



Midpeninsula Regional
Open Space District

PLANNING AND NATURAL RESOURCES COMMITTEE

R-19-124
September 17, 2019

AGENDA ITEM 2

AGENDA ITEM

Highway 17 Crossings Alternatives, Caltrans Project Study Report, Environmental Review, Public Outreach and Funding

GENERAL MANAGER'S RECOMMENDATIONS

1. Forward the following recommended actions to the full Board of Directors for their consideration:
 - a. Delegate General Manager authorization to approve the final Caltrans Project Study Report - Project Development Support (PSR-PDS) document.
 - b. Approve the proposed approach for project environmental review pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to evaluate highway crossing alternatives (for wildlife and trail use).
 - c. Adopt a Resolution authorizing the General Manager to enter into a Cooperative Agreement with Caltrans to begin the Caltrans Project Approval and Environmental Document (PA&ED) for the proposed project.
2. Review and provide feedback on the proposed public outreach and regional partners funding plan.

SUMMARY

The Highway 17 project (Project) supports the Midpeninsula Regional Open Space District (District's) goal of providing safe, regional wildlife and trail access across Highway 17 near the Lexington Reservoir just south of the Towns of Monte Sereno and Los Gatos. The Project is a top priority identified by District constituents as part of the 2014 Open Space Vision Plan and voter-approved Measure AA bond funding. Work to date has identified and evaluated potential crossing locations and structures to provide access across the four-lane state highway using specific project evaluation criteria (Attachment 2). A dedicated *wildlife* crossing would provide safe passage for wildlife from top predators to small mammals and herpetofauna (snakes and amphibians) while improving motorist safety by reducing wildlife-vehicle collisions or near-misses. A dedicated *trail* crossing would provide a similarly safe highway crossing for people. At full build-out, the trail crossing and associated trail connections would complete critical regional trail gaps in the Ridge Trail and the Juan Bautista de Anza National Historic Trail (Anza Trail). These new trail connections would also complete a regional trails priority identified in the Santa Clara County Countywide Trails Master Plan, which the Santa Clara County Board of Supervisors adopted in 2008 as part of the Santa Clara County General Plan.

Feasibility studies have identified eight crossing options (wildlife only, trail only, or shared-use structure) at five separate locations to construct the wildlife and regional trail crossings within the study area (see Attachment 3). On June 27, 2018, District staff presented the crossing alternatives to the Board who authorized that all eight alternatives advance to the Caltrans Project Study Report - Project Development Support (PSR-PDS) process (R-18-66). Since that time, staff and the consultant team have: 1) hosted two public meetings; 2) held numerous ongoing stakeholder/partner meetings; 3) prepared a final Revised Alternatives Report (RAR); 4) finalized the Draft Regional Trail Connections Study; and 5) completed the Final Draft Caltrans PSR-PDS document. Based on results of these studies, and stakeholder and public feedback, the General Manager recommends advancing four (4) alternative wildlife and trail crossing structures to the next phase of Caltrans review, known as the Project Approval and Environmental Document (PA&ED) phase.

Two alternatives are proposed for both the wildlife crossing and the recreational trail crossing in case one of the alternatives is found to be impracticable to construct as further environmental and constructability details are assessed. As recommended, a total of four crossings would be evaluated during environmental review: wildlife crossings at two proposed locations, and recreational crossings at two different proposed locations (four total). District staff has worked with Caltrans to determine the CEQA/NEPA approach for the Project. Midpen will be the lead agency for CEQA and Caltrans will be the lead agency for NEPA. A single consultant may be retained to prepare both required documents. The General Manager further recommends that the District enter into a Cooperative Agreement with Caltrans to complete the environmental analysis. If this approach is approved by the Board of Directors, District staff will issue a Request for Proposals to solicit an environmental consultant. As part of their commitment to providing ongoing technical support, Caltrans would assist in consultant selection and review all documents (at no cost to the District) to ensure that the environmental documents meet Caltrans standards.

