TECHNICAL MEMORANDUM

GLENN LUKOS ASSOCIATES

Regulatory Services

PROJECT NUMBER: 11150006WOOD

TO: Thomas DiPrima

FROM: Tony Bomkamp

DATE: April 17, 2023

SUBJECT: NorthLake Partial Creek Avoidance Alternative and Associated Wildlife Movement Enhancements

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Biologists from Glenn Lukos Associates (GLA) conducted an analysis of a Partial Creek Avoidance Alternative ("PCAA") prepared by the NorthLake development team that avoids the northerly segments of Grasshopper Creek on the NorthLake project site. The purpose of the biological analysis was to determine the effects on Wildlife Movement of the PCAA compared with the project as previously approved by the County of Los Angeles ("Previously Approved Project") and in the final decision of the Superior Court in the CENTER FOR BIOLOGICAL DIVERSITY and ENDANGERED HABITATS LEAGUE v. COUNTY OF LOS ANGELES, et al, and Real Parties in Interest, NORTHLAKE ASSOCIATES, et al, Case No. 19STCPO1610. This analysis considers specific factors including the previous approved project design and the proposed PCAA, with a focus on the northern portion of the site. This analysis considers the following issues.

- Expanded potential for wildlife movement due to elimination of development in the northernmost portion of the project site.
- Reduced encroachment by the development into the identified wildlife corridor to the north of the project site, and
- Enhanced movement opportunities associated with the freeway culverts that allow limited east-to-west and west-to-east movement.

Expanded Potential for Wildlife Movement due to Elimination of Development in the Northernmost Portion of the Project Site

It was determined that the Previously Approved Project would not have impacts to wildlife movement under the California Environmental Quality Act ("CEQA"), a determination that the Superior Court upheld. Even though it was determined that impacts to wildlife movement were determined to be less than significant, the project Applicant voluntarily accepted a condition of approval (Condition of Approval No. 51) to provide for wildlife movement post project development. Exhibit 1 depicts the preliminary Wildlife Connectivity Plan adopted as a condition of approval for the Previously Approved Project. It is anticipated that if the Previously Approved Project were reapproved, the same or a functionally equivalent Wildlife Connectivity Plan would be adopted as depicted on Exhibit 2. In addition, it is anticipated that the Wildlife Connectivity Plan would also apply to each of the alternatives

considered in the Recirculated Draft Supplemental Environmental Impact Report. Of the three alternatives considered, only the PCAA's reduced northerly footprint would have implications regarding the Wildlife Connectivity Plan as the two other alternatives propose similar northerly development.

Under the Previously Approved Project, wildlife would have an unobstructed path from the nearby culvert under Interstate 5 to the Castaic Lake environs. Exhibit 2 depicts the PCAA wherein the northernmost approximately 2,200 feet of development has been eliminated leaving a broad corridor across the northern end of the site, including a variety of pathways along drainages and other suitable topographic features.

Reduction of Encroachment by the Approved Development into the Identified Wildlife Corridor to the North of the Project Site

Exhibit 3 depicts the project site in the context of Figure 8 prepared by South Coast Wildlands that shows "permeability" for a suite of wildlife species described in the *South Coast Missing Linkages Project: A Linkage Design for the Sierra Madre-Castaic Connection*[1] ("Linkages Project"). Figure 8 consolidates the permeability for all the species considered in the Linkages Project. The Previously Approved Project fully avoided areas of permeability for the Mountain Lion; however, the project encroached into the Least Cost Corridor areas of mule deer permeability. When areas of highest permeability (i.e., most ideal for animal passage) are considered, those areas are to the north of the project development areas, and thus not impacted by the project. As such, the Previously Approved Project would have a less than significant impact on mule deer movement. Exhibit 4 shows that with the PCAA, the encroachment into the area of Least Cost Corridor areas for mule deer permeability is reduced substantially and outside the areas of highest permeability. Like the Previously Approved Project, the PCAA would have less than significant impacts on mule deer movement in the identified wildlife corridor.

Enhanced Movement Opportunities Associated with the Freeway Culverts that Allow Limited East-to-West and West-to-East Movement Under Interstate 5

Exhibit 2 depicts the location of the two northerly under-crossings beneath Interstate 5 in relation to the PCAA that eliminates the above-mentioned approximately 2,200 feet of development leaving multiple paths for wildlife movement between the northern Interstate 5 under-crossing and Castaic Lake. Exhibit 2 also shows the relationship between the southerly of these two crossings which now can more easily connect wildlife to Castaic Lake by the northerly route as well as to the south and west. In addition, Exhibit 2 shows pathways through the southerly part of the develop consistent with the preliminary Wildlife Connectivity Plan adopted as a condition of approval for the Previously Approved Project.

