

Worker Environmental Awareness Program (WEAP)

Eldorado-Lugo-Mohave Series Capacitor Project (ELM)

Environmental Resources

Southern California Edison

WEAP Outline

Requirements and Responsibilities for Conserving Environmental Resources

- ▶ ELM Project Overview
- ▶ Environmental Compliance
 - Importance of Environmental Compliance
 - Contractual Obligations
- ▶ Personnel Compliance Responsibilities
- ▶ Environmentally Sensitive Areas
- ▶ Environmental Monitoring
- ▶ Biological Resources
 - Special-Status Species Protection
 - Special-Status Plants
 - Special-Status Wildlife
 - Nesting Birds
- ▶ Wildlife Handling
- ▶ Weed Control Program
- ▶ Cultural and Paleontological Resources
- ▶ SWPPP and BMPs
- ▶ Hazardous Materials and Hazardous Waste
- ▶ Air Quality
- ▶ Fire Management
- ▶ Reminders
- ▶ Identification

ELM Project Overview

ELM Overview

- ▶ ELM project increases power transfer capability of 500-kilovolt (kV) transmission lines between the Eldorado, Lugo, and Mohave substations
 - Increases amount of power delivered from California, Nevada, and Arizona
- ▶ Maintains system reliability of Southern California Edison's (SCE) transmission facilities within Los Angeles Basin
- ▶ Meets proposed project needs while minimizing environmental impacts

ELM Overview

▶ ELM Crosses

□ 2 States (California and Nevada)

- California State Land (CPUC)
- Nevada State Land

□ Federal Lands

- Bureau of Land Management (BLM)
- Bureau of Reclamation
- Department of Defense
- U.S. National Park Services – Mojave National Preserve

□ Private Lands

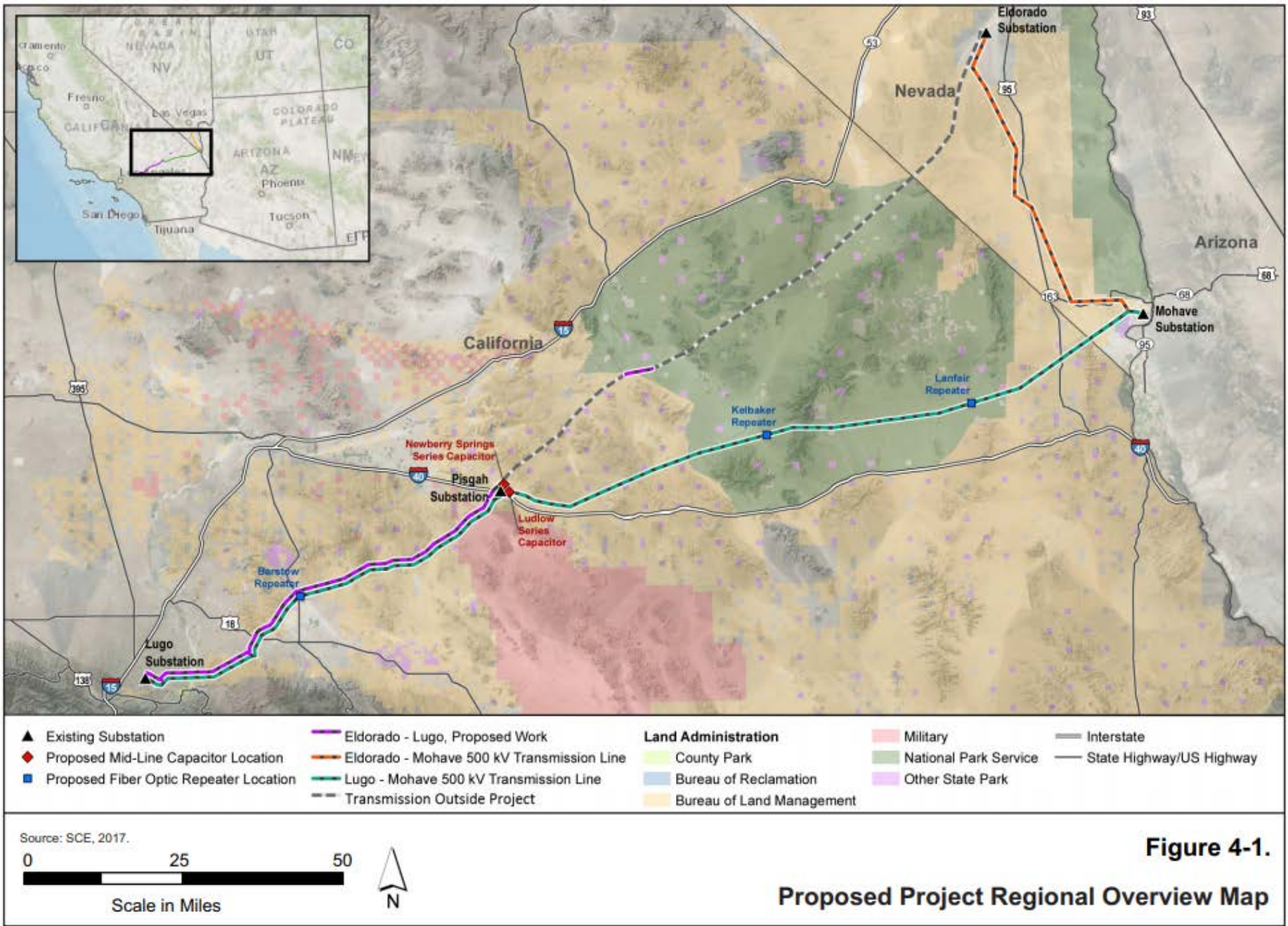


Figure 4-1.

Proposed Project Regional Overview Map

ELM Overview

- ▶ Project area includes many sensitive resources
 - Biological
 - Cultural
 - Historical
 - Prehistoric
 - Native American
 - Paleontological
 - Water
 - Air

ELM Overview

- ▶ Federal, state, and local laws and regulations are established to ensure resources are protected and impacts are minimized
- ▶ Extensive environmental analysis and review was completed and approved by numerous agencies including:
 - ❑ California Public Utilities Commission (CPUC)
 - ❑ Bureau of Land Management (BLM)
 - ❑ U.S. Army Corps of Engineers (USACE)
 - ❑ Bureau of Reclamation
 - ❑ National Park Service (NPS) for Mojave National Preserve (MNP)
 - ❑ United States Fish and Wildlife Service
 - ❑ California Department of Fish and Wildlife
 - ❑ Regional Water Quality Control Board

ELM Overview

- ▶ Adherence to federal and state laws require project permitting and approval
- ▶ Requires implementation of established mitigation measures for project
- ▶ Compliance with mitigation measures is a mandatory condition of CPUC, BLM, NPS, and other agency permit approvals

ELM Overview

- ▶ ***Noncompliance with mitigation measures can result in:**
 - **Project delays or Shutdown**
 - **Violations and Penalties**
 - **Fines**
 - **Equipment forfeiture**
 - **Imprisonment**

Environmental Compliance

Importance of Environmental Compliance

Requirement: Minimize Environmental Impacts

- ▶ SCE strives for 100 percent compliance
- ▶ Compliance is responsibility of all project personnel
- ▶ Violations can result from any unauthorized loss or damage to sensitive biological and jurisdictional resources
- ▶ Violations—even unintentional—can result in serious consequences:
 - ❑ Penalties = fines and imprisonment for responsible parties and companies
 - ❑ Project delays or shutdowns
 - ❑ Increased costs
 - ❑ Permit re-issuances and additional mitigation



Contractual Obligations and Protective Requirements

- ▶ Construction Contractor is responsible for constructing project in compliance with all environmental measures with direction from environmental monitors, including specialty monitors — biological, cultural, paleontological, Tribal, dust monitors, and Mojave National Preserve monitors
- ▶ Environmental monitors evaluate Construction Contractor's compliance with and performance of environmental specifications

Contractual Obligations and Protective Requirements

- ▶ Construction Contractor's responsibilities include:
 - ❑ Review and understand environmental measures and specifications
 - ❑ Implement and maintain compliance with environmental measures and specifications
 - ❑ Respond to all environmental monitor requests and adhere to all environmental monitor directions
 - ❑ Attend project's WEAP training before beginning on-site work
 - ❑ Conspicuously delineate boundaries of all work areas prior to mobilization and discuss environmental resource issues with environmental monitor

Contractual Obligations and Protective Requirements

- ▶ Construction Contractor's responsibilities include:
 - ❑ Provide schedules and describe work schedules adequately to schedule monitoring resources
 - ❑ Restrict all activities, vehicles, and equipment to approved/ designated work areas and access routes
 - ❑ Limit vehicles and mobile equipment speeds to 15 mph throughout project ROW
 - ❑ Do not bring firearms or non-ADA-approved animals into any project construction site

Contractual Obligations and Protective Requirements

- ▶ Construction Contractor's responsibilities include:
 - Establish, operate, and maintain a project-wide trash collection system that securely retains all food and other trash by following these specifications:
 - Receptacles are self-closing, wind-proof, sealable, and animal-proof
 - Regularly inspects, empties to prevent spillage, and maintains sanitary conditions



Personnel Compliance Responsibilities

Construction Personnel Compliance Responsibilities

- ▶ Understand and comply with ELM compliance obligations
- ▶ Immediately report all environmental issues and concerns to environmental monitor
- ▶ Keep vehicles/ equipment, activities, and construction debris within designated construction areas

Construction Personnel Compliance Responsibilities

- ▶ Enjoy your opportunity to observe and view wildlife but do not approach, touch, handle or capture animals
- ▶ If wildlife is encountered in work area or access road, contact environmental monitor
- ▶ Stay clear of identified special-status species and other ESAs
 - ▶ Special-status species: Any species listed or proposed for listing as threatened or endangered by USFWS under Endangered Species Act
 - ▶ ESAs: Environmentally Sensitive Areas are designated agricultural areas that need special protection because of their landscape, wildlife or historical value
- ▶ Do not enter marked ESAs or nesting bird buffers—including no grading areas—without environmental monitor's approval
- ▶ If new nesting buffer is established, work in area must be halted and equipment must be removed according to environmental monitor's instructions

Construction Personnel Compliance Responsibilities

- ▶ Remove trash from project area or store in appropriate and enclosed container
- ▶ Potable and non-potable water sources—such as tanks, ponds, pipes—must be covered and secured by storing all water within closed tanks by covering open storage ponds or tanks with 2-centimeter netting or other means
- ▶ Ensure excavated areas (e.g., trenches, bore holes, pits, etc.) are covered, backfilled, fenced or monitored while not actively in use (ramps may be installed in areas where no desert tortoise habitat exists during pre-construction surveys and/or monitoring)

Construction Personnel Compliance Responsibilities

- ▶ Prior to construction starting each day, wait until biological monitor conducts work area clearance sweep before initiating work and/or entering workspace
 - ❑ Clearance sweep includes inspection of excavations and equipment for wildlife and birds
 - ❑ Equipment cannot be moved and work cannot start until sweep is complete.
- ▶ Observe right-of-way (ROW) speed limit of 15 mph
- ▶ Check for wildlife around and beneath vehicles and equipment prior to moving them

Construction Personnel Compliance Responsibilities

- ▶ Adhere to any 1-hour construction holds enacted by SCE or environmental monitor by halting work to maintain compliance
- ▶ If situation violates environmental requirements:
 - ❑ Immediately stop work
 - ❑ Contact environmental monitor

