

COASTAL CONSERVANCY

Staff Recommendation
May 05, 2020

Liberty Canyon Wildlife Crossing Engineering Designs

Project No. 14-048-02
Project Manager: Emely Lopez

RECOMMENDED ACTION: Authorization to disburse up to \$1,000,000 to the National Wildlife Federation to prepare engineering designs and construction specifications for a wildlife crossing that will connect the Santa Monica Mountains to the Sierra Madre Range over US-101 and Agoura Road, west of Liberty Canyon Road, in the City of Agoura Hills.

LOCATION: Agoura Hills, Los Angeles County

PROGRAM CATEGORY: Integrated Coastal and Marine Protection

EXHIBITS

- Exhibit 1: [Project Location Map](#)
- Exhibit 2: [Project Photos](#)
- Exhibit 3: [Initial Study/Mitigated Negative Declaration](#)
- 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:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed one million dollars (\$1,000,000) to the National Wildlife Federation (“the grantee”) to prepare engineering designs and construction specifications for a wildlife crossing that will connect the Santa Monica Mountains to the Sierra Madre Range over US-101 and Agoura Road west of Liberty Canyon Road in the City of Agoura Hills.

This authorization is subject to the following conditions:

Prior to the commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.
3. A plan for acknowledgment of Conservancy funding.”

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 Protection.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The National Wildlife Federation is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.
4. As a responsible agency, the Conservancy has independently reviewed and considered the “Initial Study with Mitigated Negative Declaration for the Liberty Canyon Wildlife Habitat Connectivity Project” (MND) adopted by the California Department of Transportation on April 12, 2018, pursuant to the California Environmental Quality Act (CEQA). The MND is attached to the accompanying staff recommendation as Exhibit 4. The Conservancy finds that based on the record as a whole, there is no substantial evidence that the Liberty Canyon Wildlife Habitat Connectivity Project, as mitigated, will have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382.”

PROJECT SUMMARY:

Staff recommends the Conservancy authorize disbursement of up to \$1,000,000 to the National Wildlife Federation (NWF) to prepare engineering designs and construction specifications for the Liberty Canyon Wildlife Crossing, which will connect the Santa Monica Mountains to the Sierra Madre Range over the of US-101 west of Liberty Canyon Road in the City of Agoura Hills (Exhibit 1). NWF will work with Caltrans and the City of Agoura Hills, the landowner, to prepare engineering designs for the wildlife crossing. The wildlife crossing will consist of a vegetated bridge above US-101 and Agoura Road to restore safe wildlife movement along a corridor between large blocks of important wildlife habitat in the inland Sierra Madre Range and the coastal Santa Monica Mountains.

The wildlife crossing’s primary beneficiary will be the mountain lion (*Puma concolor*) population in and around the Santa Monica Mountains. There are approximately 10 to 15 mountain lions remaining in this area, and the habitat fragmentation caused by US-101 causes inbreeding, territorial fighting, decreased genetic diversity, and declining health amongst the mountain lions. Scientists and wildlife managers predict the mountain lion population in the Santa Monica Mountains will be extinct in the next 50 years without a safe US-101 crossing at the Liberty Canyon location in the City of Agoura Hills. The loss of the region’s top predator will have

significant negative consequences for the entire ecosystem. The project will also enhance motorist safety by reducing vehicle collisions with wildlife on US-101.

US-101, a highly utilized highway in Los Angeles, acts as a significant barrier to the movement of both small and large species between the Santa Monica Mountains and the Sierra Madre Range, resulting in habitat fragmentation. Not only does the US-101 impact the genetic health of mountain lions, but it also compromises the genetic health of smaller creatures such as bobcats, coyotes, salamanders, and lizards. However, the loss of the apex predator in the Santa Monica mountains will impact the natural functions of the land.

