

COASTAL CONSERVANCY

Staff Recommendation
January 29, 2015

LIBERTY CANYON WILDLIFE CROSSING: ENVIRONMENTAL ASSESSMENT AND PROJECT DESIGN

Project No. 14-048-01
Project Manager: Deborah Ruddock

RECOMMENDED ACTION: Authorization to disburse up to \$1,000,000 to the California Department of Transportation for environmental assessment and design of a wildlife crossing near the interchange of U.S. 101 and Liberty Canyon Road in the City of Agoura Hills, and to enter into a joint powers agreement with the Santa Monica Mountains Conservancy.

LOCATION: Agoura Hills, Los Angeles County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

EXHIBITS

- Exhibit 1: [Project Location](#)
 - Exhibit 2: [Project Site](#)
 - Exhibit 3: [Photos](#)
 - Exhibit 4: [Project Letters](#)
-

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220 of the Public Resources Code, regarding integrated coastal and marine resources protection:

“The State Coastal Conservancy hereby authorizes the disbursement of one million dollars (\$1,000,000) to the California Department of Transportation (Caltrans) for environmental assessment and design of a wildlife crossing of U.S. 101 near Liberty Canyon Road in the City of Agoura Hills in Los Angeles County, and to enter into a joint powers agreement with the Santa Monica Mountains Conservancy to further this purpose, subject to the following conditions:

1. Prior to the disbursement of Conservancy funds for the project, Caltrans shall submit for the review and approval of the Executive Officer of the Conservancy (“Executive Officer”) a

final work plan, including the names of any contractors to be used in the completion of the project, a project schedule, and budget.

2. Prior to the disbursement of Conservancy funds for the project, the Conservancy and the Santa Monica Mountains Conservancy shall have entered into a joint powers agreement pursuant to Government Code section 6502, enabling the Conservancy to disburse funds for the project.”
3. Caltrans shall develop and complete designs for the wildlife crossing using the best available conservation science and datasets.
4. Prior to project completion, Caltrans shall submit for the review and approval of the Executive Officer a plan for monitoring and evaluating usage of the crossing and success in achieving project goals.

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.”

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a grant of \$1,000,000 to the California Department of Transportation (Caltrans) for environmental assessment and initial design of a safe wildlife crossing of US-101 at Liberty Canyon Road in the City of Agoura Hills in Los Angeles County (Exhibit 1). The National Wildlife Federation applied for the grant on behalf of Caltrans. The project site is located in the non-coastal zone portion of the Santa Monica Mountains but lies within the Upper Malibu Creek watershed, a coastal watershed that drains into Santa Monica Bay (Exhibit 2).

The crossing, a vegetated overpass or underpass, will restore safe wildlife travel along a corridor between the inland Sierra Madre Mountains and the coastal Santa Monica Mountains. The project’s primary beneficiary will be the Santa Monica Mountains mountain lion population, which is experiencing increased mortality, inbreeding, and declining health as a result of being “trapped” by the Highway 101 freeway (<http://www.latimes.com/science/sciencenow/la-sci-sn-mountain-lions-20140814-story.html>). The proposed project entails (1) preparation of environmental documents consistent with the California Environmental Quality Act (CEQA) and the National Environmental Planning Act (NEPA) and associated public outreach, and (2) preparation of initial engineering design plans for the crossing (done concurrently with the environmental document). Upon completion of the proposed project, Caltrans will adopt the

environmental document, select a preferred alternative – overpass or underpass -- and proceed to final engineering design.

Caltrans estimates the agency will complete work funded under the proposed authorization in mid-2017. Construction is forecast to be complete by late 2018. The crossing potentially would be the largest wildlife crossing in the world, spanning 10 lanes of freeway and 140 feet of asphalt.

Project Goal

The proposed wildlife crossing is intended to restore connectivity between large blocks of important wildlife habitat in the inland Sierra Madre Mountains and the coastal Santa Monica Mountains. The South Coast Missing Linkages Project and the California Essential Habitat Connectivity Project identify the proposed project location, a section of US-101 near Liberty Canyon Road, as a critical link in the corridor between the mountain ranges used by the mountain lion (*Puma concolor*) and other wildlife (Exhibit 3).