Construction Personnel Compliance Responsibilities

- ▶ Notify environmental monitor immediately if:
 - ❑ Sensitive resource is detected and suspected
 - ❑ Roadkill, dead, or injured wildlife is found
 - ❑ A nest, burrow, or den is found or suspected nearby
- ▶ Do not begin activity within construction area without prior environmental clearances and approvals

Environmentally Sensitive Areas

Environmentally Sensitive Areas

- ▶ ESAs are used to notify construction personnel of protected resources
- ▶ ESA can be biological, cultural, and paleontological protected resource
- ▶ Do not enter marked ESAs or buffers—including no grading areas—without environmental monitor approval
- ▶ Keep vehicles/equipment, activities, and construction debris within designated construction areas



Environmentally Sensitive Areas

- ▶ Work must be staked prior to start of construction
- ▶ Construction activities and equipment must stay within approved work areas
- ▶ Construction activities and equipment must stay outside of ESAs even if ESA overlaps a previously approved construction work area



Environmentally Sensitive Areas

- ▶ ESAs are established around sensitive resources to protect them during construction
- ▶ ESAs are marked with signs
- ▶ Some ESAs are located very close to project activities while others cross project roads
- ▶ No activities are allowed within ESA, Environmental monitors are required at all ESAs

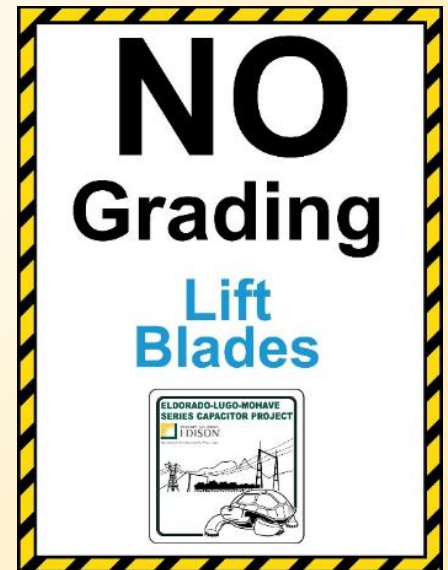


Monitors and ESAs

- ▶ ESAs must be avoided – If project activities are prohibited by ESA, contact environmental monitor, **We will work with you to get job done while maintaining integrity of resource and compliance with project permits**
- ▶ Specialty monitors (e.g., biological, cultural, paleontological) are on site to protect resources from construction impacts
- ▶ Biological, cultural, and paleontological monitors have authority to stop construction for unanticipated discoveries
- ▶ In areas of Native American concern, Native American monitors also will be present

No Grading

- To avoid impacts to cultural resources within project roads, restrictions may apply to regrading and widening of certain roads
- No grading also can be a mitigation to protect biological resources by preserving the soil crust and plants
- No grading is permitted within roads that cross ESAs
- “No Grading” signs will be posted
- No grading should be encouraged even if no cultural resources are present




Staking and Marking Protocol


- ▶ Prior to any construction, equipment or crew mobilization at each work site and work areas will be marked with wooden lath staking or marking to identify the limits of work and will be verified by project environmental staff and CPUC environmental monitor
- ▶ Stakes and markings will be installed in consultation with the agencies, Project subject matter experts, and environmental and specialty (biological, archaeological, and paleontological) monitors
 - Areas staked or marked will be as small as possible to protect and minimize impact to environmental resource
- ▶ Coded marking colors or color combinations will be consistent and uniform across the Project.
 - All work activities, vehicles, and equipment will be confined to approved roads and staked or marked work areas.

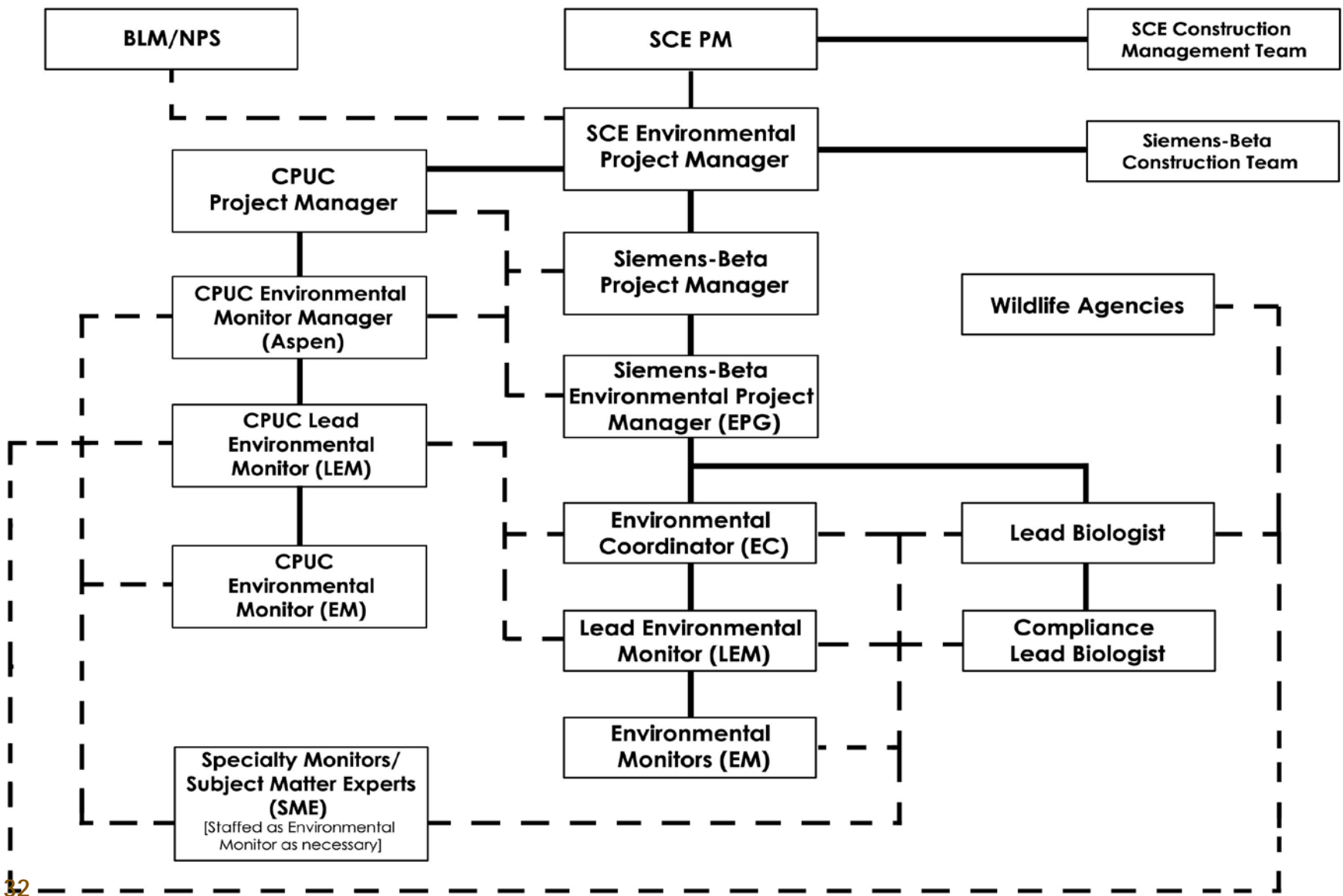
Environment Monitoring

Eldorado-Lugo-Mohave Series Capacitor Environmental Compliance Organization Chart

Legend

Line of Authority 

Line of Communication 



Environmental Monitors

- ▶ Oversee compliance with mitigation measures, environmental laws, and permits
- ▶ Liaison between SCE compliance staff and construction personnel
- ▶ Notify project personnel of mitigation requirements
- ▶ Assist with planning construction activities to maintain compliance
- ▶ Ensure project personnel is properly trained

Environmental Monitors

- ▶ Assist construction crews with implementing mitigation measures
- ▶ Observe work and document successful implementation of mitigation measures
- ▶ Conduct work area construction clearance surveys
- ▶ Recommend necessary avoidance measures
- ▶ Document and report non-compliance

Environmental Monitors

- ▶ Assess construction impact levels relative to compliance limitations
- ▶ Identify emerging problems and reach resolution prior to noncompliance
- ▶ Work with construction personnel to maintain and regain compliance

Environmental Monitors

- ▶ Temporarily stop work if noncompliance condition arises or if following is imminent
 - ❑ Harm to persons and property
 - ❑ Take protected environmental resources, including special-status species
 - ❑ Violation of law, regulation, or permit

Biological Monitors

- ▶ Participate in daily tailboards
- ▶ Conduct daily morning sweeps
- ▶ Provide mitigation measure guidance
- ▶ Perform day-to-day resource monitoring at each construction site
- ▶ Verify on-site staking/marketing of sensitive resources (ESAs) in field

Biological Monitors

- ▶ Place 1-hour holds on construction
- ▶ Document non-compliance issues
- ▶ Oversee compliance with all mitigation measures
- ▶ Relocate biological resources, as a last resort, in coordination with Field Lead

Cultural Monitors

- ▶ Mark cultural resources designated as ESAs
- ▶ Monitor all personnel and on-site project activities for compliance with cultural mitigation measures, permit conditions, and requirements for other approvals
- ▶ Monitor construction crews by providing clarification on cultural mitigation measure requirements and disturbance area boundaries

Cultural Monitors

- ▶ Initiate and report temporary work holds due to cultural non-compliance issues and offer clarifications on sensitive resource discoveries
 - Place 1-hour hold to investigate potential violations and provide mitigation monitoring guidance
 - Communicates estimated time/ construction delays and avoidance measures and resolution

Tribal Monitors

- ▶ Initiate temporary work holds due to cultural non-compliance issues and offer clarifications on sensitive resource discoveries
 - ☐ Place 1-hour hold to investigate potential violations and provide mitigation monitoring guidance
 - ☐ Communicates estimated time/ construction delays and avoidance measures and resolution

Paleontological Monitors

- ▶ Inspects excavation sidewalls, graded surfaces, trenches, and spoils piles for evidence of fossils exposed by excavations
- ▶ Halt work if paleontological resources are identified during construction


Dust Monitors

- ▶ Keep Dust Monitor Journal of construction activities and environmental factors such as wind speed and direction
- ▶ Oversee compliance with all Dust Control mitigation measures
- ▶ Ensure dust control measures are in place after work hours
- ▶ Halt work if wind gusts exceed acceptable thresholds

CPUC Environmental Monitors

- ▶ Monitor construction activities for compliance with project mitigation measures, mitigation plans, and permit conditions
- ▶ Documents issues with monitoring, notifies appropriate personnel, and reports issues to CPUC Project Manager
- ▶ Temporarily halt construction if imminent safety and resource endangerment concerns are noted at work location
- ▶ CPUC Project Manager has authority to shut down construction completely
- ▶ BLM has authority to shut down construction completely

Biological Resources



Special-Status Species Protection

Why Protect Species?

It is the Law

Why Protect Species?

We benefit from protecting special-status species

Endangered species “are of esthetic, ecological, educational, historical, recreational, and scientific value to the nation and its people.”

Endangered Species Act of 1973

Why Protect Species?

We benefit from protecting special-status species

Conserving unique plants and animals and the ecosystems upon which they depend is necessary to conserve our country's biological heritage.

