

September 26, 2014

Andrew Keller
Southern California Edison
1218 South 5th Avenue
Monrovia, CA 91016

Subject: Biological Assessment
Million Gallon Tank Repair Project
Catalina, California

Dear Mr. Keller:

Southern California Edison (SCE) is proposing repairs to the Million Gallon Tank (MGT) located above Two Harbors on Santa Catalina Island, in Los Angeles County, California (see Figure 1). LSA Associates, Inc. (LSA) reviewed potential impacts associated with the proposed repair activities and identified no major constraints. However, some native vegetation is likely to be impacted. Representative photographs of the project site are provided as an attachment.

Methods

On September 10, 2014, LSA biologist Richard Erickson conducted a reconnaissance-level survey of the MGT work area. Information on special-status species and habitats of the island was obtained from the California Natural Diversity Database (CNDDB), Amphibian and Reptile Species of Special Concern in California,¹ California Bird Species of Special Concern,² Terrestrial Mammal Species of Special Concern in California,³ and other sources.

Field Survey Results

The MGT is on a gentle ridge at the end of an existing road system. The immediate area around the tank is highly disturbed with only a minimal amount of ruderal vegetation. That area will be used to accommodate work equipment and a number of temporary water tanks to be used while the MGT is empty for repairs. Vegetation surrounding this work area is primarily ornamental and nonnative, and will not be impacted during repairs. The tree and shrub species include eucalyptus (*Eucalyptus* sp.), pine (*Pinus* sp.), Canary Island date palm (*Phoenix canariensis*), sugar bush (*Rhus ovata*), and lemonade berry (*Rhus integrifolia*).

¹ Jennings, M.R., and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. California Department of Fish and Game, Sacramento.

² Shuford, W.D., and T. Gardali, editors. 2008. California Bird Species of Special Concern, Studies of Western Birds 1.

³ Bolster, B., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft final report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey, and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No.FG3146WM.

Three laydown areas for materials and equipment are located up the ridge next to the road. Two of the areas were already in use for storage, and the third appeared to have been used in the past. All three were vegetated with ruderal grasses and herbs. A patch of coastal prickly pear (*Opuntia littoralis* var. *littoralis*) was present in one area and had been avoided in the placement of materials there.

About 400 feet (ft) of above-ground pipeline associated with the MGT is also in need of repair. The pipeline descends the steep slope to the north of the tank before going underground beneath the access road to the USC marine lab. Vegetation around the pipeline includes toyon (*Heteromeles arbutifolia*) and native and nonnative grasses. Trimming of the toyon will likely be required in order to access some of the pipe supports in need of repair.

Wildlife species detected during the survey included the red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), Santa Catalina Island fox (*Urocyon littoralis catalinae*), and mule deer (*Odocoileus hemionus*; not native to Catalina).

Potential Special-Status Species Occurrence

As discussed below, evidence of one special-status species was found at the project site, the endangered Santa Catalina Island fox (*Urocyon littoralis catalinae*).

Threatened/Endangered Species. The literature review revealed six threatened or endangered species with the potential to occur on the island: the federally listed as endangered and State-listed as threatened Santa Catalina Island fox; the State- and federally listed as endangered Lyon's pentachaeta (*Pentachaeta lyonii*) and Catalina Island mountain-mahogany (*Cercocarpus traskiae*); federally listed as endangered Santa Cruz Island winged-rockcress (*Sibara filifolia*); federally listed as threatened island rush-rose (*Crocotanthemum greenii*); and the State listed as threatened beach spectaclepod (*Dithyrea maritime*). Habitat within the project area is considered unsuitable for the beach spectaclepod, Catalina Island mountain-mahogany, Santa Cruz Island winged-rockcress, and island rush-rose. The historical island collection of a single pentachaeta plant is believed most likely the result of introduction, but there is potential suitable habitat within the project area.

Suitable habitat for the island fox is present virtually throughout the island, including the project site. Scat of the species was observed adjacent to the project area. The proposed project should not affect the fox if the management recommendations provided below are implemented.