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[1] Penrod, K., C. Cabanero, P. Beier, C. Luke, W. Spencer, and E. Rubin. 2005. *South Coast Missing Linkages Project: A Linkage Design for the Sierra Madre-Castaic Connection*. South Coast Wildlands, Idyllwild, CA. www.scwildlands.org

Conclusions

By eliminating development at the northern end of the project site, the PCAA provides for enhanced wildlife movement when compared with the Previously Approved Project, which was determined through project approval and review by the court to have less than significant impacts to wildlife movement.

North Valley Paseo
North Valley Park
School
Vista Park
CASTAIC LAKE
Enhanced Parkway
Grasshopper Creek Park
Fire Station
5
Community Sports Park
Commercial
Castaic Lagoon Park
Lower Ridge Route
Industrial
Northlake Hills Elementary School

LEGEND

- PROPOSED WILDLIFE CONNECTIVITY
- EXISTING FREEWAY CROSSING

1″=600′
0′ 600′ 1200′

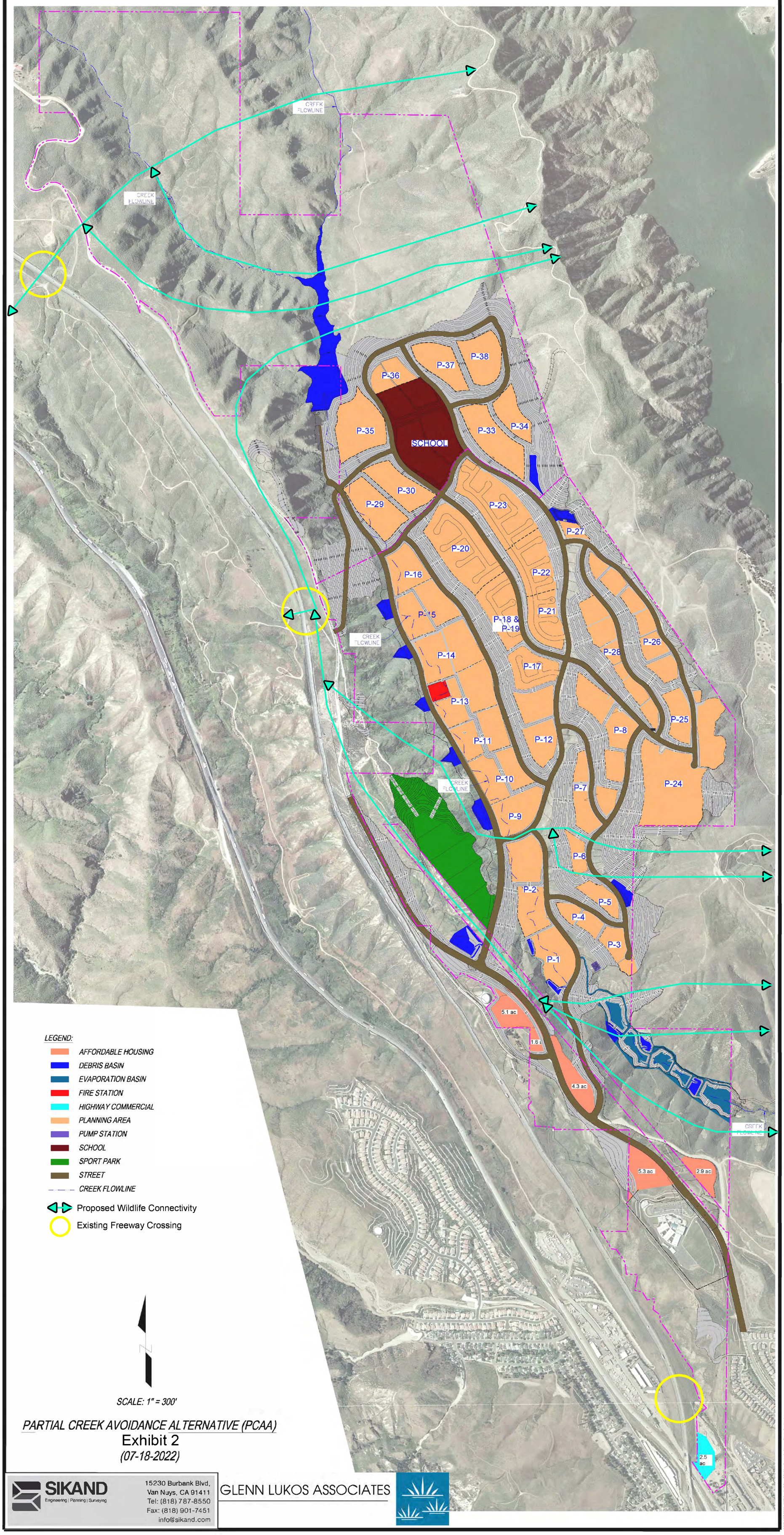
Exhibit 1
Previously Approved Project

NORTHLAKE WILDLIFE CONNECTIVITY PLAN
PRELIMINARY

NORTHLAKE

DATE: 03.19.2018

PLACEWORKS



PARTIAL CREEK AVOIDANCE ALTERNATIVE (PCAA)