Biological Resource Regulations

(The following are examples and do not represent all applicable regulations.)

- ▶ CEQA/National Environmental Policy Act (NEPA)
- ▶ Federal Land Policy and Management Act
- ▶ Threatened and Endangered Species
 - Federal Endangered Species Act (FESA)
 - California Endangered Species Act (CESA)

Biological Resource Regulations

(The following are examples and do not represent all applicable regulations.)

► Sensitive Species

- ❑ Migratory Bird Treaty Act (MBTA)
- ❑ Bald and Golden Eagle Protection Act (BGEPA)
- ❑ Bureau of Land Management Policy
- ❑ Clark County – Multiple Species Habitat Conservation Plan (MSHCP)
- ❑ California Native Plant Protection Act

Special-Status Species Protection

- ▶ Special-status animal and plant species are defined for ELM as:
 - ❑ Listed under FESA or CESA
 - ❑ Designated as Sensitive by BLM
 - ❑ California Species of Special Concern
 - ❑ California Rare Plant Rank 1 and 2
- ▶ It is illegal to capture, kill, injure, harass, or harm endangered species, their habitat may also be legally protected

Special-Status Species Protection

- ▶ Take permits are required to incidentally harm Endangered Species Act-protected species
- ▶ Noncompliance penalties include fines, equipment forfeiture, imprisonment
- ▶ BLM and CPUC project approvals are required mitigation measures to protect sensitive species and habitats

Mitigation Measures

- ▶ Wildlife must not be harmed or harassed regardless of its protection status
- ▶ Noncompliance with these measures, regulations, conditions, and laws can result in project delays, shutdown, fines or imprisonment

Note: A complete list of mitigation measures, regulations, and conditions is available in FRED.

Seasonal Restrictions

To extent feasible:

- ▶ Do not remove vegetation in suitable habitats for riparian birds during breeding season (January 1–August 31)
- ▶ No construction activities occur during the desert tortoise's more active season (April–May; September–October)
- ▶ No activities occurs within 1-mile line of sight of active golden eagle nests during breeding season (December 1–July 31)
- ▶ If unable to meet these seasonal restrictions, additional avoidance, minimization measures, and monitoring may be required



Special-Status Plants

Special-Status Plants

- ▶ Several special-status plants may be encountered within project area
- ▶ Special-status plants outside an existing ESA that are observed or suspected should immediately be reported to environmental/biological monitor
- ▶ Avoid all ground-disturbing activities within buffer areas
- ▶ Stay within delineated work zones

Special-Status Plant Species



➤ Abrams' spurge (*Euphorbia abramsiana*) – California Rare Plant Rank (CRPR) species



➤ Spiny-hair blazing star (*Mentzelia tricuspis*) – CRPR species

Special-Status Plant Species



- Mojave menodora (*Menodora spinescens* var. *mohaviensis*) – BLM sensitive species, CRPR



© 2010 James M. Andre

- Appressed muhly (*Muhlenbergia appressa*) – CRPR

Everyone is responsible for protecting the environment.

Special-Status Plant Species



- ▶ Parry's spurge (*Euphorbia parryi*) – CRPR species



- ▶ Rosy two-tongued beardtongue (*Penstemon bicolor* ssp. *roseus*) – BLM sensitive, CRPR, Nevada S3 species

Special-Status Plant Species



- ▶ Pink funnel lily (*Androstephium breviflorum*) – CRPR species



- ▶ Rusby's desert-mallow (*Spheroclea rysbi* var. *eremicola*) – CRPR species

Special-Status Plant Species



- ▶ Salina Pass wild rye (*Elymus salina*) – CRPR species



- ▶ Short-jointed beavertail (*Opuntia basilaris* var. *brachyclada*) – BLM sensitive, CRPR species

Special-Status Plant Species



- ▶ Spiny-hair blazing star (*Mentzelia tricuspis*) – CRPR species

Special-Status Plant Species

Additionally, the following plant species have been identified outside the project area, but not within the project area, however there may be isolated occurrences found of these species:

- ▶ Cliff brake (*Pellaea truncate*)
- ▶ Clokey's Cryptantha (*Cryptantha clokeyi*)
- ▶ Coves' Cassia (*Senna covesii*)
- ▶ Johnson's Bee-Hive Cactus (*Sclerocactus johnsonii*)
- ▶ Mojave Milkweed (*Asclepias nyctaginifolia*)
- ▶ Narrow-Leafed Yerba Santa (*Eriodictyon angustifolium*)
- ▶ Parish's Club Cholla (*Grusonia parishii*)



Special-Status Plant Species

Additionally, the following plant species have been identified outside the project area, but not within the project area, however there may be isolated occurrences found of these species:

- ▶ Playa Milkvetch (*Astragalus allochrous* var. *playanus*)
- ▶ Rough Menodora (*Menodora scabra* var. *scabra*)
- ▶ Slender Cottonheads (*Nemacaulis denudata* var. *gracilis*)
- ▶ Spiny Cliff-Brake (*Nemacaulis denudata* var. *gracilis*)





Special-Status Wildlife

Mojave Desert Tortoise

- ▶ FESA, CESA Threatened
- ▶ CC-MSHCP covered species
- ▶ Habitat: Sandy, gravelly, and/or rocky locations in desert. Burrows serve as climate refugia and may be dug into soil or located under boulders and plants. Most active during moderate temperatures and following rain but may be encountered at any time of the year, especially in good conditions. Project-wide.
- ▶ Description: Slow-moving tortoise with high domed shell that is tan to dark brown. Stocky legs with elephantine rear feet. Size can range from 1.5 inches (juveniles) to 15 inches (adults). Desert tortoises spend most of their lives in underground burrows.



If this species is observed or suspected, immediately notify environmental / biological monitor

Impacts can result in fines, imprisonment

Mojave Desert Tortoise

- ▶ Monitoring: Approved tortoise biologist available on site to monitor any work areas for desert tortoise. Approved tortoise biologist responsible for performing surveys prior to Proposed Project activities in suitable desert tortoise habitat.
- ▶ Desert Tortoise in Work Area: If desert tortoise encountered in work area, all work ceases, and contact approved biologist. Work cannot commence until animal has voluntarily moved to safe distance away from work area. Desert tortoises may be moved by agency-approved biologist if necessary.
- ▶ Under Vehicle Checks: Desert tortoises commonly seek shade during hottest times of day. Employees working within geographic range of this species are required to check under equipment and vehicles before they are moved.



Mojave Desert Tortoise Hatchling

If this species is observed or suspected, immediately notify environmental / biological monitor

Impacts can result in fines, imprisonment

Mojave Desert Tortoise

- ▶ Disposal of Trash: Contractor is responsible for ensuring trash and food items are contained in closed containers and removed daily to reduce attractiveness to opportunistic predators such as common ravens, coyotes, feral dogs
- ▶ Raven Management: SCE will implement a Raven Management Plan (RMP) to minimize avian predation of desert tortoise for project. RMP uses methods that deter raven depredation of juvenile desert tortoises and other wildlife species. RMP is not intended to eliminate or control raven populations but targets offending ravens that prey upon desert tortoises. RMP will incorporate an adaptive management strategy for immediate implementation following project construction.



If this species is observed or suspected, immediately notify environmental / biological monitor

Impacts can result in fines, imprisonment

Desert Bighorn Sheep

- ▶ BLM Sensitive and fully protected by State of California
- ▶ Habitat: Steep terrain and cliffs
- ▶ Description: Muscular body with tan/brown body, white around muzzle, rump, belly; males have large curved horns and females have short slightly curved horns.
- ▶ Stop work if Bighorn Sheep enters work area until animal passes through.



Pallid San Diego Pocket Mouse

- ▶ California Species of Special Concern
- ▶ Habitat: Coastal sage scrub/grassland ecotones, chaparral communities; sandy area of southwestern California with affinity for gravelly and rocky substrates.
- ▶ Description: Moderately-sized pocket mouse, with dark brown top, white underneath, spines that are black on rump, and white on hips. Tail is shorter than body. Has dark-colored dorsal crest and is light below.
- ▶ The Proposed Project impacts within the pallid San Diego pocket mouse's range is minimal, indicating this potential impact would be less than significant. No mitigation is required.



Photo credit: Denise Clark, USUS Biologist

Desert Kit Fox

- ▶ State listed as “Imperiled” due to rarity. “Vulnerable” within its local range.
- ▶ Habitat: Mojave Desert, semi-arid, mixed grass shrublands and margins of pinyon-juniper woodlands dominated by creosote bush in Mohave; large badger burrows or rock outcrops as denning sites.
- ▶ Description: Cat-sized fox with long ears, grayish coat, light slim body, and short legs with black-tipped tail.
- ▶ Active or potentially active dens will be marked and project activities – with following exceptions: within 100 feet (non-natal dens) or 200 feet (natal dens, or any active den during breeding season) will be avoided. Ingress/egress of construction vehicles and equipment through buffers and low intensity activities such as inspections, BMP maintenance within buffers allowed, provided qualified biologist determines these activities will not impact dens, denning animals. Buffers may be modified with concurrence of CPUC, BLM, in consultation with CDFW, USFWS. If active dens found within project disturbance areas and avoidance is not possible, SCE will act only after notifying and obtaining concurrence from CPUC, BLM, CDFW, and (when occurring on Mojave National Preserve land) NPS .



Ringtail

- ▶ Fully protected in California
- ▶ Could occur anywhere along project alignment, particularly in steep, rocky and shrublands nearby water
- ▶ Habitat: Forest, shrubland with rocky areas, usually near permanent water or riparian areas. Ringtails den in rock crevices, hollow logs, and abandoned burrows.
- ▶ Description: Ringtails are cat-like carnivores with buffy-colored upper body, dark brown wash and pale underparts. The tail is bushy with black and white rings.
- ▶ Active or potentially active dens will be marked and project activities – with exceptions as listed below – within 100 feet (non-natal dens) or 200 feet (natal dens, or any active den during breeding season) will be avoided. Ingress/egress of construction vehicles and equipment through buffers and low intensity activities such as inspections, BMP maintenance within buffers allowed, provided qualified biologist determines these activities will not impact dens, denning animals. Buffers may be modified with concurrence of CPUC, BLM, in consultation with CDFW, USFWS. If active dens found within project disturbance areas and avoidance is not possible, SCE will act only after notifying and obtaining concurrence from CPUC, BLM, CDFW, and (when occurring on Mojave National Preserve land) NPS.



Bendire's Thrasher

- ▶ BLM Sensitive
- ▶ Habitat: Open desert scrub, grasslands, and shrublands.
- ▶ Description: Large, long-tailed songbird. Gray-brown with subtle dark spots and streaks on the chest. Medium curved bill.
- ▶ A 500-foot disturbance-free ground buffer staked, flagged, signed around active nests.
- ▶ Avoid construction activities within buffer areas.
- ▶ Stop work if environmental monitor determines construction activities are disturbing nesting activities.



If this species is observed or suspected, immediately notify environmental monitor.

