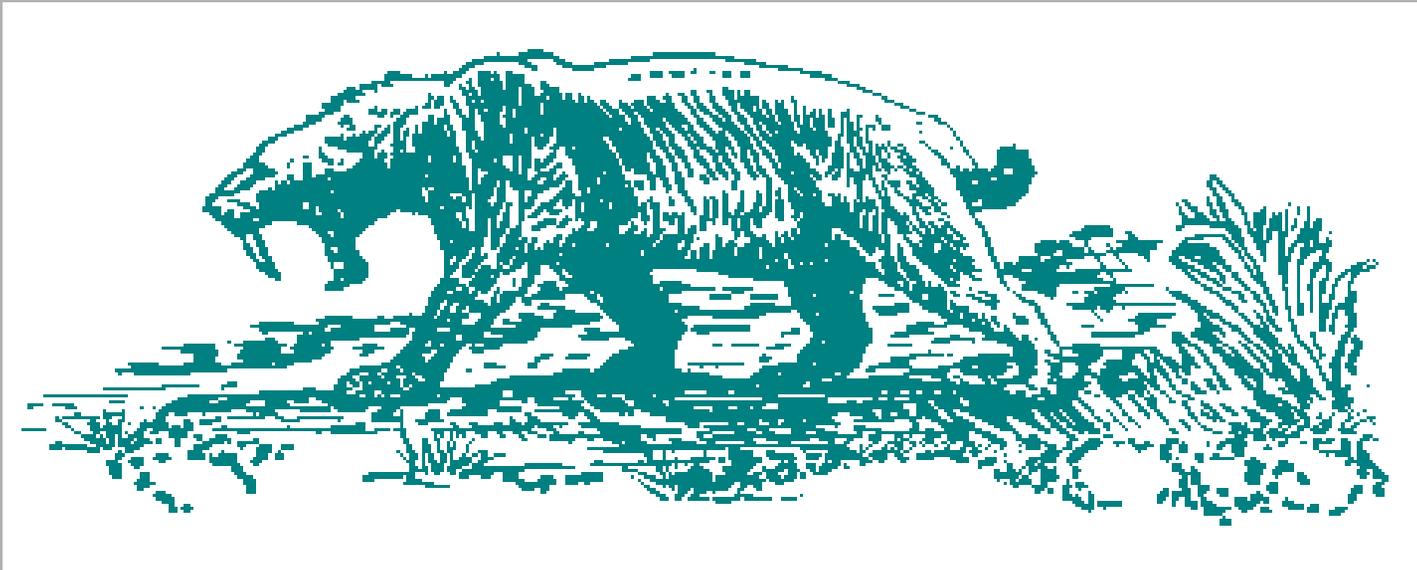


# GEOLOGIC HAZARDS

# A phytosaur skeleton from Petrified Forrest National Park



# Caltrans Paleontology



"And some rin uphill and downdale,  
knapping the chunky stanes to pieces wi' hammers,  
Like sae mony road-makers run daft.  
They say it is to see how the warld was made!"

----- *Sir Walter Scott, St Ronan's Well*

Paleontology is the study of life in past geologic time

The paleontological resources found on the public lands represent an important and critical component of America's natural heritage.

Caltrans, as part of the project development and delivery process, is obligated to conduct paleontological studies in response to Federal, State, and local laws, regulations, and ordinances.

## **Federal and State Laws**

National Environmental Policy Act (NEPA)

Federal Aid Highway Act of 1956 (PL 84-627) and  
1958 (PL 85-767)

Antiquities Act of 1906 (PL 59-209)

