

DRISI

CALTRANS DIVISION OF RESEARCH,
INNOVATION AND SYSTEM INFORMATION

Research

Notes

Environmental

MAY 2024

Project Title:
Response of San Joaquin Kit Foxes
to Road Construction Project Sites:
Mitigation Strategies to Minimize
Project Delays and Impacts

Task Number: 3783

Start Date: January 2, 2022

Completion Date: December 31,
2023

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Response of San Joaquin Kit Foxes to Road Construction Project Sites: Mitigation Strategies to Minimize Project Delays and Impacts

Determine the effects of roads and road construction activities on San Joaquin kit fox population that live close to state highways.

WHAT IS THE NEED?

Information on construction related factors that affect San Joaquin kit fox presence is needed to inform the development and implementation of mitigation measures and conservation strategies that will reduce delays to the construction schedule and associated increases in construction costs.

WHAT ARE WE DOING?

Multiple studies have been proposed and/or conducted to determine effects of roads on San Joaquin kit fox; however, a data gap has been identified related to the species response to road construction and construction related factors that affect fox presence. This research proposes to determine how kit foxes respond to road construction projects, identify factors behind the attraction or continued presence, and identify potential mitigation strategies that may reduce likelihood of kit fox presence during active construction without reducing quality of habitat.

The research team will conduct a study to determine how kit foxes respond to road construction project sites in both urban and rural settings. They will determine whether foxes generally avoid sites once construction begins, use them similarly before and after initiation of construction, or are attracted to the sites by construction-related site changes, with consideration to the level of development around the site. If they appear to be attracted to road construction sites, then the researchers will try to identify factors behind the attraction.



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Based on this assessment, the research team will identify potential mitigation strategies that may reduce likelihood of kit fox presence during active construction without reducing quality of habitat or at least reduce the potential for harm to foxes that continue to use the sites.

WHAT IS OUR GOAL?

The primary goals would be to determine 1) what construction related factors increase the likelihood of kit fox presence and 2) how kit fox use the sites relative to adjacent habitats that are similar in quality but further away from active construction.

The secondary goal is to identify measures that might discourage kit fox presence or reduce risk to foxes using construction sites when work is ongoing.

WHAT IS THE BENEFIT?

Understanding how and why San Joaquin kit foxes use road construction project sites will help to identify mitigation strategies that facilitate preparation and approval of pre-project environmental reviews, avoidance of significant project delays, and potentially new best management practices to further reduce the likelihood of project-related take of an endangered species.

This information will be useful for other States and federal agencies, as well as local agencies that consult with the State and federal government on impacts to kit fox and their habitat.

WHAT IS THE PROGRESS TO DATE?

A research team from California State University-Stanislaus campus has been selected and this task is progressing well with the two filed studies have already been conducted. The project is completed by December 31, 2023. The research team has submitted all the deliverables and the final report. This project is now completed and closed.

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