American Badger

- ▶ California Species of Special Concern
- ▶ Habitat: Grasslands, parklands, farms, other treeless areas with friable soil, supply of rodent prey. Also found in forest glades, meadows, marshes, brushy areas, hot deserts, and mountain meadows. Usually found at elevations lower and warmer than those characterized by coniferous forests.
- ▶ Description: Flat body with short, stocky legs with grey/reddish fur on back, and flanks. Belly is buffy color with whitish throat and chin. Face has white stripe that goes from nose to tail across back.
- ▶ Active or potentially active dens will be marked and project activities – with exceptions as listed below – within 100 feet (non-natal dens) or 200 feet (natal dens, or any active den during breeding season) will be avoided. Ingress/egress of construction vehicles and equipment through buffers and low intensity activities such as inspections, BMP maintenance within buffers allowed, provided qualified biologist determines these activities will not impact dens, denning animals. Buffers may be modified with concurrence of CPUC, BLM, in consultation with CDFW, USFWS. If active dens found within project disturbance areas and avoidance is not possible, SCE will act only after notifying and obtaining concurrence from CPUC, BLM, CDFW, and (when occurring on Mojave National Preserve land) NPS.



Banded Gila Monster

- ▶ BLM Sensitive Species, California Species of Special Concern, and Nevada Protected Reptile
- ▶ Habitat: Rocky, deeply incised topography, with large, high mountain ranges; mostly associated with riparian areas (Lower Colorado)
- ▶ Description: Large, heavy bodied lizard with large head, small beady eyes, and short, fat tail. Skin is bright pink/orange, black in color with warty-like bumps covering body.
- ▶ Stop work if Gila monster is found in work area. Animal will be allowed to move through work area while construction is halted. If animal does not move out of harm's way after 20 minutes, authorized biologist may move it minimum distance possible within suitable habitat.



Desert Rosy Boa

- ▶ BLM Sensitive Species
- ▶ Habitat: Arid, desert, xeric scrub, rocky, mountainous shrublands, and sandy plains
- ▶ Description: Medium-sized, heavy bodied snake with three wide, dark brown, black, orange, reddish stripes on light cream, tan, or grey background. Head is slightly larger than neck. Tail is relatively blunt with smooth scales that are small, and rounded on top of head.
- ▶ Stop work if a Rosy Boa is found in work area. Animal allowed to move through work area while construction is halted. If animal does not move out of harm's way after 20 minutes, authorized biologist may move it minimum distance possible within suitable habitat.



Mojave Fringe-Toed Lizard

- ▶ BLM Sensitive, California Species of Special Concern
- ▶ Habitat: Known almost exclusively from California, primarily in San Bernardino, eastern Riverside Counties; found in arid, sandy, sparsely vegetated habitats. Sand dunes, sand fields primary habitat.
- ▶ Description: Medium-sized cream to light tan colored lizard with relatively flat body, flattened tail. Back marked with small orange spots surrounded by network of black reticulations. Underside pale cream, tinted light yellow-green during breeding season.



Mojave Fringe-Toed Lizard

- ▶ Approved biologist available on site to monitor any work areas for Mojave fringe-toed lizard. Approved biologist responsible for performing surveys prior to Proposed Project activities in suitable habitat for species. Approved biologist has authority to halt all non-emergency actions – as soon as safely possible – that may result in harm. Approved biologist will assist in overall implementation of all adopted protection measures for special-status reptiles.



Burrowing Owl

- ▶ CDFW Species of Concern
- ▶ BLM Sensitive
- ▶ Habitat: Gently sloping areas, characterized by low, sparse vegetation. Often associated with high densities of burrowing mammals. Also found in agricultural fields, golf courses, road allowances, vacant lots, etc.
- ▶ Description: Small (7 to 10 inches), ground-dwelling owl. Round head. Bright lemon-yellow eyes. Wings relatively long and rounded with brown and buffy white barred primaries. Legs long, sparsely feathered. Most active early morning, late evening.
- ▶ If active burrows are identified, 300-foot ground-disturbance buffer and 300-foot horizontal and 200-foot vertical helicopter buffer will be clearly established with marked, staking, signage.
- ▶ Avoid activities around active burrows during breeding season (February 1 to August 31).



If this species is observed or suspected, immediately notify environmental / biological monitor

Golden Eagle

- ▶ CDFW Fully Protected and on CDFW Watch List
- ▶ Protected under Bald and Golden Eagle Protection Act
- ▶ BLM Sensitive
- ▶ Habitat: Open, semi-open areas, including rimrock terrain of open desert and grassland areas
- ▶ Description: Large, dark-brown raptor with long, broad wings. Golden rear crown, nape, sides of neck.
- ▶ If active nest is detected, 1-mile line-of-sight and 0.5-mile no line-of-sight buffer established during construction activities.
- ▶ Stop work if environmental/biological monitor determines construction activities are disturbing nesting activities.



If this species is observed or suspected, immediately notify environmental / biological monitor

Bat Roosts

- ▶ Rabies is a virus that spreads from animals to humans. It attacks central nervous system and is almost always fatal. Working with or around wildlife, might put you at risk.
- ▶ Potential roost sites for special-status bats within project area include rock outcrops, snags, and abandoned man-made structures. Foraging habitat occurs throughout project area.
- ▶ Exclusion area will be established 165 feet from any active roost. These areas will be avoided during construction activities.
- ▶ Special-status bats include western mastiff bat and pallid bat



Wildlife Shelter Sites

- ▶ Wildlife, including protected species such as desert tortoises, can use a variety of shelter sites
- ▶ Preserve features that can provide shelter for wildlife, if feasible
- ▶ Avoid disturbance of any feature that can provide shelter for wildlife until cleared by biological monitors
- ▶ Potential shelter sites include:
 - ▶ Caliche shelters
 - ▶ Rock outcrops
 - ▶ Woodrat middens
 - ▶ Burrows
 - ▶ Downed vegetation





Nesting Birds

Nesting Birds

- ▶ Birds and nests are protected under Migratory Bird Treaty Act, California Fish and Game Code Section 3503, Section 3503.5
- ▶ Species-specific buffers are established in Nesting Bird Management Plan (NBMP) and the BLM Bird and Bat Conservation Strategy Plan
- ▶ NBMP applicable throughout nesting season (beginning January 1 for raptors, February 1 for most other birds, and continues through end of August)
- ▶ When active nest are discovered during preconstruction survey, biological monitor will delineate and restrict construction as necessary per species-specific buffer as ESA

Nesting Birds

- ▶ If nest are observed during construction activities
 - Work is halted in area and species-specific buffer are established
 - Equipment must be removed according to instructions provided by biological monitor
- ▶ To avoid take of active nests; lead biologist, avian biologist, or biological monitor will implement and maintain ESA buffer, monitor adjacent construction activities, and document observations of nesting birds' behavior and active nest status

Nesting Bird Identification Process

Construction contractor made aware of ESA buffers using:

- Construction maps outlining environmental and biological constraint areas
- Staking
- Signage
- Direct Communication in the Field

Avian Biologist consulted. Determines if reduced buffer applies to active nest.

Avian Biologist makes determination based on information from:

- Biological Monitor
- Species' natural history
- Species' known tolerances including SCE nesting bird management on ELM

SCE biologist consulted prior to reducing standard buffer

Buffers reduced after considering:

- Distance to construction
- Type and anticipated duration of construction
- Microhabitat at nest's location that may provide visual and acoustic barriers, behavior of pair, and its reproductive stage

Wildlife Handling

Wildlife Handling

- ▶ Enjoy your opportunity to observe and view wildlife but do not approach, touch, handle or capture animals
- ▶ If any construction personnel – other than biological monitor – observes wildlife in need of assistance, **they must immediately notify environmental or biological monitor and are not to approach, handle, or move animal**
- ▶ Environmental monitor notifies all construction operators in immediate vicinity of intent to enter work area to protect safety of biologist, construction workers, and animal

Wildlife Handling

- ▶ Dead special-status species animals found on unpaved project roads, work areas, and ROWs are to be reported to CDFW within 1 workday, Carcass are to be handled as directed by CDFW
- ▶ Dead non-special status species animals found on unpaved project roads, work areas, and ROWs are to be reported to appropriate local animal control agency within 24 hours
- ▶ Use caution to avoid contact with animal's external parasites (e.g. fleas or ticks) if present

Wildlife Handling

Rattlesnake/Gila Monster Relocation

- ▶ Environmental monitor alerts all on-site personnel of rattlesnake's or Gila monster presence, biological monitor observes snake from distance while alerting workers to its movements
- ▶ Environmental monitor ensures other project personnel do not harass and/or handle rattlesnakes or Gila monsters
- ▶ If time and work allow, give snake/Gila monster space and let it leave area on its own – Given space, time, and adequate escape route, they will typically retreat on own
- ▶ Stop work immediately if snake and workers are at risk of injury

Wildlife Handling

Rattlesnake/Gila Monster Relocation

- ▶ If venomous snake or Gila monster needs to be moved (e.g., in harm's way, posing a threat to humans, under a piece of equipment), only biologists authorized to handle venomous snakes or Gila monsters can participate in relocating them



CDFW-Approved Wildlife Handling Rehabilitation Locations

- ▶ All God's Creatures
Chino Hills, California, (909) 393-1590
- ▶ Joseph and Linda Chalk
San Bernardino, California, (909) 887-8267
- ▶ Kandie Cansler
Oak Glen, California, (909) 790-1010
- ▶ Nevada Department of Wildlife
Las Vegas, Nevada, (702) 486-5127

Weed Control Program

Weed Control Program

- ▶ **What is a “*Noxious Weed?*”**
 - ❑ Species identified by public law as exerting substantial negative environmental and economic impact.
 - ❑ Noxious weeds are a subset of exotic plants.
 - ❑ The term “noxious weeds” is a legal classification, not an ecological term.

