

Mission Canyon Stream Restoration Project

Jenny McGee
Restoration Project Manager
Southern California Edison

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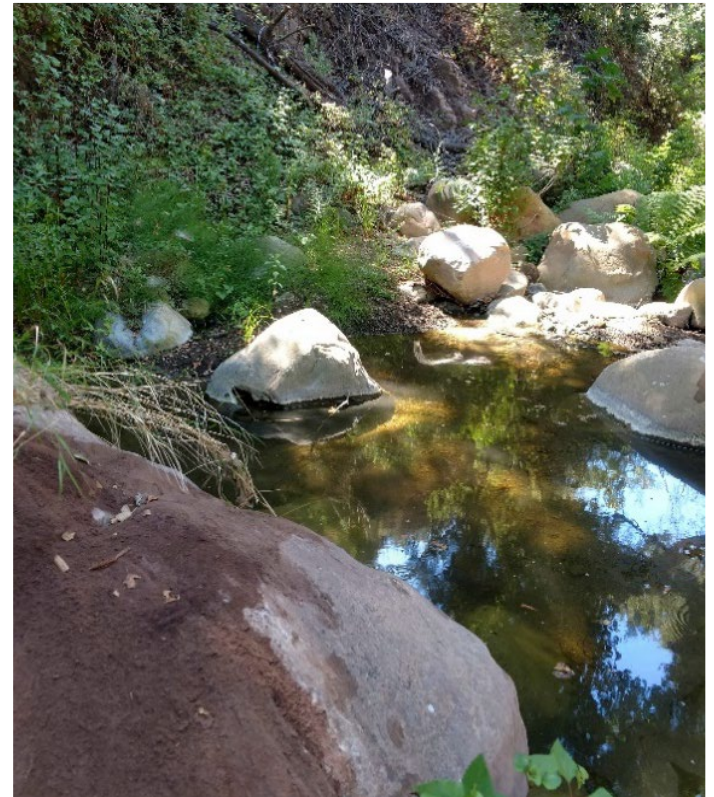
Agenda

Background

Stream Restoration Project
Description

Schedule and Project Timeline

Questions and Discussion



Background

Energy for What's AheadSM



Stream Restoration Project: Background

Mission Canyon Incident Overview

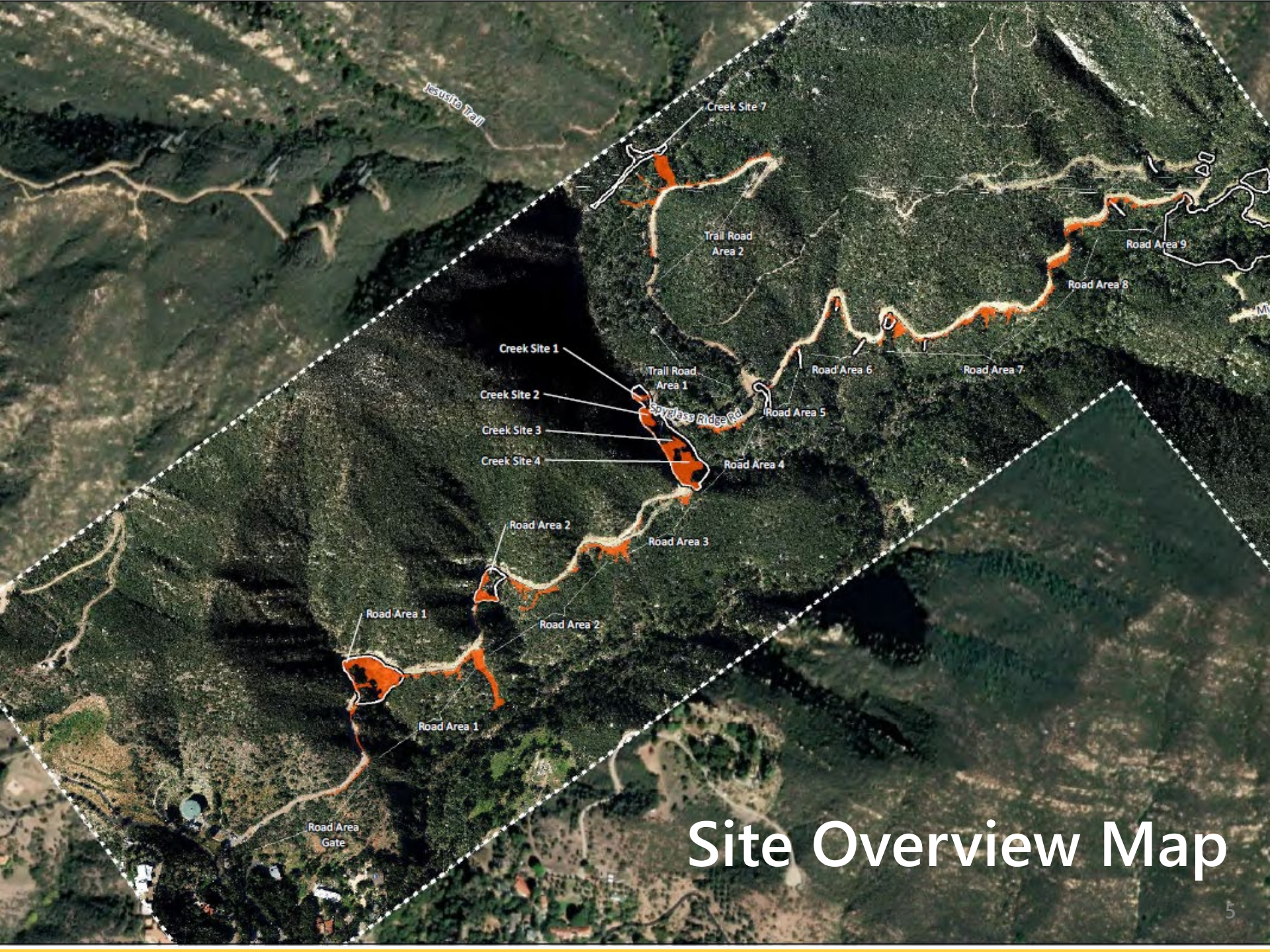
- In December 2019, Southern California Edison (SCE) performed road grading and vegetation management
- Rock/ spoils were discharged onto slopes supporting native habitat and into Mission Creek
- This caused impacts to:
 - native vegetation communities,
 - sensitive plant populations,
 - native trees,
 - sensitive wildlife,
 - streambed, resources, and
 - additional indirect impacts to the Mission Canyon ecosystem.
- *Full restoration of this habitat to conditions existing prior to the December 2019 work, including habitat features within the stream, is a primary goal of the Stream Restoration Project.*