DISCUSSION

Project Phasing

There are four main phases of any Caltrans Project:

- 1) Project Initiation - completion pending future Board approval of the final PSR-PDS
- 2) PA&ED - by signing the Cooperative Agreement, the District will enter this phase
- 3) Plans Specifications and Estimate (Design)
- 4) Construction

Two Separate Structures:

The Project responds to the multifaceted need to:

- 1) Provide safe wildlife passage across Highway 17;
- 2) Provide a safe regional trail crossing of Highway 17; and
- 3) Provide east and west trail connections to the Ridge Trail and other regional trails.

While wildlife and trail crossings share the same goal (to safely cross the highway), they fulfill different objectives: one to facilitate use by wildlife to connect 30,600 acres of protected public lands/habitat and the other to facilitate use by regional trail users as a critical element to closing a four-to-nine-mile trail gap that would link 50 miles of existing Ridge Trail.

Analysis completed for the Revised Alternatives Report (RAR) concluded that two separate wildlife and trail crossing structures are preferable to a shared crossing to “provide the most opportunity for unimpaired wildlife passage across the landscape with limited human interaction.” Results from public feedback indicate that separate crossings are also preferred as they are perceived to be safer, more effective, and less of an impact. Current research (Smith 2017)¹ shows that mountain lions flee when exposed to human voices, indicating that a crossing structure shared with recreational trail users may deter wildlife use. Additionally, artificial lighting required on a structure designed for use by humans can cause individual wildlife to leave an illuminated area for a darker refuge² further deterring wildlife use of a shared structure even when humans are not present.

Somewhat surprisingly, the cost for two separate structures is comparable to the cost for a single shared crossing given the width, landscaping, and extensive ramping needed to appropriately accommodate both wildlife and people. For these reasons, the General Manager recommends constructing two separate structures (one for wildlife only that excludes public access and one for regional trail users, which may provide incidental or secondary wildlife use). This two-crossing approach is supported by Project partners, including Caltrans, California Department of Fish and Wildlife, Bay Area Ridge Trail Council, Santa Clara County Parks (SCC Parks) and the public, based on extensive agency review and public input.

Wildlife and Regional Trail Crossing Alternatives

Eight alternatives were evaluated during the Caltrans PSR-PDS process, and separately against criteria identified in the RAR (Attachment 2). The consultant team reviewed this preliminary evaluation and provided their expert opinion to determine the constructability of the alternatives (e.g. ease of design, permitting, and/or construction). This resulted in a final score for each alternative relative to one another. Those with the lowest score are the alternatives that best meet the Project criteria and are the most feasible to construct. The following top four alternatives for both the wildlife crossing and the regional trail crossing have been identified through this process and are recommended for advancement into the next phase (environmental review), known as Caltrans PA&ED.

Wildlife crossing:

- Trout Creek– Alternative 2 on Figure 3
- Ravine Creek– Alternative 1 on Figure 3

Regional trail crossing:

- Northern Overcrossing – Alternative 5a on Figure 3 and
- Southern Overcrossing – Alternative 3a on Figure 3

¹ Smith JA, Suraci JP, Clinchy M, Crawford A, Roberts D, Zanette LY, Wilmers CC. 2017 Fear of the human ‘super predator’ reduces feeding time in large carnivores. Proc. R. Soc. B 284: 20170433.
<http://dx.doi.org/10.1098/rspb.2017.0433>

²Gaston KJ, Bennie, J. 2014. Demographic effects of artificial nighttime lighting on animal populations. Environ Rev22: 323 – 30
<http://kevingaston.com/wp-content/uploads/2017/05/Gaston-Bennie-2014-Demographic-effects-of-AL-on-animal-populations.pdf>

Trail Connections

In addition to evaluating the crossing alternatives, the Project team studied thirteen (13) trail segments to ensure each regional trail crossing alternative could be linked to the existing Ridge Trail alignments west and east of Highway 17. Of these thirteen trail segments, four were determined to be infeasible and too impracticable to construct and maintain due to existing conditions, including steepness, unstable slopes, and multiple major stream crossings.