Weed Control Program Laws and Regulations

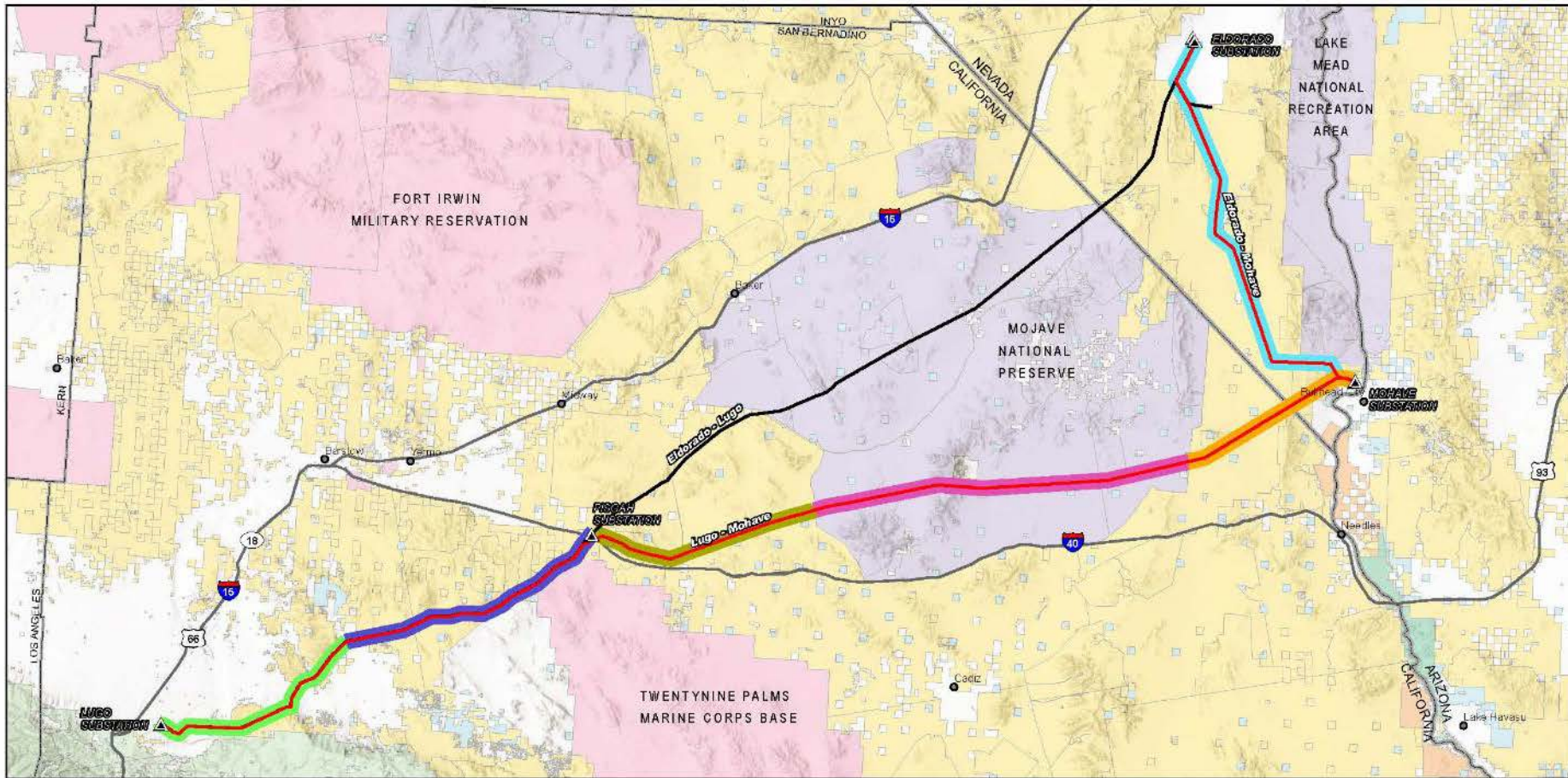
- ▶ Federal and state laws prohibit introduction and willful spread of noxious weeds
 - ❑ **Federal Noxious Weed Act of 1974:** “Prohibited under this law is the movement of any noxious weed identified by the Secretary of Agriculture into or through the United States...”
 - ❑ **Plant Protection Act of 2000:** “Defines a noxious weed as any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment.”
 - ❑ **Noxious Weed Control and Eradication Act of 2004:** “The act prohibits the movement of a federally designated noxious weed into or through the United States...”

Weed Control Program

- ▶ **Goal** is to minimize spread of weeds during construction
- ▶ **Control Measures include:**
 - ❑ Pre-Construction Weed Treatment Procedures
 - ❑ Prevention by establishing “Weed Zones”
 - A “Weed Zone” is area that has mostly the same weed species, and can be isolated from adjacent Weed Zones to prevent weed spread
 - Implementing cleaning stations and inspections for vehicles moving between Weed Zones
 - ❑ Through surveys and monitoring
 - ❑ Using manual and chemical control methods



Weed Control Program



Legend

Weed Management Zones

- Weed Zone 1
- Weed Zone 2
- Weed Zone 3
- Weed Zone 4
- Weed Zone 5
- Weed Zone 6

General Reference Features

- Existing Substation
- Major Roadway
- County
- State
- Major City

Jurisdiction

- Indian Reservation
- Bureau of Land Management
- Department of Defense
- US Fish and Wildlife
- National Park Service
- State Lands
- US Forest Service
- Private



INTEGRATED WEED MANAGEMENT PLAN

WEED ZONES

ELDORADO-LUGO-MOHAVE SERIES CAPACITOR PROJECT

April 27, 2020

Weed Control Program

► Control Measures (continued):

- ❑ Ground-disturbing construction equipment must be cleaned prior to arriving on site and when traveling between weed zones:
 - **Wash ALL equipment when traveling between weed zones!**
 - Wash all dirt and mud that could contain seed, paying special attention to tires/tracks, undercarriage, wheel wells, and running boards
 - All vehicles must be washed offsite or at designated cleaning stations/yards
 - Other construction vehicles (e.g., pickup trucks) frequently entering and exiting site and personal vehicles will be inspected and washed as needed

Weed Control Program

▶ **Control Measures (continued):**

- Ground-disturbing construction equipment must be cleaned prior to arriving on site and when traveling between weed zones:
 - Clean all tools involved in ground-disturbing and/or vegetation trimming/removal activities (e.g., shovels, rakes, chainsaws, etc.)

*NOTE: On-site monitor WILL inspect all equipment prior to use

Weed Control Program

► Control Measures (continued):

□ Wash stations, procedures:

- Construction Contractor produces Daily Log that documents each time a vehicle is washed
- Log is presented to on-site monitor prior to equipment use
- Monitor maintains copies of all wash logs on site, logs are available for CPUC and BLM inspection
- Vehicles/equipment WILL BE denied access/use if monitor determines they are not sufficiently clean and/or devoid of weed seeds upon arriving on site

Weed Control Program

► Control Measures (continued):

- Use of certified weed-free construction materials and disposal of green waste used
 - Straw, hay bales, straw wattles, mats, and other plant materials must be obtained from certified sources that are free of weed seeds
 - Gravel, mulch, and soil obtained from suppliers who can certify materials are weed-free
 - On-site storage, disposal of mulch, and green waste that may contain weed material is prohibited – mulch and green waste can be removed from project areas in covered vehicles, transported to licensed landfills and/or composting facilities

Weed Control Program



2008 Steve Maston

Redstem heron's bill
(*Erodium cicutarium*)



© J.S. Peterson

© J.S. Peterson, hosted by the USDA-NRCS PLANTS database



2018 Birgit Knorr

Mediterranean grass
(*Schismus barbatus*)

Russian Thistle
(*Salsola tragus*)

Weed Control Program



2018 Birgit Knorr

Red Brome
(*Bromus madritensis*)



Puncture Vine/Goat Heads
(*Tribulus terrestris*)



2005 Michelle Cloud-Hughes

Saharan Mustard
(*Brassica
tournefortii*)

Weed Control Program

Additionally, the following weed species have been identified outside the project area, but not within the project area, however there may be isolated occurrences found of these species:

- ▶ Asian Mustard (*Brassica tournefortii*)
- ▶ Cheatgrass (*Bromus tectorum*)
- ▶ London Rocket (*Sisymbrium irio*)
- ▶ Mouse Barley (*Hordeum murinum*)
- ▶ Saltcedar (*Tamarix ramosissima*)

Weed Control Program

Additionally, the following weed species have been identified outside the project area, but not within the project area, however there may be isolated occurrences found of these species:

- ▶ Seaside Barley (*Hordeum marinum*)
- ▶ Short-Pod Mustard (*Hirschfeldia incana*)
- ▶ Slender Oat (*Avena barbata*)
- ▶ Wild Oats (*Avena fatua*)

Cultural and Paleontological Resources

Federal and State Compliance

- ▶ All ELM participants must comply with the following laws:
 - ❑ California Environmental Quality Act (CEQA)
 - ❑ National Historic Preservation Act (NHPA)
 - ❑ Paleontological Resources Preservation Act (PRPA)
 - ❑ Native American Graves Protection and Repatriation Act (NAGPRA)
 - ❑ Archaeological Resources Protection Act (ARPA)
 - ❑ Federal Land Management and Policy Act (FLPMA)

Cultural Resources

- ▶ Cultural resources are prehistoric and historic archaeology sites
 - ❑ Any trace of past human activity greater than 50 years old may be an important cultural resource
 - ❑ Thousands of years of Native American prehistory is represented
- ▶ Ethnographic resources are also cultural resources
 - ❑ Shrines, ceremonial areas
 - ❑ Cemeteries
 - ❑ Natural landscape features



Cultural Resources

- ▶ Properly treating Native American graves is of great concern
 - ❑ Possession of artifacts and human remains from a Native American grave is felony (PRC 5097.99)
- ▶ Archaeological and Historical Sites are Nonrenewable Resources
 - ❑ Once destroyed, historical and archaeological sites cannot be recreated

Cultural Resources

- ▶ Clues Cultural Resources may be near:
 - ❑ Discolored soil
 - ❑ Unusual concentration of rock
 - ❑ Concentration of historic-era trash, including bottles, broken glass, or ceramic, bone, and metal pieces
 - ❑ Concentration of brick, concrete, and mortared stone



Cultural Resources Violations

- ▶ Removing artifacts from archaeological sites can result in heavy fines and even imprisonment
 - ❑ Minimum penalty: Fine not to exceed \$10,000 and 1 year in prison or both
 - ❑ Maximum penalty: Fine not to exceed \$100,000 and 5 years in prison or both*

*In the case of a second or subsequent violation

- ▶ If artifacts are observed on ground surface, contact on-site archaeologist or other environmental personnel immediately

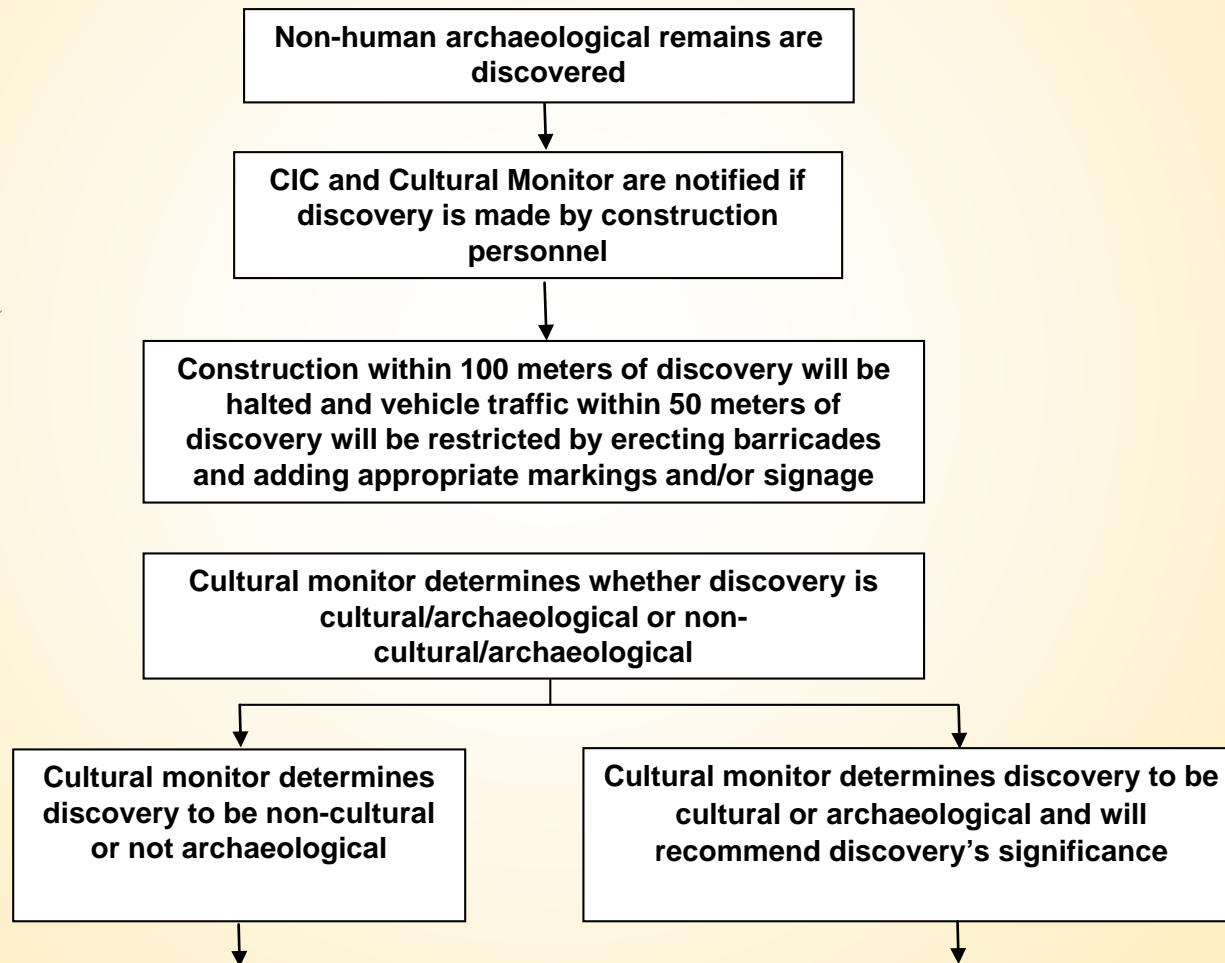
Paleontological Resources

- ▶ Fossils are remains of ancient plants and animals, ranging from 10,000 to several billion years old
- ▶ Fossils can include bones, teeth, burrows, leaves, tracks, shells, and other evidence of past life
- ▶ Paleontological finds are usually encountered during deep drilling and trenching activities