Non-Listed Special-Status Species. Twenty-five special-status plant species (California Native Plant Society [CNPS] 1B) have the potential to be present on the island. Habitat within the project area is considered unsuitable for all of these except for Coulter's saltbush (*Atriplex coulteri*), round-leaved filaree (*California macrophylla*), California crossosoma (*Crossosoma californicum*), and Wiggin's cryptantha (*Cryptantha wigginsii*). None of these were observed within the project area during the site visit. All Catalina special-status plants are listed in Table 1.

Table 1: Special-Status Plant Species on Santa Catalina Island

Common Name	Scientific Name	Status	Comments
Aphanisma	<i>Aphanisma blitoides</i>	--/-- 1B	Annual herb, not observed within project area, not known to occur near project area
Santa Catalina Island manzanita	<i>Arctostaphylos catalinae</i>	--/-- 1B	Perennial shrub, not observed within project area, not known to occur near project area
Coulter's saltbush	<i>Atriplex coulteri</i>	--/-- 1B	Perennial herb, not observed within project area, known to occur near project area, suitable habitat is present within the project area
South coast saltscale	<i>Atriplex pacifica</i>	--/-- 1B	Annual herb, not observed within project area, not known to occur near project area
Davidson's saltscale	<i>Atriplex serenana</i> var. <i> davidsonii</i>	--/-- 1B	Annual herb, not observed within project area, not known to occur near project area
Round-leaved filaree	<i>California macrophylla</i>	--/-- 1B	Annual herb, not observed within project area, may occur near project area, suitable habitat is present within the project area
Southern tarplant	<i>Centromadia parryi</i> ssp. <i> australis</i>	--/-- 1B	Annual herb, not observed within project area, not known to occur near project area
Catalina Island mountain-mahogany	<i>Cercocarpus traskiae</i>	FE/CE 1B	Perennial shrub, not observed within project area, not known to occur near project area
Nevin's woolly sunflower	<i>Constancea nevinii</i>	--/-- 1B	Perennial shrub, not observed within project area, known to occur near project area, suitable habitat is not present within the project area
Island rush-rose	<i>Crocotanthemum greenei</i>	FT/-- 1B	Perennial shrub, not observed within project area, not known to occur near project area
Catalina crossosoma	<i>Crossosoma californicum</i>	--/-- 1B	Perennial shrub, not observed within project area, known to occur near project area, suitable habitat is present within the project area
Wiggin's cryptantha	<i>Cryptantha wigginsii</i>	--/-- 1B	Annual herb, not observed within project area, known to occur near project area, suitable habitat is present within the project area
California dissanthelium	<i>Dissanthelium californicum</i>	--/-- 1B	Annual herb, not observed within project area, not known to occur near project area
Beach spectacledpod	<i>Dithyrea maritime</i>	--/CT 1B	Annual herb, not observed within project area, may occur near project area, suitable habitat is not present within the project area
Catalina Island dudleya	<i>Dudleya virens</i> ssp. <i> hassei</i>	--/-- 1B	Perennial herb, not observed within project area, known to occur near project area, suitable habitat is not present within the project area
Island green dudleya	<i>Dudleya virens</i> ssp. <i> insularis</i>	--/-- 1B	Perennial herb, not observed within project area, not known to occur near project area
Santa Catalina Island bedstraw	<i>Galium catalinense</i> ssp. <i> catalinense</i>	--/-- 1B	Perennial shrub, not observed within project area, known to occur near project area, suitable habitat is not present within the project area
Showy island snapdragon	<i>Gambella speciosa</i>	--/-- 1B	Perennial shrub, not observed within project area, known to occur near project area, suitable habitat is not present within the project area
Decumbent goldenbush	<i>Isocoma menziesii</i> var. <i> decumbens</i>	--/-- 1B	Perennial shrub, not observed within project area, may occur near project area, suitable habitat is not present within the project area
Southern island mallow	<i>Lavatera assurgentiflora</i> ssp. <i> glabra</i>	--/-- 1B	Perennial shrub, not observed within project area, not known to occur near project area, suitable habitat is not present within the project area
Santa Barbara honeysuckle	<i>Lonicera subspicata</i> var. <i> subspicata</i>	--/-- 1B	Perennial shrub, not observed within project area, not known to occur near project area

