



Midpeninsula Regional
Open Space District

R-20-104
Meeting 20-22
September 23, 2020

AGENDA ITEM 6

AGENDA ITEM

Authorization to enter into a Funding Agreement with Peninsula Open Space Trust to conduct a Newt Mortality and Population Study along Alma Bridge Road in collaboration with partners.

GENERAL MANAGER'S RECOMMENDATION

Authorize the General Manager to enter into a Funding Agreement and contribute \$150,000 for Peninsula Open Space Trust and partner agencies to conduct a Newt Mortality and Population Study from October 2020 to June 2021.

SUMMARY

In November 2017, Midpeninsula Regional Open Space District (District) staff were notified by a District trail patrol volunteer about ongoing high newt mortality observations (numbering in the hundreds) along Alma Bridge Road near Sierra Azul Open Space Preserve. To date, over 11,000 dead newts have been documented by volunteers on Alma Bridge Road since monitoring began in 2017. A more detailed summary the newt mortality issue was recently reported to the Board in an FYI on July 8, 2020. In light of the newt mortality observations, Peninsula Open Space Trust (POST) began to work with a consultant biologist in 2018 to analyze volunteer-collected data. Recent discussions with key landholding partners determined the need for further study that builds on existing community science data to better understand the issues and provide scientific-based findings to help generate significant funding contributions for construction and maintenance of major roadway modifications to protect the newt population. POST has agreed to lead the newt study with assistance from partner agencies. This study will fill data gaps relative to the number of adult newts attempting to cross Alma Bridge Road to breed in Lexington Reservoir and the percentage killed by vehicular strikes during a single breeding season. The study will also evaluate potential long-term mortality impacts on the local newt population and timing of peak newt movement. POST will contribute \$25,000 to the study. A consulting biologist will manage the study and either the consulting biologist or a qualified biologist from one of the partner agencies paired with volunteers (to reduce overall study costs) will conduct daily field operations. A net zero budget adjustment within the Natural Resources General Fund operating budget is planned for Quarter 1 of the fiscal year to set aside sufficient funds for this partnership project.

DISCUSSION

Background

California newt (*Taricha torosa*) and rough-skinned newt (*Taricha granulosa*), closely related species, are both present in the Los Gatos Creek watershed. Both species have been identified among roadkill on Alma Bridge Road. Neither of these newt species have special protection in

this area, however the California newt is listed as a California Species of Special Concern in the southern portion of its range (Monterey County and south), which does not include Santa Clara County or District preserves. The rough-skinned newt has no special protection.

Peninsula Open Space Trust (POST) began to work with a consultant biologist in 2018 to analyze existing volunteer data. This analysis found a substantial number of adult newts killed on the road during the 2018-2019 breeding season, a concentration of mortality along a few road segments, and the need for additional study to estimate the adult newt breeding population size and associated percentage at risk of being killed by vehicle strikes. Since 2019, the Audubon Society and Loma Prieta Chapter of the Sierra Club have actively engaged with the Santa Clara County Board of Supervisors and the District Board of Directors (Board) requesting action to reduce newt mortality on Alma Bridge Road. County Roads has installed numerous newt crossing signs on Alma Bridge Road. They have also indicated that road closures during newt breeding season are not feasible and stated that County Parks will educate park users about newt crossings.

On January 14, 2020, the District held a Planning and Natural Resources Committee (PNR) meeting for the Beatty Parking Lot and Trail Connections Project (Beatty Project) located along Alma Bridge Road. PNR heard concerns about ongoing newt mortality on Alma Bridge Road (R-20-07). Staff addressed these concerns by revising the parking area design to reduce the footprint and changing the operation to only allow seasonal access to prevent impacts to newts crossing Alma Bridge Road during their migratory breeding season. The revised project scope was presented at the August 4, 2020 PNR meeting (R-20-83) where the PNR advised staff to place the Beatty Project on hold until further work to address the newt mortality can be conducted (1 year proposed for the newt study; 2 to 4 years anticipated for design and implementation of road improvements) (refer to the September 23, 2020 Board FYI for more details).

In August 2020, newt advocacy groups (Audubon and Sierra Club) and researchers (University of California Davis Roadkill Ecology Center and US Geologic Survey (USGS)) put forth a proposal to the Wildlife Conservation Board (WCB) to plan and design a newt crossing area on Alma Bridge Road south of Limekiln Creek and to evaluate three design methods: 1) at-grade amphibian crossings embedded within the road, 2) retrofit existing culverts to enhance newt movement, and 3) an elevated road section allowing “sheet flow” of migrating newts below the roadway. The District, POST, Santa Clara County Parks (County Parks), Santa Clara County Roads and Airports (County Roads), Valley Water, and California Department of Fish and Wildlife (CDFW) all provided support letters for this grant proposal.