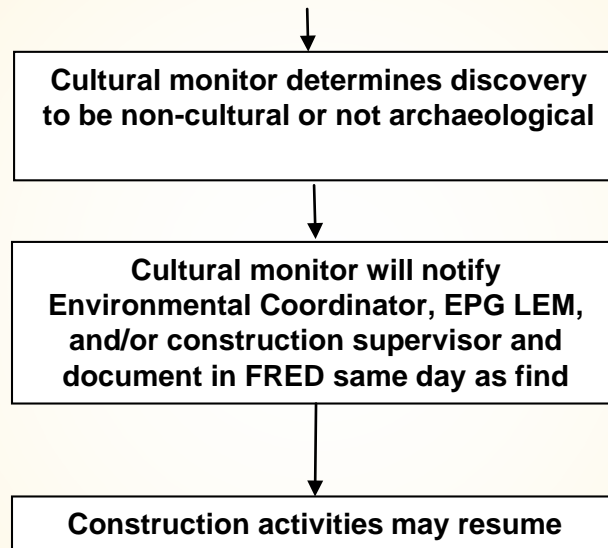
Paleontological Resources Violations

- ▶ It is unlawful to collect fossils or other paleontological resources from any construction area during construction
- ▶ Removing fossils or other paleontological resources from paleontological sites can result in heavy fines
- ▶ If exposed fossil or other paleontological resource are observed or uncovered, contact on-site paleontologist or other environmental personnel immediately
- ▶ Preservation of paleontological resource and notification of paleontological monitor are of prime importance

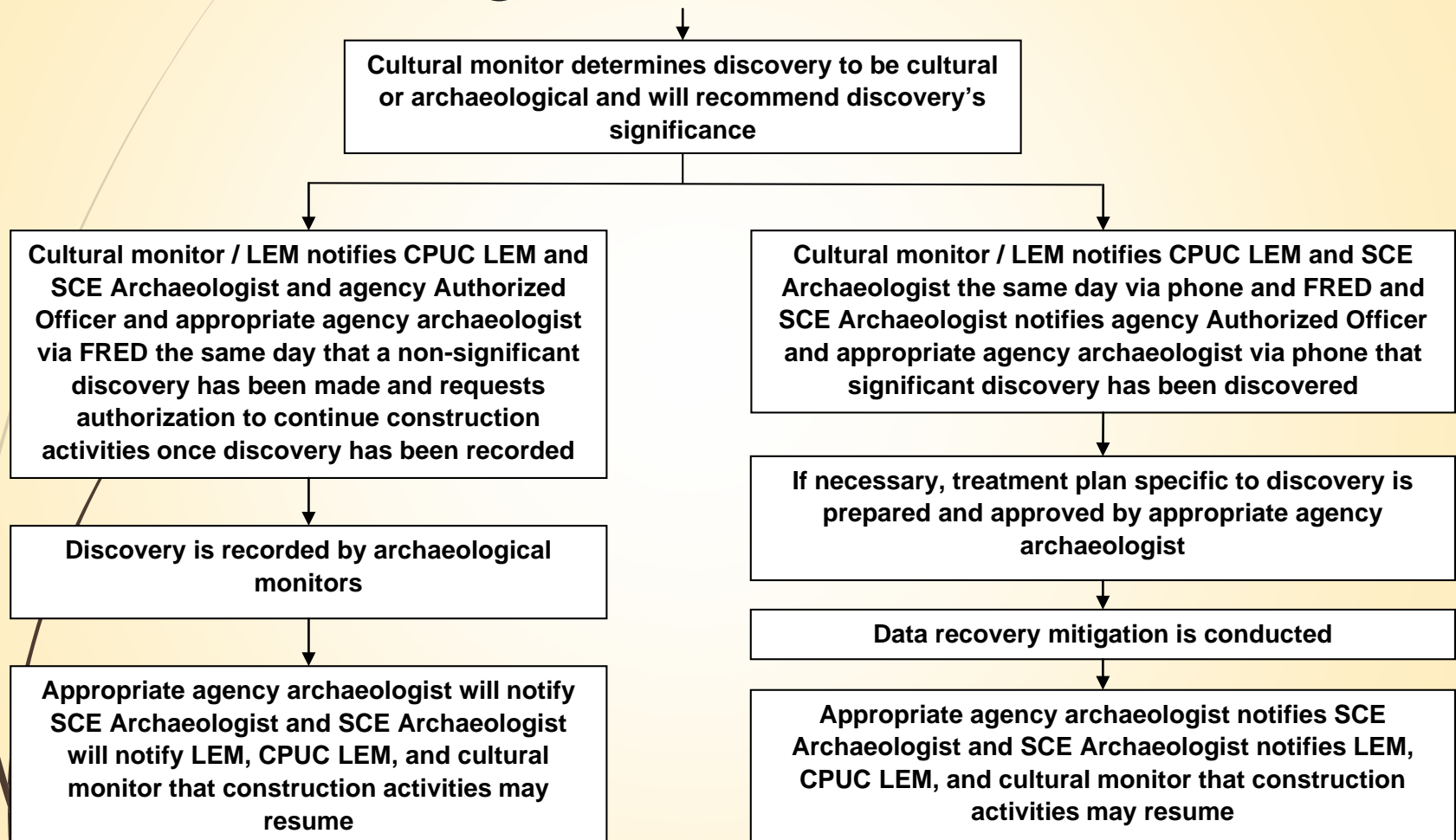
Unanticipated Historical and Archaeological Discoveries



Unanticipated Historical and Archaeological Discoveries



Unanticipated Historical and Archaeological Discoveries cont'd



Unanticipated Paleontological Discoveries

If paleontological resources (fossils, bones, animal tracks, etc.) are discovered during construction activities:

- ▶ Stop work in area until what is found can be identified
- ▶ Notify paleontological monitor or construction supervisor immediately
- ▶ Avoid moving or disturbing the discovery
- ▶ Paleontologist will recommend appropriate mitigation measures
- ▶ If significant, workers will be asked to avoid the area and continue work in another area

Human Remains

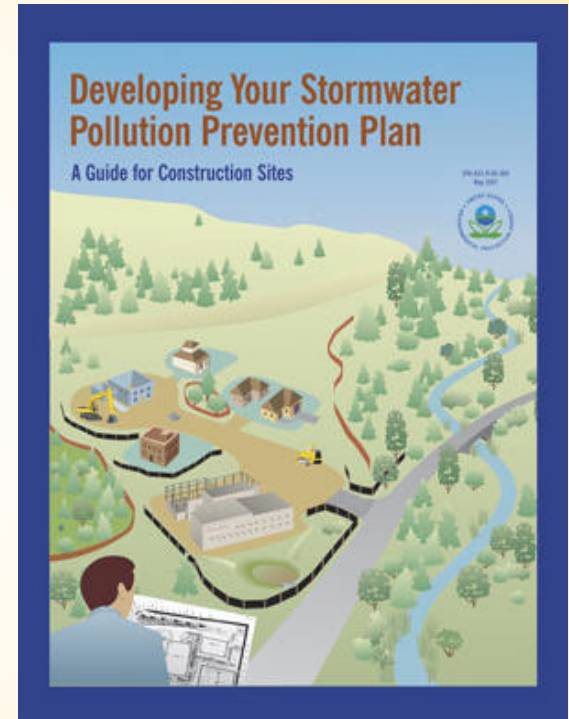
- ▶ If human remains are encountered at any time, work in area of discovery must be halted
- ▶ Environmental / cultural monitors must be contacted IMMEDIATELY if any skeletal remains are found

SWPPPs and BMPs

Stormwater Pollution Prevention Plans and
Best Management Practices

SWPPPs and BMPs

- ▶ The SWPPPs provide BMPs to address storage and handling of hazardous materials and sediment runoff during construction activities
- ▶ Three Project SWPPPs
 - ❑ Region 6
 - ❑ Region 7
 - ❑ Nevada
- ▶ Copies of SWPPPs are available at ALL construction sites, with BMP contractor, and at construction manager's remote office



BMPs

- BMPs are used to control erosion and sediment runoff, and to prevent pollution of surrounding areas and waterways
- BMPs must be used during construction as specified in SWPPP
 - ❑ Demolition
 - ❑ Grading
 - ❑ Material and Equipment Storage
 - ❑ Hauling
 - ❑ Refueling
 - ❑ Construction



BMPs

▶ BMP Examples

- ❑ Fiber rolls and straw wattles
- ❑ Silt fences
- ❑ Sand and gravel bags
- ❑ Secondary containment and drip pans
- ❑ Visqueen and tarps
- ❑ Spill kits
- ❑ Use of water trucks and water buffalos
- ❑ Rumble strips and gravel at yard entrances



When to Use BMPs:

- Always refer to SWPPP manual when in doubt
- Use BMPs when you:
 - ☐ See dust
 - Use water (i.e., water truck and water)
 - ☐ Digging/moving dirt
 - Surround work area with fiber rolls and silt fence



When to Use BMPs:

- ▶ Use BMPs when you:
 - Work near a storm drain
 - Use gravel bags to protect drain from water/sediment runoff
 - Create dirt piles
 - Cover stockpiles with Visqueen to prevent wind-blown sediment/dust

Compliance Responsibilities Construction Personnel

- ▶ Work crews should continually check and maintain BMPs
 - ❑ Make sure BMPs are not damaged and are functioning properly
 - ❑ Replace all damaged BMPs and add more when necessary
 - ❑ Notify environmental monitor immediately if breach of erosion controls occurs
 - ❑ Maintain good housekeeping!



