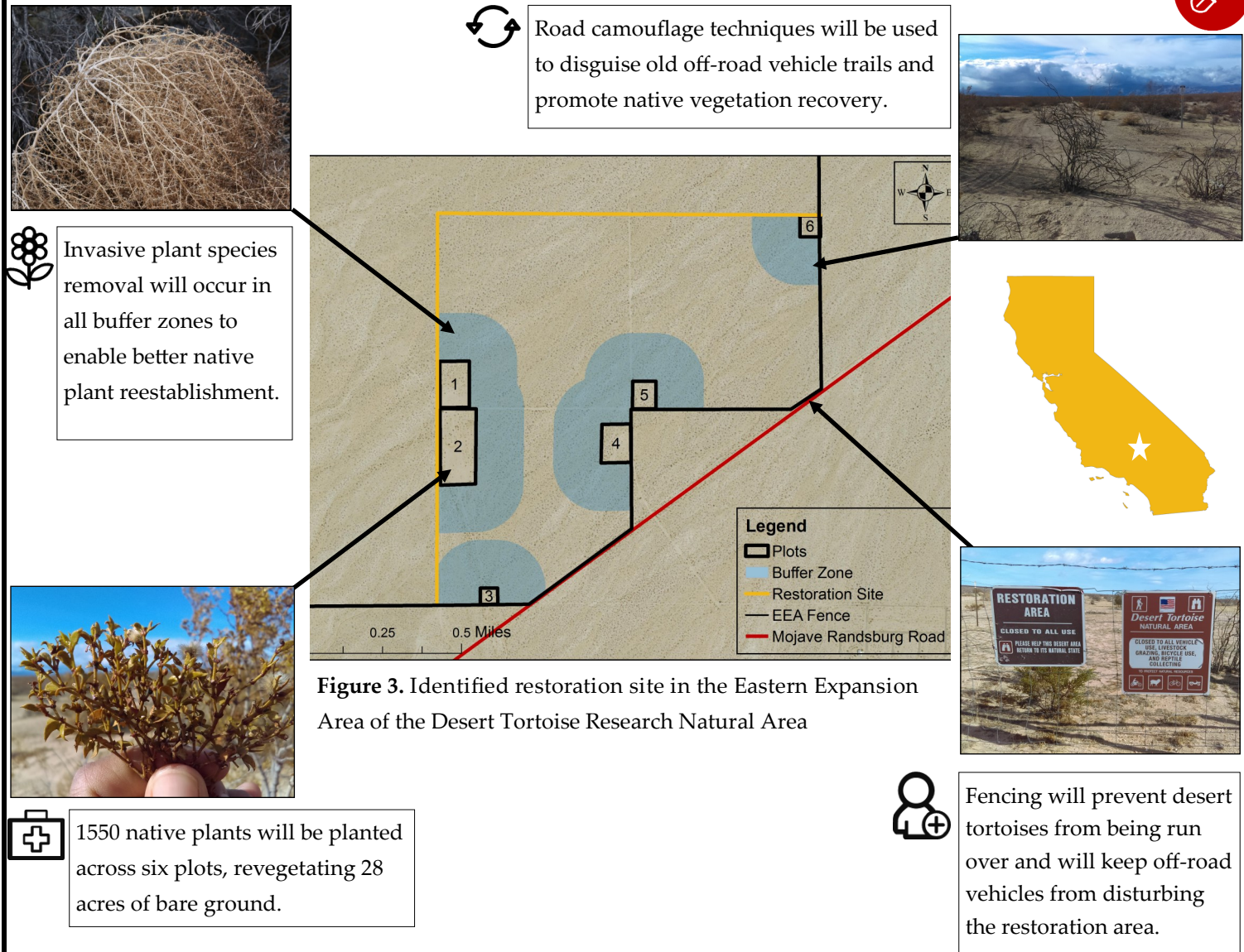


## Case Study



## Recommendations

Implementing this framework can provide land managers a tool to use for deciding when, where, and how to effectively allocate limited resources. New partnerships should be established as they can lead to more funding opportunities, additional stakeholders, and further engagement in the restoration process. Finally, thorough monitoring should be implemented so that objectives can be evaluated based on carefully selected success criteria and adapted in response to changing conditions.

## Acknowledgements

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# OPERATION DESERT TORTOISE

## A Framework for Restoration to Support Agassiz's Desert Tortoise Recovery in the Western Mojave Desert

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### Introduction

The Agassiz's Desert Tortoise (*Gopherus agassizii*) (desert tortoise), a federally threatened species endemic to the Mojave and Sonoran deserts, is emblematic of the widespread impact humans have on desert ecosystems. Though significant emphasis has been placed on species recovery and several projects have demonstrated successful outcomes, desert tortoise populations continue to decline across much of their home range. In the Western Mojave Desert, an area that continues to see extensive human impact, the population declined an average of 51% between 2004 and 2014, according to the US Fish & Wildlife Service. Much of this decline can be directly attributed to habitat degradation, which is the single biggest threat to the species' continued vitality. Consequently, successful strategies for habitat restoration and protection from future threats are vital to species recovery.



Desert recreation, such as off-road vehicle use, impacts desert tortoises by causing soil compaction and even fatality. Human activities along desert roads allows for non-native plants to invade tortoise habitat. Additionally, human development near desert ecosystems exacerbates predator populations (i.e. ravens) which contribute to desert tortoise mortality.

### Research Questions

The following research questions guided the development of our project toward the creation of a framework that can streamline efforts for desert tortoise habitat restoration. This framework includes a guidance document, assessment tool, and restoration case study, which together serve as a decision support tool land managers can use when deciding where and how to allocate limited resources.



How can habitat restoration be done strategically?



How can managers evaluate an area's potential for restoration?



How can strategic habitat restoration be applied to on-the ground restoration?