The report “South Coast Missing Linkages Project: A Wildland Network for the South Coast Ecoregion” describes an innovative conservation strategy designed to maintain landscape connectivity and provide southern California’s plant and animal life the essential habitat it needs for survival. The goal is to conserve existing connections that are essential travel routes for wildlife and key to protecting fundamental biological and ecological processes in the South Coast region, considered to be one of the 25 most important “hotspots” of biological diversity on earth. South Coast Wildlands, a science-based conservation planning organization, produced the report and continues to manage a collaborative effort to accomplish its goals. Partners include National Park Service (NPS), U.S. Forest Service, California State Parks, The Wildlands Conservancy, Conservation Biology Institute, and The Nature Conservancy (TNC).

The *California Essential Habitat Connectivity Project* was a highly-collaborative endeavor sponsored by Caltrans and California Department of Fish and Wildlife (CDFW). The project produced a statewide map depicting areas essential for habitat connectivity to help infrastructure, land use, and conservation planners maintain and restore a connected California, while at the same time making infrastructure planning projects more cost-efficient. One key project strategy is to minimize the effects of existing barriers through creation of wildlife crossings or fish passage structures.

The NPS has been collecting and publishing data on large carnivore movements for over a decade, validating the importance of the Sierra Madre – Santa Monica Mountains corridor for sustaining wildlife populations in the region and demonstrating that the busy Highway 101 is a formidable barrier to wildlife movement. Animals with large home ranges, such as mountain lions, are essentially trapped within the Santa Monica Mountains, resulting in inbreeding and high mortality rates (http://news.ucdavis.edu/search/news_detail.lasso?id=11005). Scientists and wildlife managers predict the mountain lion population will be extirpated without a safe Highway 101 crossing at the Liberty Canyon location. Loss of the region’s top predator will have significant negative consequences for the entire ecosystem.

The proposed wildlife crossing was envisioned more than a decade ago as a means of restoring the critical link in the regional migration corridor (See “Project History”). However, the recent death of a male mountain lion while trying to cross the highway near Liberty Canyon Road has given new urgency to the project (<http://articles.latimes.com/2013/nov/06/local/la-me-1105->

[mountain-lion-dna-20131106](#)). The Wildlife Conservation Board (WCB) unanimously approved a grant of \$650,000 to the Resource Conservation District of the Santa Monica Mountains (RCDSMM) for the first phase of the wildlife crossing project at its meeting on Nov. 20, 2014. The project, intended as an interim fix until a permanent overpass or underpass can be constructed, will replace and relocate fencing to keep wildlife off the freeway and will widen and improve an existing dirt underpass to entice mountain lion and other wildlife to move between protected open spaces on both sides of the freeway. To assist with planning the permanent crossing, the Santa Monica Mountains Conservancy (SMMC) has committed to providing \$200,000 for preparation of Caltrans' Project Study Report, which discusses project purpose, need, and objectives and identifies potentially feasible alternatives based on cost, schedule, and funding. The report will inform environmental assessment and project design activities funded by the proposed Coastal Conservancy grant.

Caltrans estimates cash needs of approximately \$3 million to cover pre-construction project costs. In addition to funds committed by SMMC and the proposed Conservancy authorization, the National Wildlife Federation (NWF) is committed to raising \$2,000,000 through private donations and grants for final design, specifications, and estimates for the selected crossing alternative and another \$300,000 for ongoing research, education and outreach activities.

In addition, Caltrans will provide staff support valued at \$200,000 for planning and design activities and NPS will contribute approximately \$500,000 of federal in-kind services for science that will contribute to environmental assessment of the wildlife crossing.

Construction costs are unknown at this time and depend on the crossing alternative selected.

Project support letters are included in Exhibit 4.

