



R-22-144
Meeting 22-30
December 14, 2022

AGENDA ITEM 5

AGENDA ITEM

Santa Cruz Kangaroo Rat Habitat Assessment and Botanical Surveys

GENERAL MANAGER'S RECOMMENDATIONS *den*

1. Authorize the General Manager to enter into a multi-year contract for the base amount of \$101,680 with Nomad Ecology of Martinez, California to conduct botanical surveys and a habitat assessment that will inform future development of a Habitat and Population Monitoring Plan for the critically imperiled Santa Cruz Kangaroo Rat.
2. Authorize a 15% contingency in the amount of \$15,252 for unanticipated challenges in conducting field studies, bringing the total contract to a not-to-exceed amount of \$116,932.
3. Authorize an allowance of \$20,958 that would be reserved solely to conduct an additional year of botanical surveys, if deemed necessary, to adequately inform future actions to develop the habitat and population monitoring plan, for a not-to-exceed grand total contract amount of \$137,890.

SUMMARY

In 2019, a species of narrow-faced kangaroo rat (kangaroo rat) was discovered in Sierra Azul Open Space Preserve (Sierra Azul) by an independent researcher. To date, kangaroo rats have been discovered in five locations within Sierra Azul. A habitat assessment and botanical surveys within known kangaroo rat habitat would allow a better understanding of the habitat characteristics that supports the species. The results of these studies can inform the creation of a kangaroo rat Habitat and Population Monitoring Plan to ensure that the species remains protected and thriving within the preserve.

A Request for Qualifications and Proposals (RFQP) was issued on September 09, 2022, to solicit habitat assessment and botanical survey services. The General Manager recommends entering into a contract with Nomad Ecology, Inc., (Nomad Ecology) to perform these services for a not-to-exceed contract amount of \$101,680 plus a 15% contingency of \$15,252 for unanticipated challenges in conducting the required field studies, bringing the total contract amount to \$116,932. An allowance of \$20,958 is also recommended if a second year of botanical surveys are required to adequately inform the preparation of a future habitat and population monitoring plan, bringing the grand total contract amount to \$137,890. There are sufficient funds in the adopted Fiscal Year 2022-23 (FY23) budget to cover the anticipated scope of services. A \$295,000 grant from the Wildlife Conservation Board (WCB) would offset these costs. Funding for future year budgets would be requested as part of the annual Budget and Action Plan process.

DISCUSSION

The narrow-faced kangaroo rat (*Dipodomys venustus*) is made up of three subspecies, which range from vulnerable to critically imperiled by the State. Through a separate effort and to support the population's long-term viability, the District has partnered with UC Davis, UC Santa Cruz, and CalPoly San Luis Obispo to support ongoing genetic research. The genetic research may allow the identification of the subspecies found at Sierra Azul, which is presumed to be the Santa Cruz kangaroo rat (*D. venustus venustus*- the most imperiled of the three subspecies), explain the population's genetic diversity, and inform future development of a range-wide habitat and population management plan (HPMP) that would identify opportunities for site-specific enhancements to increase the population resiliency of the rare species. The genetic research could also inform a potential listing status for either the species and/or subspecies under the California Endangered Species Act.

The Santa Cruz kangaroo rat is listed by the California Department of Fish and Wildlife (CDFW) as being at risk of extirpation¹. This critically imperiled subspecies was only known to exist in one location, Henry Cowell Redwoods State Park in Felton, CA. Kangaroo rats have been recently found in five locations within Sierra Azul. Assuming the subspecies is confirmed, and along with a known population in Henry Cowell Redwoods State Park, these are the only known extant populations of this rare subspecies.

To complement the ongoing genetic research and further inform the HPMP, the General Manager recommends entering into the proposed contract to complete a detailed habitat assessment and botanical surveys as detailed below. Within Sierra Azul, ecological succession² is causing vegetation to encroach on limited habitat for the species; this encroachment limits mobility, burrowing, and foraging opportunities. This reduces the long-term viability of both the specific population and the species as a whole due to its low numbers and limited distribution.

Habitat Assessment: the consultant would provide a technical report that describes the habitat characterization and sensitive natural community map within the approximately 45 acres of occupied habitat. The area includes four (4) primary sites, two (2) secondary sites, and a 30-foot buffer along roads within the habitat. These surveys would inform road maintenance projects in the area and improve the overall understanding of the habitat in Sierra Azul. The assessment would provide a detailed description of current habitat conditions and inform future management efforts for the species by comparing initial baseline conditions to post-treatment conditions to evaluate the success of management efforts.

Botanical Surveys

Rare Plant Surveys: The consultant would provide botanical surveys that conform to both the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS) protocols within roughly 105 acres of habitat at four (4) primary sites within Sierra Azul. Surveys would include but not be limited to locating and identifying rare plants and sensitive natural communities.

¹ Unlike extinction, whereby a species no longer exists anywhere, *extirpation* means that at least one other population of the species still persists in other areas.

² Ecological succession is the process by which the mix of species and habitats in an area changes over time. Gradually, these communities replace one another until a "climax community," such as a mature forest, is reached, or until a disturbance, like a fire, occurs.