Exhibit 2

(07-18-2022)

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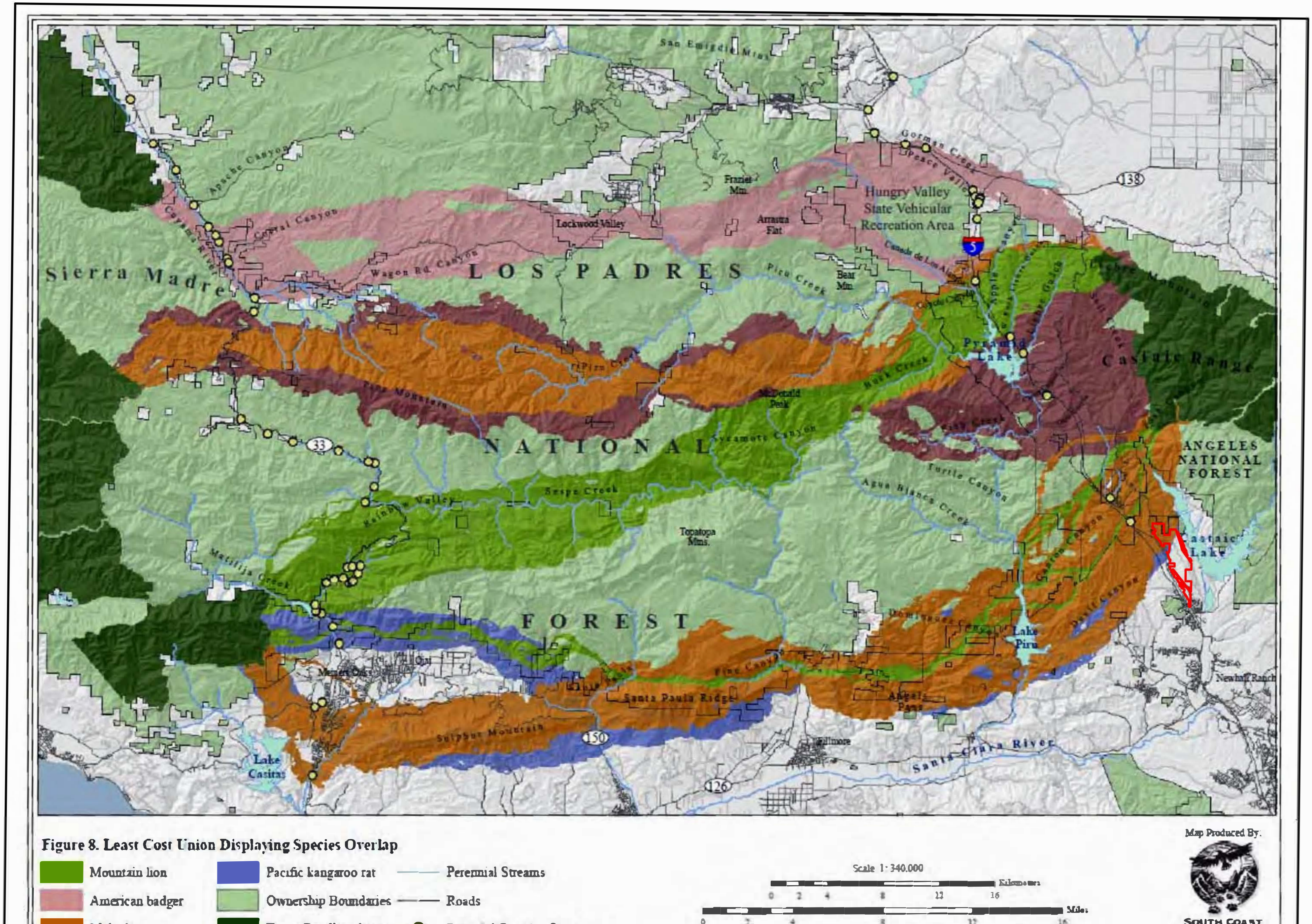