The National Park Service (NPS) has been studying mountain lions and their ecology and behavior since 2002. The habitat fragmentation in the Santa Monica Mountains results in mountain lions having decreased genetic diversity and increased mountain lion mortality from territorial conflicts and vehicle collisions. Mountain lions are territorial animals, and their inability to disperse across the highway increases their aggression and social interaction with humans. Territorial conflicts between mountain lions have resulted in the death of eight mountain lions in the area south of the US-101 in the last 18 years, a much higher rate than would be expected in a population where young males have the ability to disperse to new territories. From early in the NPS's study intraspecific conflict was a major source of mortality, specifically adult male mountain lions killing other males, and in some cases females, even those they may have mated with.

The highway barrier also results in mountain lion deaths from vehicle collisions. NPS documented 17 mountain lion deaths from vehicle collisions between 2004 and 2017. A 2018 report by the University of California Davis Road Ecology Center identified the US-101 in the area of the wildlife crossing as a Statewide Wildlife-Vehicle Conflict Hotspot. Mountain lions also run the risk of mortality by police who must kill the mountain lions when they are perceived to be a threat to public safety.

Additionally, the recent fires in the region make the need for connecting this landscape with a wildlife crossing even more critical. As the Woolsey Fire burned 88% of NPS land in the Santa Monica Mountains and 47% of the total land within the Santa Monica Mountains National Recreation Area, this loss of habitat further reduced available mountain lion habitat and increased habitat fragmentation.

The wildlife crossing is expected to address the habitat fragmentation issues mountain lions and other smaller creatures such as bobcats, coyotes, salamanders, and lizards experience. The physical and topographical characteristics of the Liberty Canyon area make this site an ideal location for habitat linkage and safe wildlife crossing of the US-101 to the Sierra Madre Range. Liberty Canyon is one of the few remaining stretches of US-101 with undeveloped, permanently protected public land on the north and south sides of the freeway. The crossing will potentially be the largest wildlife crossing in the world, spanning ten lanes of the freeway and Agoura road. It will consist of a 165-foot wide by a 200-foot long bridge over US-101. The crossing will also include fencing at either end to direct wildlife to the crossing, increasing its effectiveness. The wildlife crossing and habitat linkage is approximately eight acres.

Through the environmental review process, Caltrans identified an overpass conceptual design for the Liberty Canyon wildlife crossing that will avoid significant environmental impacts (Exhibit 2). The proposed project entails building on the conceptual designs to complete engineering designs and specifications to 60% final engineering plans (blueprints), engineering designs, plans, and estimates. This is expected to be completed by Caltrans November 2020. NWF will manage communications and billing with Caltrans and will direct the stakeholder group that is guiding Caltrans in their design. If Conservancy funding is provided and engineering design proceeds as planned, Caltrans estimates it will complete construction of the wildlife crossing by fall 2023. The grantee anticipates that funding for construction will come from the California Wildlife Conservation Board and other partners. The final engineering designs and specifications and public bidding will influence the cost of construction.

Site Description:

The proposed wildlife crossing will be over US-101 and Agoura Road west of Liberty Canyon Road in Agoura Hills, CA. Caltrans owns and manages US-101, and the City of Agoura Hills owns and manages Agoura Road. The area adjacent to the wildlife crossing supports high-value coast live oak woodland and chaparral, as well as a small stream with riparian habitat flowing north to south down Liberty Canyon, crossing US- 101 through a culvert near the interchange (Exhibit 2).

The project is located within the Santa Monica Mountains National Recreation Area (SMMNRA), the largest urban national park in the country. SMMNRA's 150,000 acres of mountains and coastline extend from the Hollywood Bowl to Point Mugu in Ventura County. The Recreation Area is a network of local, state, and federal parks connecting through private lands and communities. SMMNRA includes a globally rare Mediterranean ecosystem that is exceptionally bio-diverse, with more than 450 animal species and 26 distinct plant communities. The Santa Monica Mountains connect to Simi Hills to the south, and the Los Padres National Forest beyond to the north, which are protected and undeveloped mountains.

Grantee Qualifications:

The NWF protects and restores wildlife populations of both game and nongame species. Operating for 83 years, NWF is one of the United States' largest and most influential non-profit wildlife conservation, education and advocacy organizations with more than six million members and supporters across the country. Its work includes restoring key public and tribal lands in the west and working with local ranchers and tribal members to make restoration successful in their communities. The NWF has long been focused on protecting the most vulnerable of our wild species and is committed to defending, strengthening, funding, and ensuring effective implementation of the Endangered Species Act and other wildlife laws to a maximum benefit of fish and wildlife populations. Additionally, the NWF has experience managing state and federal grants and has annual budget of over \$100 million, and a successful track record of large-scale conservation work, such as multi-million-dollar large scale projects in the Great Lakes, Chesapeake Bay, and the Gulf Coast.