The remaining nine feasible trail segments were consolidated into trail routes that connect the existing Ridge Trail alignments to the regional trail crossing alternatives, providing a complete Ridge Trail connection. Each regional trail crossing alternative has two potential trail route options. District staff and consultants evaluated and ranked the trail routes based on the Project criteria and the ease and feasibility of construction and future maintenance.

Of the regional trail crossing alternatives, the Northern Overcrossing – Alternative 5a and the Southern Overcrossing – Alternative 3a on Figure 3 rank the highest for connecting trail feasibility and meeting overall Project criteria.

Public Outreach and Funding Approach

To date, District staff has conducted public and stakeholder outreach, and explored potential funding sources. Efforts include: 1) creation of the project website: www.openspace.org/hwy17, 2) multiple public and stakeholder meetings, and 3) identification of grant and legislative funding opportunities.

Even with available MAA funding, the Project will require strategic partnerships and additional funding to fully implement the Project. The General Manager recommends partnering with two organizations to continue the ongoing partnership development, and to prepare for additional public and stakeholder outreach and fundraising:

- 1) National Wildlife Federation (NWF) - to lead outreach and fundraising for the wildlife crossing portion of the Project. NWF currently leads outreach and funding efforts in support of the widely known Highway 101 Liberty Canyon Wildlife Crossing Project in southern California. Building on their experience with that project, NWF was determined to be best suited for and has the knowledge and capacity to support the Highway 17 Crossings Project.
- 2) Bay Area Ridge Trail Council - to lead outreach and fundraising specific to the regional trail crossing and connecting trails, by engaging longstanding trail partners at Recreational Equipment Incorporated (REI) and other important regional conservation partners. District staff presented the Project to the Ridge Trail Board of Directors in March 2019, which was well received. At that presentation, District staff requested the assistance of the Ridge Trail to take a primary fundraising and outreach role in support of the Project.

To ensure no missed opportunities, District staff have discussed this approach with other partners, including Peninsula Open Space Trust, Committee for Green Foothills, and SCC Parks to determine their capacity, interest, and/or resources to lead outreach or fundraising efforts. While all agencies are supportive of the Project, they do not have the capacity to be the primary lead for outreach and/or fundraising efforts. Each of these organizations identified opportunities in which they can continue to support the Project under the umbrella of a larger outreach and

fundraising effort led by the District, NWF, and Ridge Trail. District staff is working to develop separate nonbinding letters of intent with both NWF and Ridge Trail to lead public outreach and funding efforts within the General Manager’s signing authority. However, if future outreach or fundraising efforts elevate to a level that requires compensation or otherwise need Board approval, these item(s) would be brought before the Board at that time.

FISCAL IMPACT

The Highway 17 Project encompasses two portfolios covered by the Measure AA (MAA) Expenditure Plan. Portfolio 19 (El Sereno: Dog Trails and Connections) allocates \$2.25 million for the westernmost future trail connections from Sanborn County Park to El Sereno Open Space Preserve. Portfolio 20 (South Bay Foothills: Wildlife Passage and Ridge Trail Improvements) allocates \$13.97 million for the wildlife and trail crossings and connections covered by the Project. Between these two portfolios, a total of \$16.22 million dollars of Measure AA funds are allocated.

The funding allocated in MAA portfolios 19 and 20 is anticipated to bring the Project through environmental review, design and permitting. Remaining funds at the completion of the design phase would be applied toward construction.

Additional partner and/or grant funding will be required to complete the construction of the crossings and associated connector trails. Potential funding sources have already been identified and include Caltrans (Roadside Safety Improvement Program), Santa Clara Valley Transportation Authority, Wildlife Conservation Board, Prop 68 per capita allocations, private donors, and/or a combination of the above.

The rough order of magnitude costs currently associated with Project implementation is summarized in the table below. Project components include:

- 1) Implementing two (2) separate crossings (wildlife and regional trail);
- 2) Installing wildlife directional fencing to the crossing structures;
- 3) Constructing connecting trails; and
- 4) Improving Alma Bridge Road (Santa Clara County owned) to accommodate trail connections from the proposed crossings to the regional trail network, if supported by project partners and cost-share funding is available.

Costs will continue to be refined and updated as new information arises.