California Environmental Quality Act (CEQA),

California Public Resources Code 5097

California Business and Professions Code, Chapter  
12.5

# Studies

## **Scoping**

Review of ArcView paleontology database

Geologic maps

GeoRef search, literature review

Site survey

**Paleontological Identification Report**

cost estimates

If potential to encounter fossils

## **Paleontological Evaluation Report**

prepared by a qualified paleontologist

## **preliminary Paleontological Mitigation Plan**

cost estimates

non-Standard Special Provisions

During construction – contract mitigation paleontologist

**Paleontological Mitigation Plan**

**Paleontological Mitigation Report**

At completion of the project

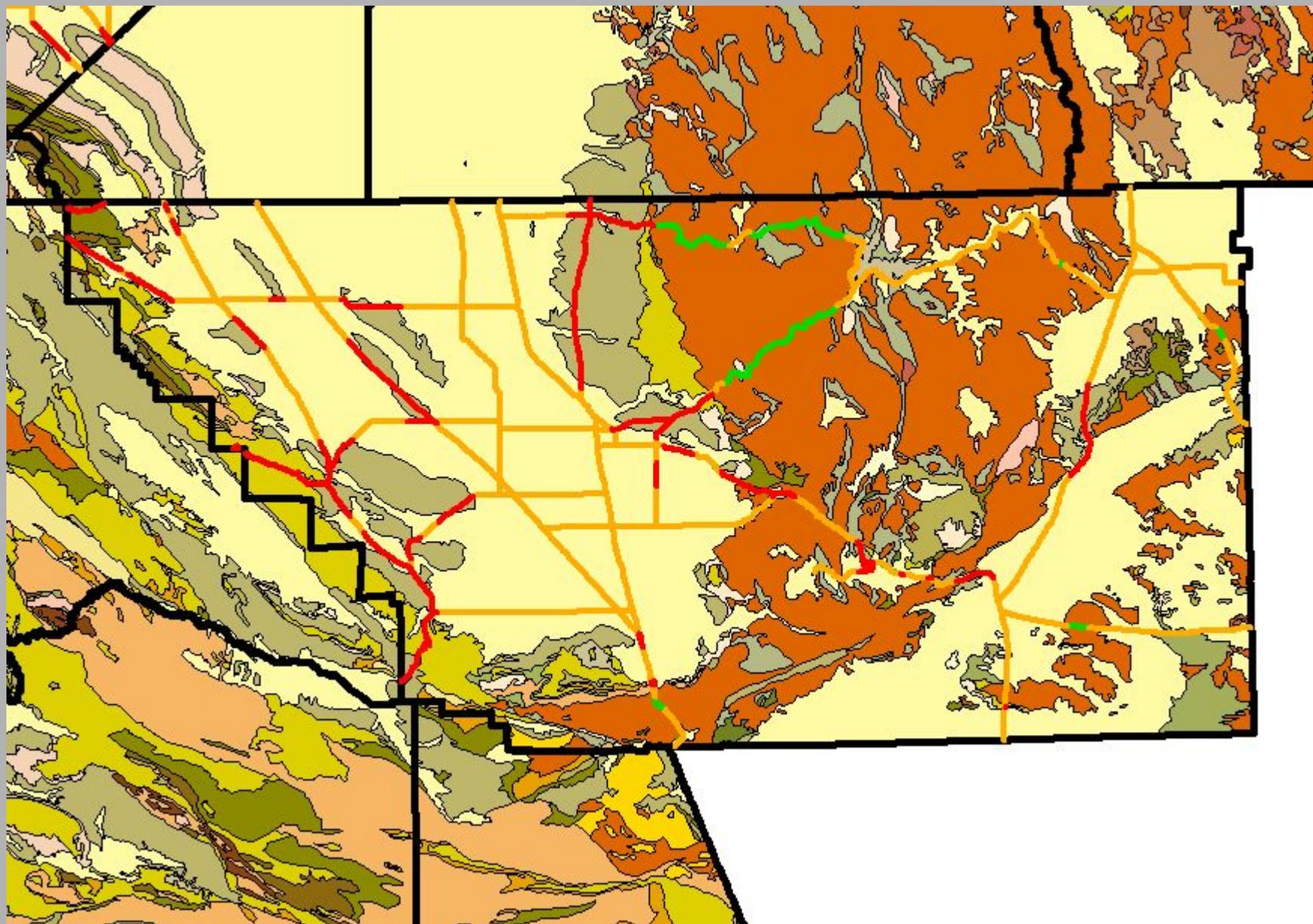
**Paleontological Stewardship Summary**

## ArcView

Planning tool to see if additional study is required.

Database shows State Routes with sensitivity of formations within one mile of the highway.

Does not show the actual geology the highway is on.



Paleontological Resources – geologic formations

Can't see the fossils on the surface

NEPA and the Federal Aid Highway Act require compliance with the Antiquities Act.

Antiquities Act requires that studies be performed by Qualified Experts.

The technical study done to determine the potential for a significant impact to paleontological resources is a geologic report prepared for a public decision making document and requires the interpretation of the local geology.

Covered by the Geologists and Geophysicists Act and requires that a licensed Geologist supervise the geologic portion of the studies.

Photos of current projects