Joint Powers Agreement

The project site is located within the geographic jurisdiction of the SMMC, outside of the coastal zone (as defined in Public Resources Code section 30103). Public Resources Code Section 33201(c) limits the Conservancy's jurisdiction in the Santa Monica Mountains to the coastal zone. California Government Code Section 6502 authorizes public agencies to jointly exercise, by agreement, any power common to the agreeing agencies regardless of whether one or more of the agencies lacks geographic jurisdiction. The proposed joint powers agreement would enable the Conservancy to join the SMMC in providing grant funding for the proposed project.

Site Description: The proposed project is located in Agoura Hills in northwestern Los Angeles County. Highway 101, which runs east and west through this area from the LA Basin to Ventura, is the largest barrier to mountain lions and other wildlife moving between large blocks of native habitat in the Santa Monica Mountains to the south and the Simi Hills, and the Los Padres National Forest beyond, to the north. The physical and topographical characteristics of the Liberty Canyon area make this site an ideal location for a sustainable wildlife crossing of Highway 101. It is one of the few remaining stretches of Highway 101 with undeveloped, permanently protected public land on the north and the south sides of the freeway. The high quality habitat on these lands consists of coast live oak woodland and chaparral. A small stream with riparian habitat flows north to south down Liberty Canyon, crossing Highway 101 through a culvert near the interchange.

The proposed project is located within the Santa Monica Mountains National Recreation Area (SMMNRA), the largest urban national park in the country. Its 150,000 acres of mountains and

coastline in Los Angeles and Ventura counties is a network of local, state, and federal parks connecting through private lands and communities. SMMNRA is part of a globally rare Mediterranean ecosystem that is exceptionally bio-diverse, with more than 450 animal species and 26 distinct plant communities.

Project History: The South Coast Missing Linkages Project identifies the need to preserve and enhance the wildlife corridor between the Sierra Madre and Santa Monica mountain ranges, in light of existing land use pressures and in the context of climate change. The California Essential Habitat Connectivity Project, commissioned by Caltrans and the California Department of Fish and Wildlife with the support of the Federal Highway Administration, also prioritizes protection of this corridor. Further, the NPS has been collecting and publishing data on large-carnivore movements for over a decade, and in 2005 published a study showing Highway 101 is an impenetrable genetic barrier for large carnivores as they attempt to migrate into or out of the Santa Monica Mountains. For the past decade, Caltrans and other public agencies and officials have been collaborating to increase awareness of the importance of protecting this critical linkage and secure funding for this purpose. Caltrans' partners include NWF, NPS, SMMC, Mountains Recreation and Conservation Authority (MRCA), US Fish and Wildlife Service, CDFW, California State Parks, RCDSMM, and local municipalities, including the City of Agoura Hills, the proposed project location.

Several attempts at securing grant funds were unsuccessful, but the 2013 killing of a mountain lion while attempting to cross Highway 101 just east of the Liberty Canyon Road interchange gave new urgency to the agencies' mission. The lion was presumed to be from the San Gabriel Mountains based on genetic data. Subsequently Senator Fran Pavley and SMMC hosted an interagency meeting with Caltrans, the City of Agoura Hills, the NPS, and the RCDSMM to discuss the status of the Liberty Canyon wildlife crossing plan and how to move forward. During 2014, SMMC pledged \$200,000 for Caltrans to study overcrossing and undercrossing alternatives. SMMC is also working with adjacent property owners at the Liberty Canyon Road-Highway 101 intersection to enhance the area for wildlife connectivity. NWF has developed the #SaveLACougars program to coordinate the ongoing efforts for the Liberty Canyon Crossing Project, and is working with the Santa Monica Mountains Fund to engage the public. The Coastal Conservancy was invited to join a regional meeting hosted by NWF in September, 2014 in an effort to leverage all potential funding muscle, as no single agency has all of the financial resources needed to cover the entire costs of the crossing. If the Conservancy approves the proposed authorization, this will be the second time the Conservancy has awarded a grant for a project in the non-coastal zone portion of the Santa Monica Mountains.