Project Component	Low Cost Estimate* (millions)	High Cost Estimate* (millions)
Wildlife and Tail Crossings	\$20.1	\$21.3
Directional Fencing	\$2.0	\$2.0
Trail Connections	\$9.0	\$16.5
Subtotal	\$31.1 million	\$39.8 million
Alma Bridge Road Improvements	\$3.0	\$5.5
Total	\$34.1 million	\$45.3 million

*2024 Dollars

The Project is associated with two Measure AA project numbers within Portfolio MAA20 South Bay Foothills: Wildlife Passage and Ridge Trail Improvements: *MAA20-001 Wildlife Corridor: Highway 17 Crossing* and *MAA20-002 Bay Area Ridge Trail Highway 17 Crossing*

For efficiency in tracking the overall project milestones, deliverables and costs, the District will merge the scope and budgets for the *VP20-001 Highway 17 Area Regional Trail Connections* project in the Board-adopted FY2019-20 Budget and CIAP with that of MAA20-002. With the completion of the assessment of regional trail connections, we now have a well-defined scope for environmental review that qualifies for MAA funding under MAA20-002. The intent is to streamline tracking for the Project by using fewer discrete project numbers.

The FY2019-20 adopted budget includes a total of \$162,149 for the Project. A future FY2019-20 budget adjustment may be recommended to provide funds for a CEQA/NEPA consultant to prepare the required environmental documents. It is anticipated that expenditures for preparation of environmental documents will be split evenly between MAA20-001 and MAA20-002.

The following tables outline the Measure AA allocations and costs to date related to Portfolio 19 (El Sereno: Dog Trails and Connections) and Portfolio 20 (South Bay Foothills: Wildlife Passage and Ridge Trail Improvements):

MAA Portfolio 19 El Sereno: Dog Trails and Connections	\$2,254,000
Life-to-Date Spent (as of 08/15/2019):	\$479,474
Encumbrances:	\$0
Balance Remaining:	\$1,774,527

MAA Portfolio 20 South Bay Foothills: Wildlife Passage and Ridge Trail Improvements	\$13,966,000
Life-to-Date Spent (as of 08/15/2019):	\$406,052
Encumbrances:	\$0
Balance Remaining:	\$13,559,948

BOARD COMMITTEE REVIEW

The first Planning and Natural Resources Committee Meeting for the Project was held on August 2, 2016 (R-16-95) in conjunction with a public meeting. The Committee reviewed the Preliminary Alternatives Report and four preliminary crossing alternatives. The Committee also received public feedback and engaged with regional partners and stakeholder agencies. On June 27, 2018, District staff presented eight crossing alternatives to the Board who authorized that all eight alternatives advance to Caltrans PSR-PDS (R-18-66).

PUBLIC NOTICE

Public notice was provided as required by the Brown Act. Public Notice was sent to the Project interested parties list on September 13, 2019 and is posted on the District webpage.

CEQA COMPLIANCE

If recommended by the Committee and authorized by the Board, approving the Caltrans PSR-PDS document and Cooperative Agreement for Caltrans PA&ED will initiate environmental

review. NEPA is the federal equivalent of CEQA and is required for the Project to seek federal funding. Caltrans has indicated that the District should be the lead agency for the crossings and trail connections. However, they have authority delegated to them by Federal Highways to act as a lead agency for NEPA (which the District does not). Completion of environmental review will determine preferred and environmentally superior Project alternatives. Environmental review is anticipated to begin in 2020 and anticipated to take 18-24 months for completion.

NEXT STEPS

If supported by the Committee, the General Manager will: 1) seek Board authorization to sign the final Caltrans PSR-PDS document, 2) forward to the Board for approval four alternatives crossings (two dedicated for wildlife, two for recreational trails) to be carried forward to the Caltrans PA&ED and 3) sign a Cooperative Agreement to begin the Caltrans PA&ED phase. District staff will continue to develop nonbinding letters of intent with NWF and Ridge Trail for authorization by the General Manager. Next, District staff will release a Request for Qualifications and Proposals to competitively select a consultant to prepare the required documents. Upon completion of environmental review, crossing(s) and trail alignments (the preferred Project alternative) will be brought before the Board for consideration to proceed with permitting and design.