Invasive Plant Surveys: In addition to a protocol-level rare plant survey, the consultant would survey for Early Detection/Rapid Response (EDRR) invasive plant species so that early action can be taken on invasive species that are present and a threat to habitat requirements.

Request for Qualifications and Proposals (RFQP) Process

Staff issued a RFQP on September 09, 2022, with the following requirements that align with the California Department of Fish and Wildlife (CDFW) guidelines for botanical surveys:

- Knowledge of plant taxonomy and natural community ecology;
- Familiarity with the plants of the area, including special status species;
- Familiarity with natural communities of the area, including special status natural communities;
- Experience conducting floristic field surveys or experience with floristic surveys conducted under the direction of an experienced surveyor;
- Familiarity with appropriate state and federal statutes related to plants and plant collecting; and
- Experience analyzing the impacts of development on native plant species and natural communities.

Staff circulated the RFQP through email and by posting on the BidSync website. The following six firms (2 firms proposed to work as a team) submitted proposals by the October 18, 2022, deadline.

Firm	Location	Proposed Base Fees^a	Optional Task(s)^b
Vollmar Natural Lands	Berkeley, CA	\$48,855	\$4,450
Nomad Ecology	Martinez, CA	\$82,865	\$18,815
MIG	San Jose, CA	\$85,090	\$39,105
AECOM	Oakland, CA	\$87,203	\$11,615
BioMaAS/Avila	San Francisco, CA	\$90,009 - \$123,676	\$84,940

a – The base fee does not include the second-year surveys.

b – Firms were encouraged to propose additional optional tasks that may assist in further developing the site and species-specific best management practices.

Evaluation criteria were determined before the RFQP's release, including the quality of the proposal, project approach, firm expertise, and alignment with the District's sustainability and equity goals. After carefully reviewing all proposals, Nomad Ecology was deemed the most qualified and best suited for the project at a fair and reasonable price.

After the selection process, staff negotiated with Nomad Ecology on optional tasks, including additional soil core analysis, individual burrows or complexes mapping, and baseline drone imagery³. A 15% contingency is requested due to the thick and complex chaparral vegetation, which may impede field surveys in the area. An allowance of \$20,958 is also requested if a second year of botanical surveys are required for a not-to-exceed contract amount of \$137,890.

³ Per FAA rules and regulations, a licensed pilot is required, and which Nomad Ecology staff possess. The District currently allows the use of drones for scientific purposes.

FISCAL IMPACT

The FY23 adopted budget includes \$190,000 for the Santa Cruz Kangaroo Rat Habitat and Population Management Project #80083. There are sufficient funds in the project budget to cover the recommended action and expenditures.

On November 10, 2021, the District adopted a resolution authorizing the General Manager to apply for grant funding from the Wildlife Conservation Board and negotiate a grant funding agreement of up to \$295,000 for the Santa Cruz Kangaroo Rat Habitat and Population Management Plan Project (R-21-154). The WCB approved the grant award on February 24, 2022. All grant-funded work would need to be completed by March 31, 2025, to submit for reimbursement before June 30, 2025. Funding for implementation of recommendations that come forth from a future HPMP that is developed with information gained by the work completed through this contract would be requested in subsequent years.

Santa Cruz Kangaroo Rat Habitat and Population Management Project #80083	Prior Year Actuals	FY23 Adopted	FY24 Projected	FY25 Projected	Estimated Future Years	TOTAL
Total Budget*:	\$0	\$190,000	\$45,000	\$60,000	\$1,302,000	\$1,597,000
Spent-to-Date (as of 11/14/2022):	\$0	\$0	\$0	\$0	\$0	\$0
Encumbrances:	\$0	\$0	\$0	\$0	\$0	\$0
Nomad Ecology Contract:	\$0	(\$61,350)	(\$40,330)	\$0	\$0	(\$101,680)
12% Contingency:	\$0	(\$9,200)	(\$6,052)	\$0	\$0	(\$15,252)
Allowance (if necessary):	\$0	\$0	(\$20,958)	\$0	\$0	(\$20,958)
Budget Remaining (Proposed):	\$0	\$119,450	(\$22,340)	\$60,000	\$1,302,000	\$1,459,110

*The Wildlife Conservation Board grant is not shown on table, as the timing of the agreement execution was uncertain during the Budget and Action Plan process and subsequent adoption.

The recommended action is not funded by Measure AA.

PRIOR BOARD AND COMMITTEE REVIEW

The Board of Directors approved the application for a Wildlife Conservation Board Grant in support of the Santa Cruz kangaroo rat Habitat and Population Management Plan Project on November 10, 2021 ([R-21-154](#), [Minutes](#)).

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

The contract award is not a project subject to the California Environmental Quality Act. Additionally, the proposed botanical surveys to be provided by the consultant are categorically exempt from the California Environmental Quality Act (CEQA) under Article 19, Section 15306:

Section 15306 exempts basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

Future implementation of habitat enhancements would require a separate CEQA analysis. Staff foresees using existing CEQA coverage from Board-approved Program(s) (e.g., Integrated Pest Management Program, Wildland Fire Resiliency Program) for this future work.

NEXT STEPS

Following Board approval, the General Manager will execute a contract with Nomad Ecology.

Attachments

1. Santa Cruz Kangaroo Rat Study Area

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