This project is a public and private partnership, and NWF was invited by the other project partners to fill several needed roles such as taking primary responsibility for fundraising,

education, advocacy, public engagement and conservation assistance. NWF has also taken responsibility for overall project management for the partner team and long experience of collaborating with government agencies, other nonprofits, businesses, community organizations and individuals to achieve significant conservation outcomes has already enabled this project to move forward.

Project History:

In 2014, the Coastal Conservancy granted \$1,000,000 (later amended to \$1,150,000) to the California Department of Transportation for environmental assessment and initial designs of the proposed Liberty Canyon wildlife crossing. The project entailed preparation of environmental documents consistent with the California Environmental Quality Act and the National Environmental Planning Act, associated public outreach, and preparation of initial engineering design plans for the crossing.

In addition, the Conservancy has funded numerous projects to protect wildlife habitat and watersheds in the SMMNRA. The proposed project would represent an additional investment to maintain the health of wildlife species in the SMMNRA by reducing habitat fragmentation to benefit these species.

Joint Powers Agreement:

The project site is located within the geographic jurisdiction of the Santa Monica Mountains Conservancy (SMMC), but 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 lack geographic jurisdiction. In June 2015, as part of the Conservancy’s first grant to Caltrans for the Liberty Canyon Wildlife Crossing, the Conservancy and SMMC entered into a Joint Powers Agreement (JPA) that authorizes the Conservancy to award grants that support the wildlife crossing at Liberty Canyon Road. The SMMC is supportive of the project.

PROJECT FINANCING

Coastal Conservancy	\$1,000,000
Santa Monica Mountains Conservancy	\$3,000,000
National Wildlife Federation	\$1,320,000
Project Total	\$5,320,000

The expected source of Conservancy funds for the proposed project is an appropriation to the Conservancy from the Habitat Conservation Fund (“HCF”) established by the California Wildlife Protection Act of 1990 (Proposition 117, Fish and Game Code §2780 et seq). Fish and Game Code Section 2789 states that, in areas where habitats are isolated or fragmented, agencies must give preference to projects that will serve as corridors linking otherwise separated habitat so that the genetic integrity of wildlife populations will be maintained. The proposed project

will serve as a corridor across US-101 to link habitat that would otherwise be separated for mountain lions, deer, and other species.

In addition to the funding sources identified above, the NWF team has a volunteer coordinator for the #SaveLACougars campaign. They have contributed thousands of hours to outreach, advocacy, education, events, as well as more specialized areas such as pro bono legal help and marketing. Additionally, all five project partners (Caltrans, NPS, SMMC, Mountains Recreation and Conservation Authority, and Resource Conservation District of the Santa Monica Mountains) have contributed thousands of unfunded hours to the project development. To the specific design portion of the project, NWF partnered with worldwide experts in wildlife crossings: ARC—Animal Road Crossings and the Western Transportation Institute to provide a pro bono design workshop. Both organizations and their team continue to provide pro bono guidance and review for NWF and the project.

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 engineering designs and specifications for construction of a wildlife crossing over US-101 in the Malibu Creek watershed. The wildlife crossing will reduce 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 construction of the Liberty Canyon Wildlife Crossing will include a monitoring and evaluation component as required in the MND.

CONSISTENCY WITH CONSERVANCY'S [2018-2022 STRATEGIC PLAN](#) GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 5, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will facilitate the restoration of a critical wildlife corridor between core habitat areas of the inland Sierra Madre Range and the coastal Santa Monica Mountains by funding engineering design work for a wildlife crossing.

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:**

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.

California @ 50 Million: The Environmental Goals and Policy Report (Governor’s Office of Planning and Research 2015). The “support landscape-scale approaches to conservation and mitigation that account for multiple benefits” section calls for protecting the health of habitats. The project will further that strategy by facilitating gene flow and movement of organisms between habitats, thereby increasing the resiliency of those habitats to disturbances and degradation.