Table 1: Special-Status Plant Species on Santa Catalina Island

Common Name	Scientific Name	Status	Comments
Santa Catalina Island desert-thorn	<i>Lycium brevipes</i> var. <i>hassei</i>	--/-- 1B	Perennial shrub, not observed within project area, not known to occur near project area
Santa Catalina Island ironwood	<i>Lyonothamnus floribundus</i> ssp. <i>floribundus</i>	--/-- 1B	Perennial tree, not observed within project area, known to occur near project area, suitable habitat is not present within the project area
Santa Catalina Island monkeyflower	<i>Mimulus traskiae</i>	--/-- 1A	Annual herb, not observed within project area, not known to occur near project area
Coast woolly-heads	<i>Nemacaulis denudate</i> var. <i>denudate</i>	--/-- 1B	Annual herb, not observed within project area, not known to occur near project area
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	FE/CE 1B	Annual herb, not observed within project area, known to occur near project area, suitable habitat is present within the project area
Santa Catalina Island currant	<i>Ribes viburnifolium</i>	--/-- 1B	Perennial shrub, not observed within project area, not known to occur near project area, suitable habitat is not present within the project area
Santa Catalina figwort	<i>Scrophularia villosa</i>	--/-- 1B	Perennial shrub, not observed within project area, known to occur near project area, suitable habitat is not present within the project area
Santa Cruz Island winged-rockcress	<i>Sibara filifolia</i>	FE/-- 1B	Annual herb, not observed within project area, not known to occur near project area
Wallace's nightshade	<i>Solanum wallacei</i>	--/-- 1B	Perennial herb, not observed within project area, not known to occur near project area

Status:

CE = California Endangered
 CT = California Threatened
 FE = Federal Endangered
 FT = Federal Threatened

California Rare Plant Rankings Classifications:

1A = Presumed extirpated in California and either rare or extinct elsewhere
 1B = Rare, Threatened or Endangered in California and elsewhere

Table 2 lists other special-status animal species known to have occurred on the island. Only a few of the birds are very likely to occur at the project site, e.g., the California quail, burrowing owl, and loggerhead shrike. None were detected during the site visit.

Jurisdictional Waters

No potential jurisdictional waters of the United States regulated by the United States Army Corps of Engineers (Corps), the California Department of Fish and Wildlife (CDFW), or the Regional Water Quality Control Board (RWQCB) were found to be present within a 50 ft radius of the proposed work sites.

Management Recommendations

To avoid impacts to natural resources in the project area, the following avoidance measures should be followed during project-related activities:

- Special care must be taken to avoid any potential impacts to the endangered Santa Catalina Island fox. Food scraps, all other trash, and anything else that might conceivably attract foxes must be removed from the site daily. At the end of work each day, open containers, open tanks, open