Hazardous Materials and Hazardous Waste

Hazardous Materials and Hazardous Waste

- ▶ Hazardous materials that are stored, used, and generated on site must follow the written procedures in Hazardous Materials and Waste Management Plan
 - ❑ Hazardous materials must be documented in Hazardous Materials Inventory (Appendix A in Hazardous Materials and Waste Management Plan)
 - ❑ Construction contractor maintains current inventory of hazardous materials and communicates changes to hazardous materials inventory to SCE



Hazardous Materials and Hazardous Waste

- ▶ Frequently used hazardous materials include:
 - ❑ Diesel fuel, gasoline, transmission fluid, engine oil, and antifreeze
 - ❑ Cleaning solvent, lubricant, and engine degreaser
 - ❑ Chain, cable fluid, and brake fluid
 - ❑ Paints and solvents
 - ❑ Hydraulic fluid, oxygen, and acetylene
- ▶ **Notify environmental monitor and stop use of equipment immediately if any fluids are spilled onto ground**
- ▶ Inspections and recordkeeping are conducted in accordance with SWPPP
- ▶ All spills and/or leaks are recorded in Spill Log

Compliance Responsibilities: Construction Personnel

- ▶ Transporting Hazardous Materials
 - ❑ Transport hazardous materials and waste only by Qualified personnel
 - ❑ Disposed of hazardous waste at facilities authorized to accept specific hazardous waste

Compliance Responsibilities: Construction Personnel

- ▶ Fueling and Maintaining Construction Equipment
 - ❑ Must establish designated refueling station areas
 - ❑ Must keep absorbent trays and pads stocked at all times
 - ❑ Refuel only in designated areas or by tanker truck using appropriate spill prevention measures, including using drip pans, plastic liners, absorbent trays, etc.
 - ❑ When refueling, DO NOT “top off” tanks
 - ❑ DO NOT conducted refueling or maintenance activities near drains or waterways
 - ❑ Must store fuel and other hazardous maintenance materials properly with secondary containment
 - ❑ Place drip pans and other control measures under construction equipment nightly to capture drips or spills

Compliance Responsibilities: Construction Personnel

- ▶ Identify and secure hazardous waste storage areas
- ▶ Take preventative measures to avoid spills and leaks in hazardous waste storage areas or during handling and transportation of wastes
- ▶ Limit storage of hazardous waste in non-secure areas
- ▶ Notify environmental monitor and stop use of equipment immediately if any fluids are spilled onto ground

Compliance Responsibilities: Construction Personnel

- ▶ Train construction personnel in proper hazardous waste management procedures
- ▶ Properly label hazardous materials and waste containers only by Qualified personnel
- ▶ Keep containers in good condition within designated storage areas
- ▶ Inspect containers for leaks and spillage
- ▶ Ensure all containers are securely enclosed
- ▶ Only appropriately trained personnel may handle hazardous materials
- ▶ DO NOT store Hazardous materials near drains and waterways

Hazardous Materials and Hazardous Waste

- ▶ Emergency response:
 - ❑ In event of any medical emergency – including emergencies involving hazardous materials
 - Immediately call 911
 - Notify site supervisor
 - Evacuate the area, if necessary
 - ❑ If safe to do so, follow safety procedures for limiting, containing, and cleaning up any released hazardous materials
 - ❑ Report spills to site environmental personnel



Hazardous Materials and Hazardous Waste

- ▶ Emergency response:
 - ❑ If hazardous materials are released into drains, waterways, or other sensitive environmental resources, immediately notify environmental monitor
 - ❑ Hazardous material spills, releases, and leaks must be reported to SCE and appropriate agencies and documented in Spill Log

Hazardous Materials and Hazardous Waste

- ▶ Contaminated soil and/or groundwater
 - Qualified personnel must be on site during site preparation, grading, and related earthwork activities to assist with recognizing potential contamination
 - Common signs of soil and/or groundwater contamination include:
 - Odor
 - Discoloration

Hazardous Materials and Hazardous Waste

- ▶ If potentially contaminated soil and/or groundwater is observed:
 - ❑ Immediately stop work
 - ❑ Notify site supervisor and SCE
 - ❑ Qualified personnel will assess soil and/or groundwater in field and collect samples for laboratory testing, if appropriate

- ▶ If potentially contaminated soils are encountered within the footprint of construction, soils will be tested, stockpiled, and appropriate Certified Unified Program Agency or Regional Water Quality Control Board will determine whether further assessment is warranted

Air Quality

Air Quality

- ▶ Contractor is responsible for adhering to applicable local air district rules and regulations to assist with the Districts' compliances with ambient air quality standards.

Air Quality

- ▶ The following measures will be adhered to at all times for duration of project
 - ❑ Traffic speeds on unpaved roads will not exceed 15 mph
 - ❑ Construction vehicles will stay on project access roads
 - ❑ Unpaved roads, substation areas, and staging areas will be watered or non-toxic soil stabilizers (e.g., water, tackifiers, and soil binders) will be applied per manufacturer's recommendations and in sufficient quantities to maintain compliance with the Mojave Desert Air Quality Management District (MDAQMD), Clark County Department of Environment and Sustainability, Nevada, and other jurisdictional requirements to maintain no visible vehicle travel dust emissions
 - ❑ Inactive excavated, graded soils, and soil piles will be sufficiently watered, sprayed with soil stabilizer to create surface crust, or covered

Air Quality

- ▶ The following measures will be adhered to at all times for duration of project
 - ❑ Drop heights from excavators and loaders will be minimized to distance no more than 5 feet
 - ❑ Soil truck loads will have 6 inches of freeboard or be covered and gate seals on dump trucks will be tight
 - ❑ Construction activities occurring on unpaved surfaces will be discontinued during periods when activities are causing visible dust plumes that cannot be avoided by approved dust suppression methods
 - ❑ All grading and excavation activities will be suspended when wind speeds exceed 30 mph unless otherwise approved in Fugitive Dust Control Plan (wind speed measurement methods will be consistent with MDAQMD Implementation Handbook for Rule 403.2)

Air Quality

- ▶ The following measures will be adhered to at all times for duration of project
 - ❑ Off-road equipment will have engines that meet or exceed U.S. Environmental Protection Agency/California Air Resources Board emissions requirements
 - ❑ Helicopter idling occurs only when necessary for safe operation and emergency readiness purposes
 - ❑ Helicopter operators will use the smallest practical and available helicopter for each lift operation
 - ❑ Helicopter Landing Zones not on existing paved airfields or other paved sites will be treated with soil amendments (e.g., water, tackifiers, and soil binders) applied at frequency necessary to create and maintain surface soil crusts where rotor wash creates fugitive dust emissions

Fire Management

Fire Management

Laminated Card

- Fire management card issued to personnel for reference while working

The card includes:

- Procedures for when fire is discovered
- Conditions under which fire can be fought
- Emergency numbers for fire reporting

If a fire is discovered

- Alert the appropriate fire agency by calling the direct phone number on the reverse or by calling 9-1-1
- Note the location, size, and type of fire
- Notify supervisor and other personnel
- Establish communication to any necessary support services
- Take a site-specific employee head count immediately

The fire will be fought by SCE and its contractors ONLY if

- The fire department has been notified of the fire, AND
- The fire is small and confined to its area of origin, AND
- There is a way out and employees can fight the fire with their backs to the exit, AND
- The proper extinguisher/tools are available, are in good working order, AND their proper use is known

If you are not sure of your ability or the ability of the extinguishers/ tools to contain the fire, you must leave the area

Card preparation date: May 2020

Fire Management

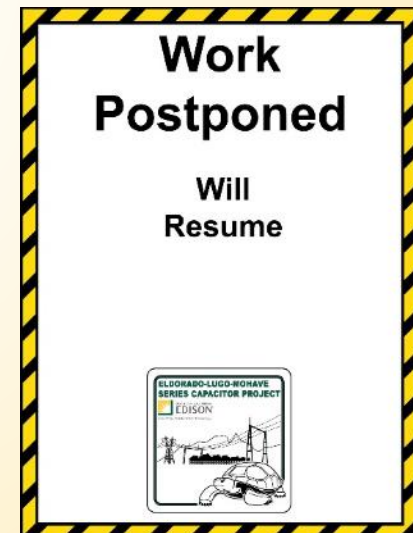
- ▶ Smoking is only allowed in areas designated by Project Fire Marshall
- ▶ Stop work during Red Flag Warning events when directed
- ▶ All trucks, vehicles, and heavy equipment will have fire-fighting equipment on board, including extinguisher, shovel, and axe (Pulaski-type)
- ▶ Fire extinguishers are designed for small, incipient stage fires ONLY – If you *think* a fire is unsafe to fight, it IS unsafe to fight! Call 911 and get to safe location



Reminders

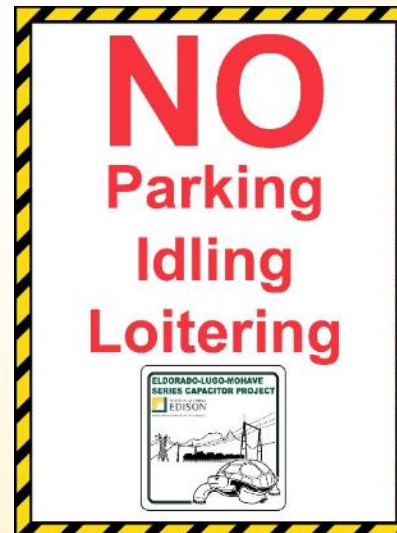
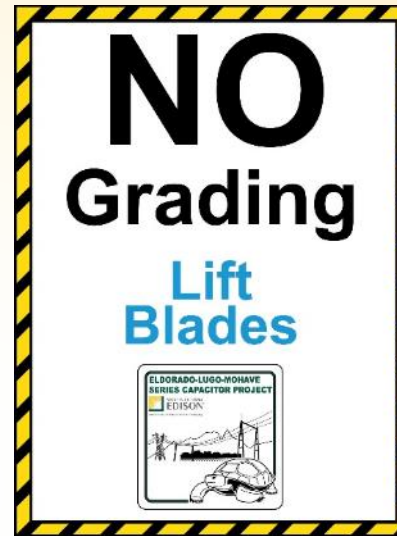
Project Signage

- ▶ Project signage is found throughout project ROW and contains information and instructions to be followed at all times.
- ❑ **ESA (Environmentally Sensitive Area)**
 - No entrance permitted without environmental monitor approval
- ❑ **Work Postponed**
 - Information on delayed construction



Project Signage

- ❑ **No Grading – Lift Blades**
 - No grading is permitted in area
- ❑ **No Parking, Idling, or Loitering**
 - No stopping at any time
- ❑ **Project Speed Limit – 15 mph**
 - Keep at or below 15 mph within project ROW



Project Signage

- ❑ **No ELM Access**
 - No project access permitted
- ❑ **ELM Access OK**
 - Project access permitted
- ❑ **Desert Tortoise Habitat – Speed Limit 15 mph**
 - Desert Tortoise habitat area – be mindful of these protected animals; Speed limit is 15 mph



Past Project Pitfalls and Common Non-compliances

- ▶ Do not start work before biological monitor performs a clearance sweep
- ▶ Dust control: Make sure water is in use if there is visible dust
- ▶ Speed limits: Keep at or below designated speed limits throughout project site
- ▶ Trash: Make sure all trash – especially food trash – goes into a proper container and does not get dropped on ground or picked up by wind



Past Project Pitfalls and Common Non-compliances

- ▶ Secondary containment: Make sure drip pans accompany every piece of engine-powered equipment
- ▶ Trench, pit, and hole covers: Make sure all trenches, pits, and holes are covered and have properly sloped wildlife escape planks included in every trench/pit/hole (not allowed in Desert Tortoise habitat)
- ▶ Keep all vehicles and equipment within project-defined boundaries
- ▶ Track out: Make sure to go over rumble strips and gravel entrances to yards

Remember!