PROJECT FINANCING

Coastal Conservancy	\$1,000,000
Project Total	\$1,000,000

The anticipated source of funding is a 2004 appropriation to the Conservancy from the Habitat Conservation Fund (HCF). The HCF was established by Proposition 117, the California Wildlife Protection Act of 1990, Fish and Game Code section 2780, *et seq.* HCF funds are available for

the acquisition of habitat necessary to protect deer and mountain lions. Proposition 117 declares that protection, enhancement and restoration of wildlife habitat is vital to maintaining the quality of life in California, and that wildlife populations are becoming isolated and forced to depend upon shrinking habitat areas within the heavily urbanizing areas of the state. Proposition 117 also declares that: “[c]orridors of natural habitat must be preserved to maintain the genetic integrity of California’s wildlife.” Fish and Game Code section 2780. Agencies are required to give special preference to projects that will “serve as corridors linking otherwise separated habitat so that the genetic integrity of wildlife populations will be maintained.” Fish and Game Code section 2789. The proposed project will fund the planning necessary to acquire a new wildlife corridor that will link two habitat areas and that is critical to maintain the genetic integrity of mountain lions and prevent their extirpation. Thus, the proposed project is an appropriate use of HCF funds.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, which authorizes the Conservancy to undertake coastal watershed and coastal habitat protection and restoration projects. Consistent with section 31220 (b)(7), the proposed project will reduce the impact of population and economic pressures on coastal habitats by funding the planning for a wildlife crossing over Highway 101 in the coastal Upper Malibu Creek watershed, thereby reducing urban population pressures and traffic impacts on mountain lions and the Santa Monica Mountains ecosystem within which they shelter, mate, breed, and forage. Consistent with section 31220(c), the proposed project includes the evaluation of alternative approaches to facilitating wildlife movement across Highway 101 and identification of monitoring necessary in a future implementation project to monitor and evaluate the effectiveness of the crossing.

CONSISTENCY WITH CONSERVANCY’S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 4, Objective C** of the Conservancy’s 2013-2018 Strategic Plan, the proposed project will help preserve and restore a critical wildlife corridor between core habitat areas of the inland Sierra Madre and the coastal Santa Monica mountain ranges by funding planning and initial design for a wildlife crossing.

Consistent with **Goal 5, Objective A**, the proposed project consists of development of a plan to enhance genetic diversity of mountain lions in the Upper Malibu Creek watershed, a coastal watershed of the Santa Monica Mountains, by restoring a key habitat corridor for the carnivore.

Consistent with **Goal 7, Objective A**, the proposed project will enhance the resiliency of the Santa Monica Mountains and Sierra Madre Mountains mountain lion populations to climate change by funding the cooperative planning and initial design necessary to remove a migration barrier for the carnivore.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Promotion and implementation of state plans and policies:** By funding planning of a wildlife crossing, the proposed project serves to promote and implement several state plans, including:

California @ 50 Million: The Environmental Goals and Policy Report (Governor's Office of Planning and Research 2013 draft). The "Preserve and Steward State Lands and Natural Resources" section calls for working to increase biodiversity and helping natural systems recover from disruption. Action #3 calls for building resilience in natural systems to help them adapt to climate change and notes the importance of maintaining wildlife corridors. Action #4 calls for "innovative land use planning to balance multiple objectives...especially in light of projected population growth and climate stresses." The proposed wildlife crossing will balance wildlife, land use, and transportation needs.

California Essential Habitat Connectivity Project (Caltrans and CDFW, 2010). The Project was a highly-collaborative endeavor sponsored by Caltrans and CDFW. The Project produced a statewide map depicting areas essential for habitat connectivity to help infrastructure, land use, and conservation planners maintain and restore a connected California, while at the same time making infrastructure planning projects more cost-efficient. One key Project strategy is to minimize the effects of existing barriers through creation of wildlife crossings or fish passage structures.

California Wildlife Action Plan (CDFW, 2005). For the South Coast Region, the plan recommends federal, state, local agencies, and non-profit organizations work to protect priority wildlands linkages identified by the South Coast Missing Linkages project to address regional habitat fragmentation. The plan also recommends transportation corridors should be retrofitted to better accommodate wildlife.