Attachments

1. Draft Resolution
2. List of Project Alternatives and Project Evaluation Criteria
3. Map of Crossing Alternatives locations

Responsible Department Head:

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RESOLUTION 19-__

RESOLUTION OF THE BOARD OF DIRECTORS OF THE MIDPENINSULA REGIONAL OPEN SPACE DISTRICT AUTHORIZING THE GENERAL MANAGER TO EXECUTE A COOPERATIVE AGREEMENT WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR PREPARATION OF PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENTATION FOR WILDLIFE AND RECREATIONAL TRAIL CROSSINGS ON HIGHWAY 17

WHEREAS, the Midpeninsula Regional Open Space District (“District”) has been coordinating with the California Department of Transportation (“Caltrans”) to evaluate options for a Highway 17 crossing project with the goal of providing safe, regional wildlife and trail access across Highway 17 near the Lexington Reservoir south of Los Gatos; and

WHEREAS, Caltrans has determined the constructability of numerous alternatives for crossings of Highway 17; and

WHEREAS, two alternatives for a wildlife crossing and two alternatives for the regional trail crossing have been identified through this process and are recommended to advance to the next phase, known as the Caltrans Project Approval and Environmental Document (“PA&ED”); and

WHEREAS, the proposed approach for project environmental review includes evaluating four highway crossing alternatives (two for wildlife, two for trail use); and

WHEREAS, the District and Caltrans intend to enter into a cooperative agreement in order to complete the PA&ED for the proposed project.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Midpeninsula Regional Open Space District (“Board”) as follows:

1. The General Manager is authorized to execute a Cooperative Agreement with the California Department of Transportation for preparation of project approval and environmental documentation for wildlife and trail crossings on Highway 17.
2. The General Manager is authorized to execute any related documents on behalf of the District and to approve any technical revisions to the Agreement or related documents which are necessary or appropriate to effectuate the purposes of the Agreement.

PASSED AND ADOPTED by the Board of Directors of the Midpeninsula Regional Open Space District on _____, 2019, at a regular meeting thereof, by the following vote:

* * * * *

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

APPROVED:

Secretary
Board of Directors

President
Board of Directors

APPROVED AS TO FORM:

General Counsel

I, the District Clerk of the Midpeninsula Regional Open Space District, hereby certify that the above is a true and correct copy of a resolution duly adopted by the Board of Directors of the Midpeninsula Regional Open Space District by the above vote at a meeting thereof duly held and called on the above day.

District Clerk

Attachment 2. Highway 17 Project Alternatives and Evaluation Criteria

Table 1. Project Alternatives

Wildlife Only Crossing Alternatives:
1) Ravine Creek Under
2) Trout Creek Under
Combined Wildlife and Regional Trail Crossing Alternatives:
3) Southern Over
4) Montevina Under
5) Northern Over
Regional Trail Only Crossing Alternatives:
3a) Southern Over
4a) Montevina Under
5a) Northern Over

Table 2. Project Evaluation Criteria

Wildlife Crossing Criteria:
<ul style="list-style-type: none"> • Proximity to the identified wildlife corridor • Appropriate dimensions and design features • Provides habitat connectivity • Adequate Line of sight • Less human exposure • Accommodate Special Status Species
Regional Trails Crossing Criteria:
<ul style="list-style-type: none"> • Accommodate the full range of potential regional trail users • Provide as direct a connection as possible to the existing regional trail alignments • Provide a safe and enjoyable trail • Provide connection to a feasible trail route • Provide emergency vehicle access (near to, but not necessarily on structure)
Feasibility Criteria:
<ul style="list-style-type: none"> • Right of way needs • Location with fill or cut embankments • Environmental impact – avoid or minimize impact on natural or cultural resources • Soils and geology feasible for construction (includes landslide potential) • Can be designed to meet Caltrans standards • Feasible construction staging and traffic impacts • Impact on existing facilities (includes utilities) and operations • Groundwater/runoff/Drainage concerns • Public Support