California Essential Habitat Connectivity Project (Caltrans and CDFW, 2010) The Habitat Connectivity Project was a highly collaborative endeavor sponsored by Caltrans and California Department of Fish and Wildlife. It 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. The Liberty Canyon project furthers a key strategy of the California Essential Habitat Connectivity Project by minimizing the effects of existing barriers through the creation of a wildlife crossing.

California Wildlife Action Plan (CDFW, 2015). The California Wildlife Action plan recommends wildlife managers to work collaboratively to protect and maintain the population of species on fragmented and smaller areas and provide more intensive through either management, environmental review, conservation planning, monitoring, mitigation project design, and habitat restoration work. Additionally, a statewide goal is to reduce the stresses on these habitats and ecological processes including habitat fragmentation, loss, and degraded functioning, all stresses of which the mountain lion is experiencing south of US-101.

4. Support of the public:

The project has a broad support network (see Exhibit 5). The project has a dedicated coalition, called Liberty Wildlife Corridor Partnership, built with a wide variety of support from the public, private sector, non-profits, and agencies. The five primary partners that serve on the coalition are as follows: Caltrans, Santa Monica Mountains Conservancy, Mountains Recreation, and Conservation Authority, National Park Service, and the Resource Conservation District of the Santa Monica Mountains. NWF leads the #SaveLACougars campaign through education, outreach, and advocacy events with the public and private philanthropy. More than 30,000 people from across the country have signed the NWF petition supporting this wildlife crossing.

The City of Agoura Hills, the landholder holders of Agoura Rd, passed a resolution supporting the project. Surrounding cities, including Malibu, Calabasas, and Thousand Oaks have also passed similar declarations, and the Southern California Association of

Governments, the nation's largest metropolitan planning organization, representing six counties, 191 cities, and more than 18 million residents, also passed a resolution in favor of the project.

The completion of the wildlife crossing site is strongly supported by State Senator Fran Pavley (retired), Los Angeles County Supervisor Sheila Kuehl, Ventura County Supervisor Linda Parks, Congressman Ted Lieu, State Senator Henry Stern, and Assembly member Richard Bloom.

Support for this wildlife crossing also extends around the world—people around the country and across the globe have made donations to the project and acted to urge its completion—over 2,000 people have made donations to the campaign, from locations from Hong Kong to Kansas, and over 75,000 signed a petition on Change.org in support of the proposed crossing.

5. **Location:** The proposed project is located outside of the coastal zone. However, it is within the Malibu Creek watershed, a coastal watershed. The proposed project's primary goal is to enhance a coastal resource in the Santa Monica Mountains through increasing genetic diversity and improved health of the region's mountain lion population.
6. **Need:** The mountain lions who roam the north-south corridor between the Sierra Madre Range and Santa Monica Mountains demonstrate alarmingly low levels of genetic diversity in recent studies. The cost of a wildlife corridor spanning ten lanes of the freeway is too high to be funded by transportation agencies and resource agencies alone. The proposed authorization for engineering design and planning 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:** Loss of the region's top predator will have significant negative consequences for the entire ecosystem in the Santa Monica Mountains. The project will also improve motorist safety on US-101, which is important for statewide and interstate transportation.
8. **Sea level rise vulnerability:** The proposed project site is outside of the coastal zone and is at an elevation that will not be affected by sea-level rise.

Additional Criteria

9. **Urgency:** Recent studies demonstrate alarmingly low levels of genetic diversity for the mountain lions in the Santa Monica Mountains. It is time to address this issue before they go extinct. Additionally, planning and permitting for various aspects of the project are underway. Climate change and increased wildfire frequency are also making this project more urgent by increasing the need for habitat connectivity and wildlife corridors.
10. **Leverage:** See the "Project Financing" section above.
11. **Conflict resolution:** The proposed project will reduce conflicts between wildlife and vehicles, thereby reducing fatalities for both animals and humans.