Table 2: Special-Status Terrestrial Wildlife Species on Santa Catalina Island

Common Name	Scientific Name	Status Federal/State	Catalina Comments
Reptiles			
California mountain kingsnake	<i>Lampropeltis zonata pulchra</i>	--/CSC	Santa Catalina reports unconfirmed?
Two-striped garter snake	<i>Thamnophis hammondi</i>	--/CSC	Apparently known only from Little Harbor
Birds			
Catalina California quail	<i>Callipepla californica catalinensis</i>	--/CSC	Common and widespread
Bald eagle	<i>Haliaeetus leucocephalus</i>	--/CFP	Following successful reintroduction program forages over much of the island
Northern harrier	<i>Circus cyaneus</i>	--/CSC	Rare visitor in open areas
Burrowing owl	<i>Athene cunicularia</i>	--/CSC	Uncommon resident in open areas
Long-eared owl	<i>Asio otus</i>	--/CSC	Rare visitor, primarily in wooded areas
Short-eared owl	<i>Asio flammeus</i>	--/CSC	Rare visitor in open areas
American peregrine falcon	<i>Falco peregrinus anatum</i>	--/CFP	Forages over much of the island
Island loggerhead shrike	<i>Lanius ludovicianus anthonyi</i>	--/CSC	Uncommon resident in open areas
Catalina Hutton's vireo	<i>Vireo huttoni unitti</i>	--/CSC	Uncommon resident in wooded areas
San Clemente spotted towhee	<i>Pipilo maculatus clementae</i>	--/CSC	Fairly common resident of wooded areas
Mammals			
Santa Catalina shrew	<i>Sorex ornatus willetti</i>	--/CSC	Rare and locally distributed in mesic habitats with low, dense vegetation, heavy leaf litter, and soils with rich duff layers
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	--/CCT	Apparently unrecorded for >35 years
Pallid bat	<i>Antrozous pallidus</i>	--/CSC	Apparently unrecorded for >35 years
Santa Catalina Island fox	<i>Urocyon littoralis catalinae</i>	FE/CT	Widespread

Status: CCT = California Candidate for Threatened Listing
 CFP = California Fully Protected
 CSC = California Species of Special Concern
 CT = California Threatened
 FE = Federal Endangered

trenches, and all other potential sources of entrapment for a fox must be covered or made easy for a fox to exit. At no time shall anyone associated with the repair project make any attempt to attract or otherwise interact with foxes.

- The SCE project biologist will, prior to the start of the tank refurbishment project, consult with Catalina Island Conservancy biologists regarding sensitive resources within the project area, including Catalina Island fox, and any appropriate additional protective measures needed to minimize potential impacts.
- A spring botanical survey is recommended prior to project initiation if impacts to grassland and other native habitat cannot be avoided. If project initiation is started prior to the blooming season, SCE will have a qualified botanist do a habitat assessment and clearance survey prior to ground disturbing activities.

- Due to the potential need for tree trimming, pipeline repair should be performed outside the primary bird nesting season (February 15 through August 31) to minimize or avoid impacts to nesting birds. If tree trimming occurs during the breeding season, a survey should be performed immediately prior to construction to ensure that nesting birds will not be adversely affected.
- Depending on the findings of botanical (and nesting bird) surveys, a biological monitor may need to be present at least for the initiation of project activities.
- Best Management Practices should be implemented to contain excavated sediment or spoils from the pipeline repair site.
- During all construction activities, cactus patches and all trees and shrubs should be avoided to the maximum extent feasible. Vegetation such as this generally provides better wildlife habitat than the ruderal grassland within the proposed laydown areas.

Conclusion

Vegetation at the project site is likely to be used by a number of nesting birds. The Santa Catalina Island fox is known to use the area, but no direct impacts are expected. Some temporary disturbance of native vegetation will occur.

No special-status plant or other special-status wildlife species were observed in the project area, and no special-status biological resources are expected to be adversely affected as long as the management guidelines outlined above are followed.

If you have any questions or need additional information regarding this work, please feel free to contact me at (949) 553-0666.

Sincerely,

LSA ASSOCIATES, INC.



Richard Erickson
Associate/Biologist

Attachments: Site Photographs
Figure 1: Project Location



Million Gallon Tank with Two Harbors in the distance, facing west.