Safeguarding California: Reducing Climate Risk (California Natural Resources Agency (CNRA), 2014). The CNRA climate change strategy document states that given future predicted climate change "species will need to move significant distances, and they may encounter substantial barriers to such movement. Addressing these barriers can be an important part of preparing for climate risks to biodiversity." One action recommended to safeguard biodiversity and habitats from climate change impacts is improving habitat connectivity to aid species migration and movement and propagation of ecological processes across the landscape.

AB 857 State Planning Priorities (2002). The proposed project is consistent with Priority #2, “protect environmental and agricultural resources, wildlands, recreational lands, and landscapes with locally unique features and areas identified by the state as deserving special protection.” The proposed project will restore a critical link in a wildlife corridor prioritized in state and regional plans as deserving protection, including California @50 million, the Essential Habitat Connectivity Project, and the California Wildlife Action Plan.

4. **Support of the public:** The proposed project is supported by Congresswoman Julia Brownley, former Congressman Henry Waxman, State Senator Fran Pavley, Los Angeles County Supervisor Sheila Kuehl, Ventura County Board of Supervisors, City of Thousand Oaks, NWF, TNC, and SMMC. More than 30,000 people from across the country have signed a NWF petition supporting this wildlife crossing: https://online.nwf.org/site/Advocacy?cmd=display&page=UserAction&id=1999&autologin=true&subsrc=Web_Sidebar_Action_MountainLion1999. More than 300 people attended a supportive local rally in September.
5. **Location:** The proposed project is located outside of the coastal zone. However, it is located in the Upper Malibu Creek watershed, a coastal watershed. The proposed project’s primary goal is to enhance a coastal resource -- the Santa Monica Mountains ecosystem -- by facilitating the increased genetic diversity and improved health of the region’s mountain lion population.
6. **Need:** Time is running out for the mountain lions who roam the north-south corridor between the Sierra Madre and Santa Monica Mountains, as recent studies demonstrate alarmingly low levels of genetic diversity. The cost of a wildlife corridor spanning 10 lanes of freeway is too high to be funded by transportation agencies or by resource agencies alone. The proposed authorization for planning and initial design tasks will enable cooperating agencies to take advantage of broad and increasing public support and leverage multiple funding commitments to more readily position the project for implementation funding.
7. **Greater-than-local interest:** State funding is appropriate for this project because it will implement state planning goals as discussed in required criteria number 3 above. The project will also support regional conservation goals for habitat connectivity and transportation safety.
8. **Sea level rise vulnerability:** The proposed authorization is for planning and initial design tasks only involving a site outside of the coastal zone.

Additional Criteria

9. **Urgency:** Time is running out for the mountain lions in the Santa Monica Mountains region, as recent studies demonstrate alarmingly low levels of genetic diversity.
10. **Resolution of more than one issue:** The proposed project will help increase the genetic diversity of the mountain lion population in the region, provide a migration pathway to accommodate climate change, increase traffic safety, and support key state conservation policy goals.

11. **Leverage:** See the “Project Financing” section above.
12. **Conflict resolution:** The proposed project will eliminate conflicts between wildlife and vehicles.
14. **Readiness:** Development of the SMMC-funded Project Study Report is underway.

COMPLIANCE WITH CEQA:

The proposed project consists of data gathering and the preparation of environmental documents and initial engineering designs. As such, the proposed project is statutorily and categorically exempt from the California Environmental Quality Act (CEQA) pursuant to the following sections of 14 Cal. Code of Regulations: (1) Section 15262, in that it involves only feasibility or planning studies for possible future actions which the Conservancy has not approved, adopted, or funded; and (2) Section 15306, in that it involves basic data collection, research, and resource evaluation activities that will not result in any disturbance to an environmental resource, and which will be undertaken as part of a study leading to an action which the Conservancy has not yet approved, adopted, or funded. Environmental factors will be considered during implementation of the proposed project as required by Section 15262. Staff will file a “Notice of Exemption” upon Conservancy approval of the project.