Exhibit 3
Permeability Map Previously Approved Project

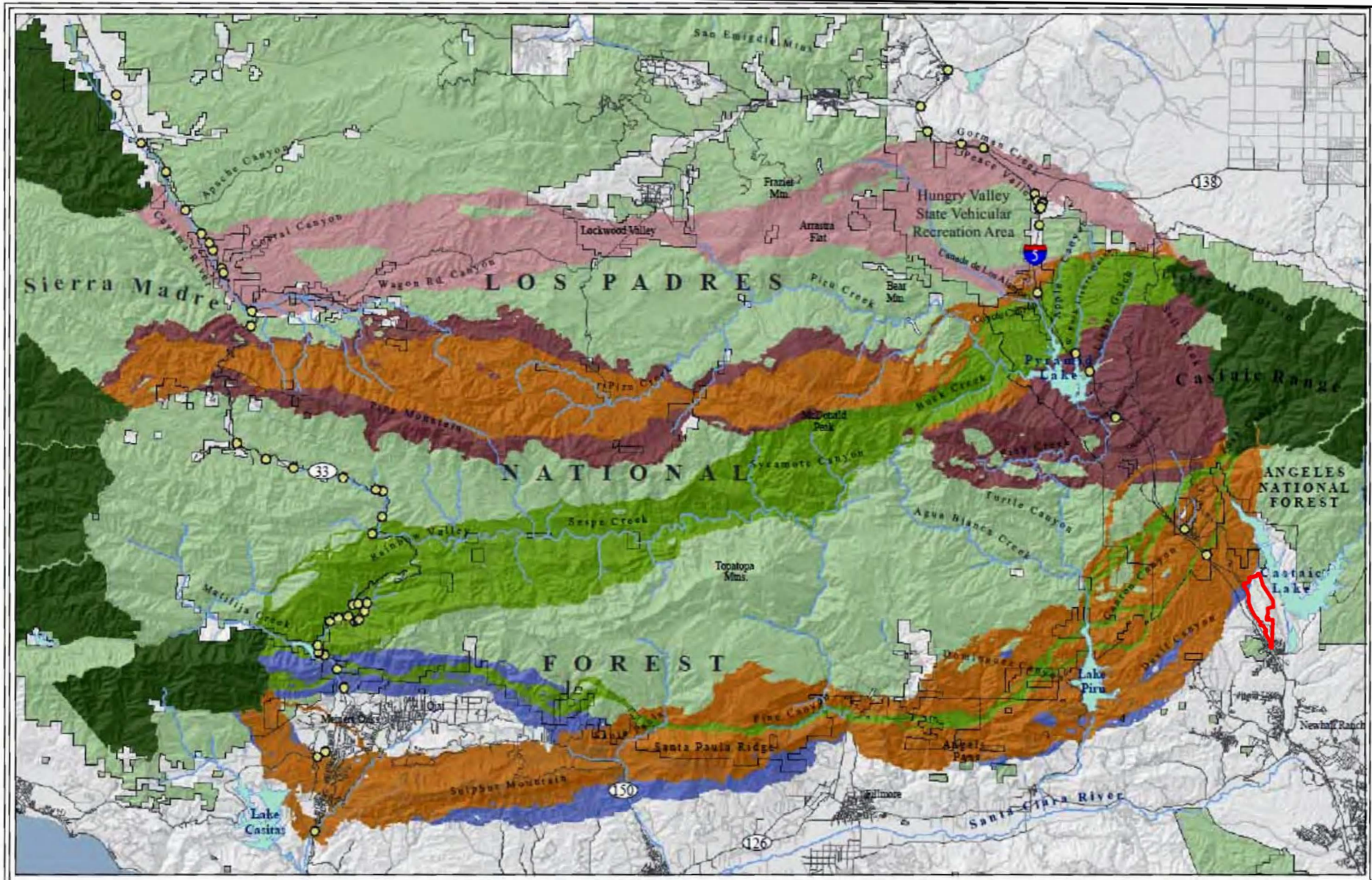

Figure 8. Least Cost Union Displaying Species Overlap

- Mountain lion
- American badger
- Mule deer
- California spotted owl
- Pacific kangaroo rat
- Ownership Boundaries
- Target Roadless Areas
- Reservoirs and Lakes
- Perennial Streams
- Roads
- Potential Crossing Structures

Scale 1: 340,000

Kilometers 0 2 4 8 12 16

Miles 0 2 4 8 12 16

Exhibit 4

Permeability Map Partial Creek Avoidance Alternative

Map Produced By:

SOUTH COAST WILDLANDS

February 2005

www.scwildlands.org