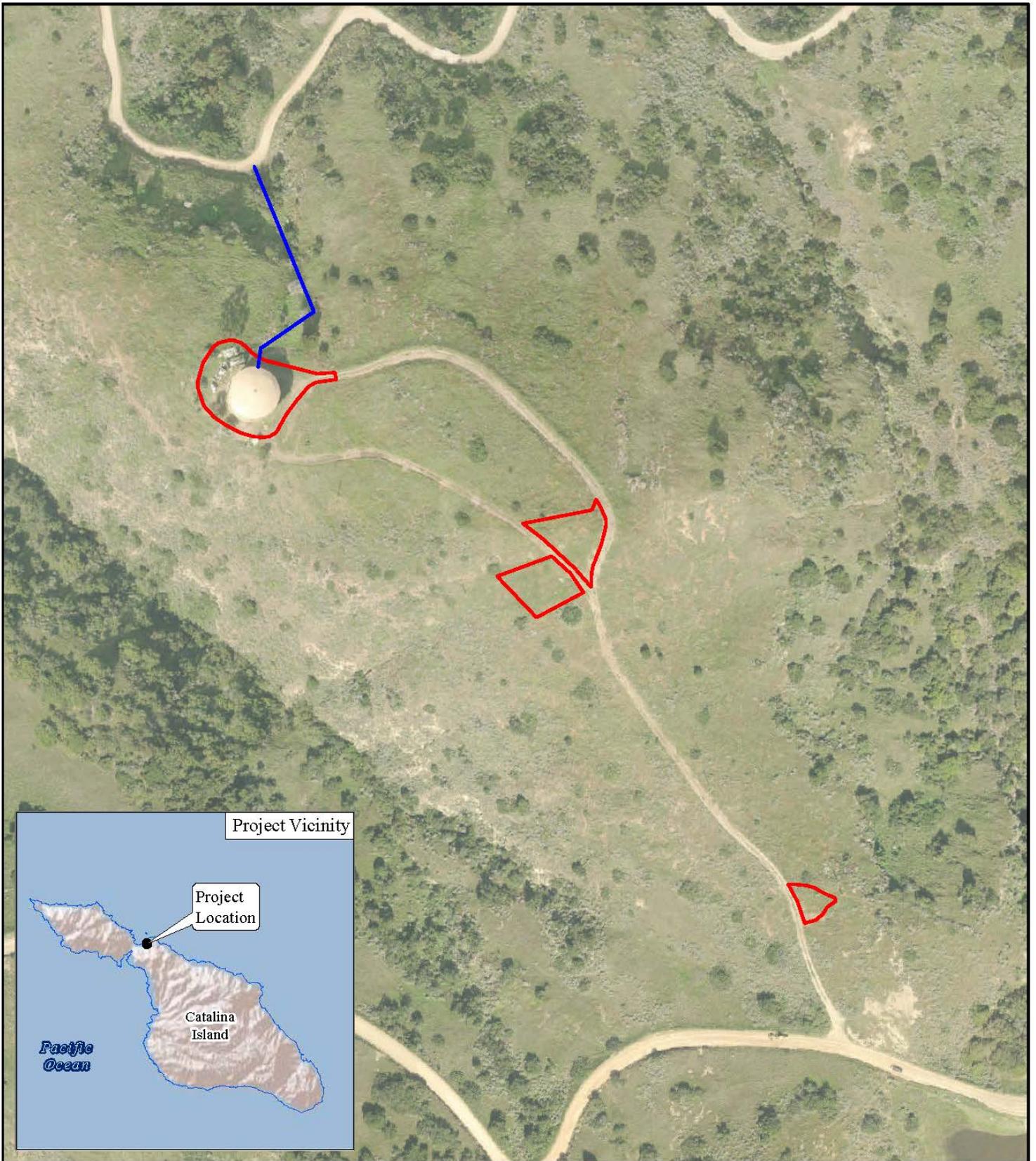
Two lower laydown areas already in use, with the access road dividing them, facing northeast.



Upper laydown area, facing southeast.



Above ground pipeline descending into toyon scrub, facing north.



Project Vicinity

Project Location

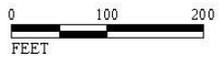
Catalina Island

Pacific Ocean

LSA

LEGEND

- Limits of Construction Activities and Laydown Areas
- Above Ground Pipeline



SOURCE: LARIAC (2011)

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FIGURE 1

SCE - Million Gallon Tank Repair Project
Project Location