Newt Study Approach

The planned newt population and mortality study will estimate the number of adult newts attempting to cross Alma Bridge Road to breed in Lexington Reservoir and the percentage that are killed by vehicular strikes during a single breeding season. The data will be analyzed through a model to characterize this percentage relative to long-term impacts on the local newt population. Tasks include the following:

1. Develop field methodology;
2. Install drift fence/pitfall traps to collect and systematically count newts;
3. Work with County Roads to install traffic counter stations to get daily vehicle totals over the study period;

4. Conduct road mortality surveys to determine the number of newts that do not make it across the road, and peak times of newt movement;
5. Tabulate and analyze data; and
6. Provide a report documenting findings.

While a consulting biologist will manage the overall study, daily field operations will be led by either the consulting biologist or a qualified biologist from one of the partner agencies paired with volunteers to reduce overall study costs. Liability coverage for staff and any associated volunteers will be provided by each of the respective agencies.

Participating Entities and Contributions to the Study:

- CDFW – approve the Principal Investigator and study methodology; authorize population study; receive and review final report.
- County Roads – provide traffic counter(s) and any permits/permissions needed to implement the study.
- County Parks – possible funding contribution and/or staff/volunteer hours to assist with the population study (to be determined when feasible).
- H.T. Harvey & Associates – Principal Investigator for population study.
- District – contribute funding and staff/volunteers to assist with population study; primary permit holder with Valley Water.
- POST – contribute funding; contract holder for the population study (with H.T. Harvey & Associates); collaborate with the District, County Roads, County Parks, Valley Water, volunteers, and H.T. Harvey & Associates regarding field operations (e.g. shared scheduling, personnel, etc.).
- Valley Water – provide necessary permissions and in-kind biological field support to implement the population study on Valley Water lands.
- USGS – provide technical review of study.

Final Report

Upon completion of field data collection, the final report will include an estimate of the total number of newts attempting to cross Alma Bridge Road in the study area with a ratio of newts killed on the road due to vehicular strikes during the study period (2020/2021 breeding season). The report will also provide daily levels of vehicular traffic and how these levels compare with levels of newt movement. The overall intent of the proposed study is to provide additional perspectives on existing conditions and facilitate stakeholder collaboration to appropriately address the issue.

This study will build upon existing community science data collected to date to provide a robust data set and repeatable methodology for use pre- and post-implementation of any newt crossing project and to determine efficacy of any further actions or new structures. Information from the study will also be provided to CDFW to help determine if listing of the California newt as a “species of special concern” in the Lexington Reservoir subwatershed is warranted (the species is already listed in counties to the south).

FISCAL IMPACT

The not-to-exceed \$150,000 expenditure for the recommended action would be funded from the FY21 General Fund operating budget. A net zero budget adjustment within the adopted Natural Resources General Fund operating budget would be executed administratively in Quarter 1 pending Board approval of this Agenda Item. The not-to-exceed \$150,000 expenditure amount considers that POST has committed \$25,000 and Valley Water will provide in-kind biological field support towards the study.

Both Valley Water and Wildlife Conservation Board Grant funds are being explored to offset the total District contribution to the study, but these are uncertain and cannot be relied upon at this time. District wildlife biologists and a Natural Resources intern will provide staff time to reduce overall project costs. Staff time contributed from participating agencies and/or any grant funding will reduce the District's total contribution to the study and authorized funds would be returned to the General Fund during quarterly budget adjustments. All agencies have agreed to work to provide staff and volunteer time as feasible to assist with the project and reduce the study cost by reducing the level of contracted staffing, but currently all agencies have significant staffing constraints due to COVID 19 and the record breaking fire season. In-kind biological support by Valley Water is already factored into the study cost.

The new study will be created as a new project under Vision Plan Portfolio 22, which supports MAA Portfolio 22 Sierra Azul: Cathedral Oaks Public Access and Conservation Projects. Future year funds to complete subsequent research and/or design and implement new wildlife crossing structures in collaboration with partners would be proposed as part of future annual Budgets and Action Plans.

The recommended action is not funded by Measure AA.

BOARD COMMITTEE REVIEW

This item was first introduced at the January 14, 2020 PNR meeting (R-20-07), in a July 8, 2020 FYI to Board, and was discussed at the August 4, 2020 PNR meeting (R-20-83), at which time staff indicated that this item would come before the full Board for consideration.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act. Public notice was sent to the Resource Management interested parties lists by postal or electronic mail.