- ▶ SCE strives for 100 percent regulatory compliance
- ▶ Several special-status species and other sensitive resources do occur in project area
- ▶ Environmental monitors provide direction to ensure regulatory compliance
- ▶ Unauthorized damage to a sensitive resource is an act of noncompliance with laws, regulations, and permits that result in penalties
- ▶ Noncompliance penalties can cause project delays, increased costs, and additional mitigation requirements



In Doubt?

Stop!

Ask!

Tribal Resource Training

Provided by Tribes



Contents

- Overview of Cultural and Paleontological Resources Management
- Definitions
 - ❑ Cultural Resources
 - ❑ Paleontological Resources
 - ❑ Cultural Resources on Desert Pavement
- Environmental Sensitive Areas (ESAs)
- Monitoring Responsibility
- Discovery Protocol
- Federal and State Laws
- Violations
- Confidentiality
- Contact Information

Cultural and Paleontological Resources Management

- ▶ Cultural Resources
 - prehistoric and historic archaeological sites and paleontological resources (fossils) are located throughout the project area.
- ▶ Avoidance of resources, minimizing Project impacts, and mitigating those impacts are measures that guide the resource management process.
- ▶ The entire Project team is responsible for resource avoidance and protection.

Everyone is responsible for protecting the environment.

What are Cultural Resources?



- Cultural resources include prehistoric and/or Native American artifacts.
- Historic-period sites buildings and structures, and objects that are greater than 50 years of age.
- Prehistoric artifacts may be hard to see as they are often made from the natural materials found within the Project area, and blend easily with the surrounding environment.

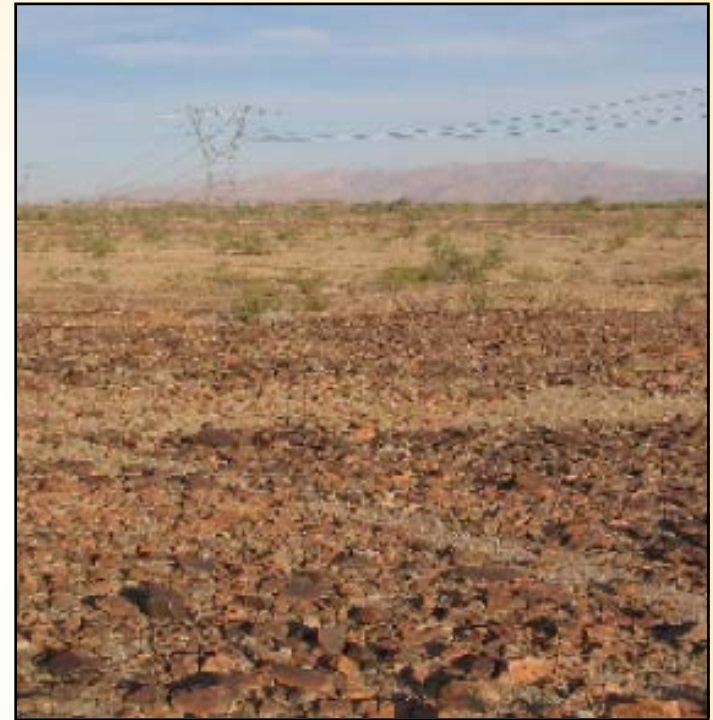


Everyone is responsible for protecting the environment.

Prehistoric Sites



prehistoric rock ring



trail segment

Prehistoric sites are areas where multiple prehistoric artifacts are found and/or are places with evidence of human interaction with the environment such as rock rings or prehistoric trails.

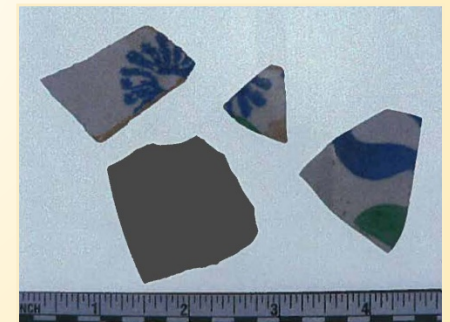
Why are Cultural Resources Important?



- ▶ Protecting cultural resources, including objects that people from the past left behind, is not only important for our understanding of how past people lived,
- ▶ These are non-renewable resources.
- ▶ Cultural resources are important to the continuance of Native American cultural and religious practices.
- ▶ The project runs through the traditional lands of the Serrano, Cahuilla, Southern Paiute/Chemehuevi, and Mohave.

Historic Period Artifacts and Sites

- ▶ Historic period resources include artifacts, objects, and features that are greater than 50 years of age.
- ▶ Historic artifacts and refuse deposits consist of housing debris, industrial tools, glass fragments, ceramic pieces, and tin cans.



Everyone is responsible for protecting the environment.

Paleontological Resources

- ▶ Fossils are the remains of ancient plants and animals, ranging from 10,000 to several billion years old.
- ▶ Fossils include bones, teeth, burrows, leaves, tracks, shells, and other evidence of past life.



Everyone is responsible for protecting the environment.

Discovery of Fossils

- ▶ Fossils are usually encountered during deep drilling or trenching activities.



Everyone is responsible for protecting the environment.

Environmentally Sensitive Area (ESA)



- ESAs will be established around cultural resources to protect them during construction.
- ESAs are marked with signs and flagging tape.
- Work areas must be staked prior to the start of construction.
- Construction activities and equipment must stay within approved work areas.
- Construction activities and equipment must stay outside of ESA's even if the ESA overlaps a previously approved construction work area.

Everyone is responsible for protecting the environment.

Compliance Responsibilities: Cultural, Tribal and Paleontological Monitors

- ▶ Flagging or marking cultural resources designated as Environmentally Sensitive Areas (ESAs) in the field, as necessary.
- ▶ Monitoring all personnel and Project activities on-site for compliance with the following:
 - Cultural Resources Management Plan (CRMP)
 - Paleontological Resources Management Plan (PRMP)
- ▶ Monitoring construction crews and providing clarification on CRMP and PRMP requirements and disturbance area boundaries.
- ▶ Initiating temporary work holds due to non-compliance issues, clarifications, or sensitive resource discoveries.

Monitors and ESAs

- ▶ Environmental monitors will be required at all ESAs. Cultural and paleontological resource monitors are on-site to protect resources from construction impacts.
- ▶ Monitors have the authority to stop construction for unanticipated, inadvertent discoveries.
- ▶ In areas of Native American concern, Native American monitors will also be present.

Unanticipated Discoveries

If Cultural or Paleontological Resources are discovered during construction activities:

- ▶ **Stop work** in the immediate area until what you discovered can be identified.
- ▶ Notify the environmental monitor and your construction supervisor
- ▶ Monitors will recommend appropriate mitigation measures
- ▶ If it is significant, you will be asked to avoid the area, and continue work in another area



Everyone is responsible for protecting the environment.



Human Remains

- ▶ If human remains are encountered at any time, work in the area of the discovery must be halted.
- ▶ An Environmental Monitor must be contacted IMMEDIATELY if any skeletal remains are found.
- ▶ NO Photographs are to be taken of the remains, except by the Coroner.

Federal and State Compliance

Federal and State laws protect Cultural and Paleontological Resources

- ▶ All project participants must comply with the following:
 - ❑ California Environmental Quality Act (CEQA)
 - ❑ National Historic Preservation Act (NHPA)
 - ❑ Paleontological Resources Preservation Act (PRPA)
 - ❑ Native American Graves Protection and Repatriation Act (NAGPRA)
 - ❑ Archaeological Resources Protection Act (ARPA)



Everyone is responsible for protecting the environment.

No Collection

- Cultural and Paleontological Resources cannot be removed or collected from the Project area.
- Removing or collecting Cultural and Paleontological Resources without a permit is a violation of state and federal law.
- If artifacts are observed on the ground surface, please contact the environmental monitors.



Everyone is responsible for protecting the environment.

Violations

- ▶ If you remove artifacts from archaeological sites you are liable for heavy fines and even imprisonment.
- ▶ Minimum penalty: fine not to exceed \$10,000 and 1 year in prison or both
- ▶ Maximum penalty: fine not to exceed \$100,000 and 5 years in prison or both

Confidentiality

Location of Cultural Resources is *Confidential*



- ▶ **Cultural resources, particularly prehistoric site locations, are of a sensitive nature and must remain confidential.**
- ▶ **Sharing, copying, or distributing cultural resources locations is NOT permitted.**

Everyone is responsible for protecting the environment.



Conclusion

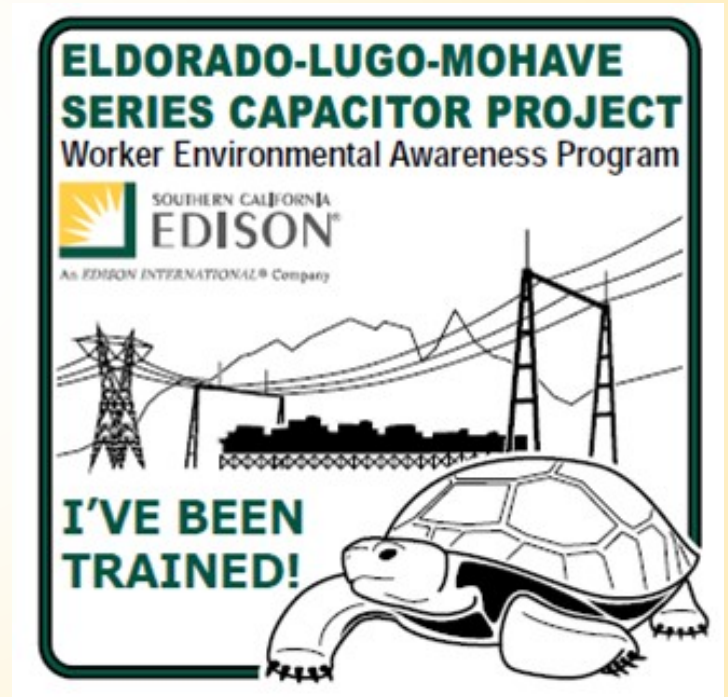
- ▶ Please remember, our goal is zero impact to cultural and paleontological resources.
- ▶ State and Federal law protects cultural and paleontological resources, and in order to proceed with this Project, we must maintain and implement compliance.
- ▶ Please stop work if you have a concern.
- ▶ Don't hesitate to ask questions.

Everyone is responsible for protecting the environment.

Identification and Agency Permits

Identification Materials / Agency Permits

- ▶ Sign-In Sheet
- ▶ Hard-Hat Sticker
- ▶ Booklet
- ▶ Agency Permits /
Mitigation Measures at
Job Site (i.e., Incidental
Take Permit)



Contact Information

▶ Contact information for:

☐ Southern California Edison

Sylvia Granados, Project Manager - Environmental,
Sylvia.Granados@sce.com, (626) 221-5695

☐ Construction Management – Beta Engineering

Dane Anderson, EI, Project Engineer
Dane.Anderson@betaengineering.com, (858) 368-3934

☐ Contractor environmental personnel

Conrad Langley, PLA, Environmental Coordinator
CLangley@epgllc.co, (602) 363-8761

☐ Questions – Contact Conrad Langley