12. **Innovation:** Wildlife crossing structures are an innovative approach to maintaining wildlife movement as development leads to the increasing fragmentation of wilderness and natural corridors. Wildlife crossings have been constructed in Canada, Germany, and the Netherlands, but few have been constructed in the US.
13. **Readiness:** The project is ready to start the design phase as soon as funding becomes available.
14. **Vulnerability from climate change impacts other than sea-level rise:** The project aims to address the loss of mountain lion genetic diversity because of habitat fragmentation caused by US-101. Maintaining the genetic diversity of mountain lions is important to maintaining the resiliency of populations in the face of climate change, which is expected to result in increasing temperatures, droughts, and disease.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

The project does not conflict with the following Local Watershed Management Plan or State Water Quality Control Plan:

- (1) Integrated Watershed Management Program established pursuant to Section 30947.
- (2) Local watershed management plans.
- (3) Water quality control plans adopted by the State Water Resources Control Board and regional water quality control boards.

The *Watershed Management Area Plan for the Malibu Creek* supports this project and acknowledges that fragmentation and isolation of habitat units within the watershed continue to threaten the existence of key species. Fragmented areas become “islands of habitat and the rich diversity within them declines. However, without a link to upland habitats, these areas become islands of habitat and the rich diversity within them declines. Therefore, it is crucial that linkages between key resource areas and adjacent upland habitats are maintained to stem the loss of biodiversity within the MCW and to protect the long-term health and viability of watershed ecosystems.”

CEQA COMPLIANCE:

On April 12, 2018, Caltrans adopted an MND for a wildlife crossing overpass design over both Highway 101 and Agoura Road and determined that it will not have significant impacts on the environment as mitigated. The MND identified potential effects of the Liberty Canyon Crossing in the areas of biological resources, hydrology and water quality. The MND identifies mitigation measures to avoid, reduce or mitigate all the possible significant environmental effects to less than significant. The project’s potential significant effects and mitigation measures, summarized below, are set forth in the Avoidance, Minimization, and/or Mitigation Summary in the MND (Exhibit 4).

Biological Resources:

The project creates temporary impacts to 0.80 acres of Waters of the U.S. because they may be filled, flooded, excavated, or drained during pre-construction, but then restored after

construction. The temporary impacts will be mitigated by using temporary construction staging areas and access roads will be strategically placed to avoid and/or minimize impacts to the extent feasible and are expected to be enhanced to pre-project conditions. Work within the drainage will be minimized and the underground reinforced concrete box culvert and reinforced cement concrete drainage system remain in place. Any work within the drainages will be conducted when there is no flow during the dry season (April 15-October 31). All appropriate Stormwater and Erosion Best Management Practices (BMPs) will be incorporated into the project specifications. Prior to the start of construction all drain inlets and outlets will be protected with BMP's to prevent construction materials and debris from entering drainages. BMPs should be implemented to the Maximum Extent Practicable. They will be in place before and during project construction.

Hydrology and Water Quality:

The project is located near a drainage and a creek and the project could have impacts on water quality and drainage patterns that could result in erosion, siltation, or increased surface runoff. The proposed project may impact existing drainage patterns. The drainages will be relocated to avoid impacts to jurisdictional features, if feasible. If it is not feasible to relocate the drainages, the access road width and work within the drainage will be minimized. The two unnamed drainages merge into a culvert under Agoura Road and then drain into an underground, reinforced concrete box culvert and reinforced concrete drainage system on the southbound side of US-101 which maintains hydrologic integrity and supports wildlife movement. The BMPs described in the Biological Resource section will be in place before and during project construction to avoid any water quality impacts. These mitigation measures will reduce the potential impacts to less than significant.

Conclusion:

Staff has independently evaluated the MND for the proposed project and concurs that there is no potential for significant environmental impact. Additionally, the overall function and value of the area, within the context of wildlife movement, is expected to improve with the addition of the proposed wildlife bridge. Accordingly, staff recommends that the Conservancy find that there is no substantial evidence that the Liberty Crossing project, as mitigated, will have a significant effect on the environment as that term is defined by 14 Cal. Code Regs. §15382.

Upon approval of the project, Conservancy staff will file a Notice of Determination.