San Diego goldenstar, Santa Rosa brodiaea, small-leaved rose, sticky dudleya

Invertebrates:

- **Harbison dun skipper** - Implement high priority restoration actions in the Harbison Dun Skipper Habitat Conservation and Management Plan and conduct postfire management.
https://sdmmp.com/view_article.php?cid=SDMMP_CID_187_5f920fa8be588
- **Hermes copper** - Implement high priority restoration actions in the Hermes Copper Habitat Conservation and Management Plan, conduct pre- and postfire management, and develop captive rearing BMPs.
https://sdmmp.com/view_article.php?cid=CID_sarah.mccutcheon@aecom.com_5952a6c728c10
- **Quino checkerspot** – Enhance and restore habitat to increase populations and implement post-fire management to facilitate population recovery.
- **San Diego and Riverside fairy shrimp** – Implement high priority management priorities as described in the City of San Diego's 2020 VPMHMP. <https://www.sandiego.gov/planning/programs/mscp/vphcp>

Vertebrates:

- **Arroyo toad** – Implement management actions to expand arroyo toad populations by enhancing and restoring habitat, removing aquatic invasive predators and exotic animal species, controlling invasive nonnative plants, and conducting postfire management where needed.
- **Western spadefoot** – Implement management actions in vernal pools as identified in the City of San Diego's 2020 VPMHMP. <https://www.sandiego.gov/planning/programs/mscp/vphcp>
- **Southwestern pond turtles** - Control aquatic invasive predators and exotic animal species at populations with recruitment potential, manage threats from invasive plants, altered hydrology, debris and create basking sites. Conduct postfire management where needed.
- **California least tern** - Implement management actions to enhance and restore breeding habitat and reduce threats to maintain and expand existing breeding colonies or to establish new breeding colonies.
- **Coastal cactus wren** – Implement high priority management actions to expand cactus wren populations in south County as identified in the Coastal Cactus Wren Habitat and Conservation Plan (https://sdmmp.com/view_project.php?sdid=SDID_201612021615.63). Implement high priority management actions to expand and connect the San Pasqual Valley cactus wren population based upon previous San

Diego Zoo global restoration analyses and consultation with SDMMMP. Implement pre- and postfire management where needed near existing occurrences.

- **Coastal California Gnatcatcher** – Implement management actions to expand populations by enhancing or restoring habitat (this is an interim measure until a regional management plan is developed).
- **Golden eagle** – Implement management actions to expand populations by protecting, enhancing, or restoring breeding or foraging habitat (this is an interim measure until a regional management plan is developed). Priority management areas for this species are not shown in the *MSP Priorities Viewer 2022-2026* due to sensitivity of species nesting locations. Contact SDMMMP for further discussion of priority areas for management.
- **Northern harrier** - Implement management actions to expand breeding populations by enhancing or restoring nesting habitat (this is an interim measure until a regional management plan is developed).
- **Southwestern willow flycatcher** – Implement management actions to expand existing or establish new breeding populations by enhancing or restoring nesting habitat (this is an interim measure until a regional management plan is developed). Priority management areas for this species are not shown in the *MSP Priorities Viewer 2022-2026* due to sensitivity of species nesting locations. Contact SDMMMP for further discussion of priority areas for management.
- **Tricolored blackbird** - Implement management actions to expand or establish new breeding populations by enhancing or restoring nesting habitat (this is an interim measure until a regional management plan is developed).
- **Western burrowing owl** – Implement high priority management actions (that are not already being conducted) as identified in the Burrowing Owl Habitat Conservation and Management Plan for San Diego County. https://sdmmp.com/view_article.php?cid=SDMMMP_CID_212_5a569e38e1c7e.
- **Western snowy plover** - Implement management actions to protect and expand breeding and wintering populations by enhancing or restoring habitat and reducing threats such as human disturbance and predation (this is an interim measure until a regional management plan is developed).
- **Mountain lion** – Implement high priority linkage enhancement actions identified in mountain lion connectivity evaluation (https://sdmmp.com/view_project.php?sdid=SDID_201612021615.46) and reduce mortality threats through implementing BMPs to deter need for depredation permits.
- **Pallid and Townsend's big-eared bats** – Implement high priority management actions identified in SDMMMP management matrix, including protecting roosts from disturbance, building roost habitat, and providing water sources. (Management plan is in draft form and not yet publicly available, contact Kris Preston for management plan priorities).
- **Stephens kangaroo rat** – Implement management actions to expand populations by enhancing or restoring nesting habitat (this is an interim measure until a regional management plan is developed).

Vegetation:

- **Vernal Pools** – Conduct habitat enhancement/restoration at appropriate sites and in manner to avoid impacts to sensitive species. Implement high priority management priorities as described in the City of San Diego's 2020 VPMHMP.

Threats:

- **Altered Fire Regime** – Implement pre-fire management actions to reduce fire risk for the most at-risk MSP rare plant and animal occurrences. Implement post-fire invasive plant control at sites with priority MSP plant and animal occurrences and vegetation communities.
- **Altered Hydrology** – Implement BMPs to improve hydrology for priority MSP Species.
- **Human Use of Preserves** – Implement measures to restrict or limit passive recreation to minimize adverse effects to priority plant and animal species and their habitats.
- **Invasive Animals** - Implement priority management actions to control or eradicate invasive nonnative animal species. Contact SDMMP for list of priority animal species from the draft Invasive Animal Strategic Plan.
- **Invasive Plants** - Implement Invasive Plant Management Strategic Plan (https://sdmmp.com/view_article.php?cid=CID_201604011922_38) priority management actions to control or eradicate invasive plant species.
- **Loss of Connectivity** – Implement linkage enhancement actions presented in completed linkage evaluations and linkage implementation plans

Mountain Lion Connectivity – North County:

https://sdmmp.com/view_project.php?sdiD=SDID_201612021615.46

Hwy 94 Wildlife Infrastructure Plan: https://sdmmp.com/view_project.php?sdiD=SDID_201612021615.169),

Hwy 67 Multi-species Connectivity Planning:

https://sdmmp.com/view_project.php?sdiD=mjennings@mail.sdsu.edu_588ebd5fa8561)