CEQA COMPLIANCE

This project consists of an interagency biological research project to be conducted on Valley Water lands by qualified biological professionals under a study design approved by CDFW. This project is categorically exempt from CEQA as it consists of basic data collection, research, experimental management, and resource evaluation, which do not result in a serious or major disturbance to an environmental resource. The research project and associate activities are strictly for information gathering purposes, or as part of a study leading to an action that a public agency has not yet approved, adopted, or funded (CEQA Guidelines section 15306). Any

proposed future actions of the District will be subject to environmental review to be completed at a later date, prior to implementation.

NEXT STEPS

Upon approval by the Board, the General Manager will execute an agreement with POST to conduct a newt population and roadkill study.

Attachment

1. Study Area Map

Responsible Department Head:

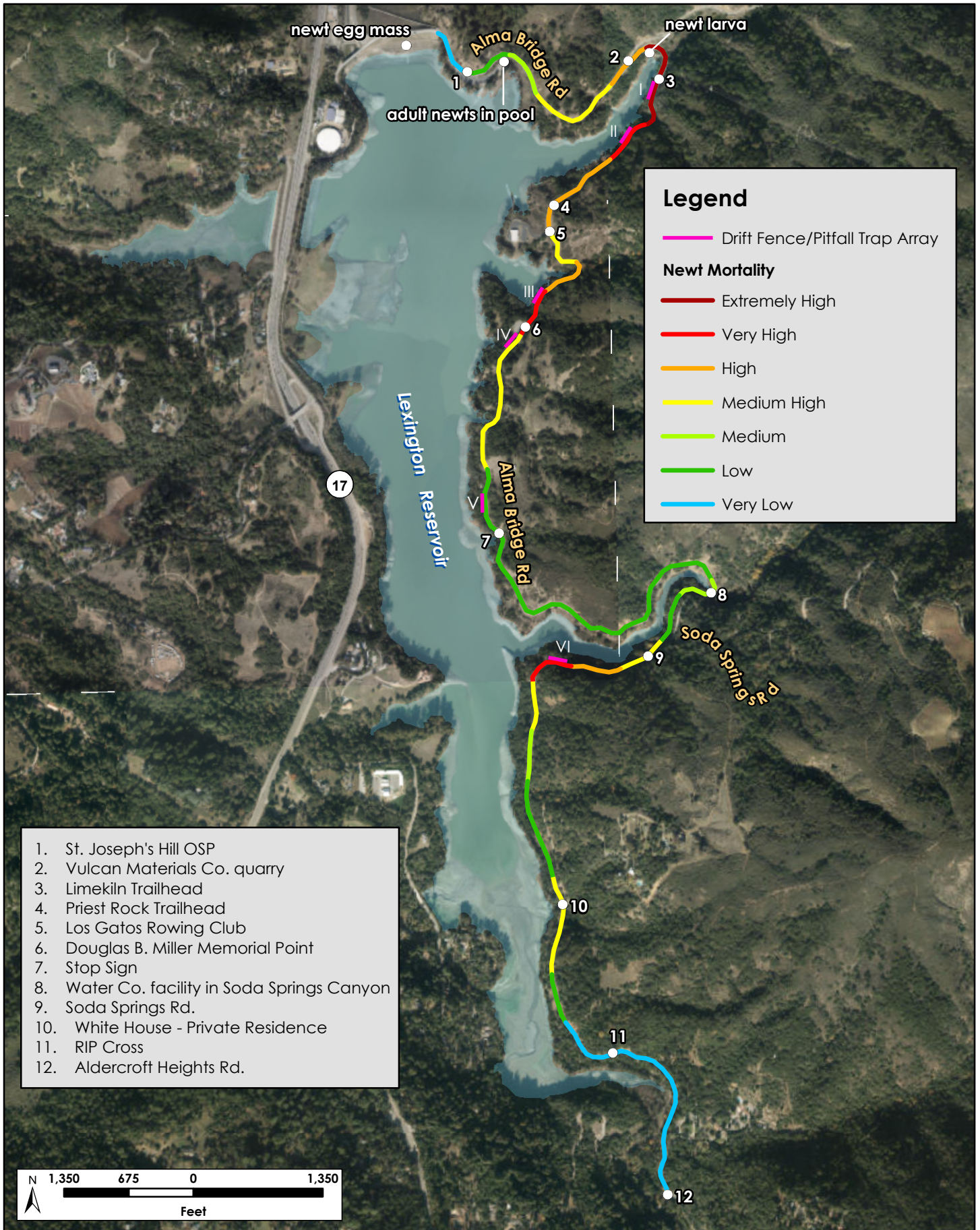
Kirk Lenington, Natural Resources Department

Contact Person:

Julie Andersen, Senior Resource Management Specialist and Interim Land & Facilities Manager

Graphics prepared by:

H.T. Harvey & Associates



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H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 1. Alma Bridge Road Newt Mortality Study
Peninsula Open Space Trust - Newt Mortality Study (4301-01)
August 2020