Soil and rock was discharged directly into Mission Creek



Boulders and rocks deposited against native trees



Jesusita Trail

Creek Site 7

Trail Road Area 2

Road Area 9

Road Area 8

Creek Site 1

Trail Road Area 1

Road Area 6

Road Area 7

Creek Site 2

Spiral Ridge Rd

Road Area 5

Creek Site 3

Road Area 4

Creek Site 4

Road Area 2

Road Area 3

Road Area 1

Road Area 2

Road Area 1

Road Area Gate

Site Overview Map

Stream Restoration Project: Background

2019 INCIDENT RESPONSE

SCE's actions in response to the 2019 incident include:

- **SCE implemented emergency site stabilization:** Dec. 2019 - March 2020
 - addressed immediate public safety and erosion within the road
 - **SCE completed weed abatement:** First weed abatement June 2020
 - 6th weed event begins June 7, 2023
 - **SCE implemented the Road Repair Project:** August – Nov. 2020
 - reduced and reconfigured roadside berms
 - removed loose rocks from exposed uphill surfaces ("scaling")
 - installed a rockfall protection drapery over exposed rock ("rock wall")
 - remediated native trees affected by the 2019 incident
- Proposed: The **Stream Restoration Project** is proposed to repair damage to natural areas, trees, and sensitive plants (anticipated start August 2023)

Stream Restoration Project: Scope Development

- **December 2020:** SCE Develops first draft of the proposed Stream Restoration Project Habitat Restoration Plan
- **February 2023:** SCE submits **6th Version** of the Habitat Restoration and Mitigation Plan to CDFW
- **April 2023:** California Department of Fish and Wildlife (CDFW, CEQA lead agency) Accepts the Project Description in the HRMP and initiates CEQA
- **HRMP** reflects changes SCE made in response to the following:
 - CDFW Comments (January 2021, March 2021, May 2021 and July 2021, June 2022, Dec. 2022), coordination meetings and supplemental materials
 - Mission Canyon Association Comments (April 2020, Feb. 2022), and onsite meeting August 2020
 - Santa Barbara County Comments (May 2021, June 2023)
 - Santa Barbara Botanic Garden (May 2021)
 - Information from Project surveys (December 2019 through October 2022)

Stream Restoration Project: Scope Development

COMMENTS FROM CDFW, COUNTY, SBBG, AND MCA

SB County:

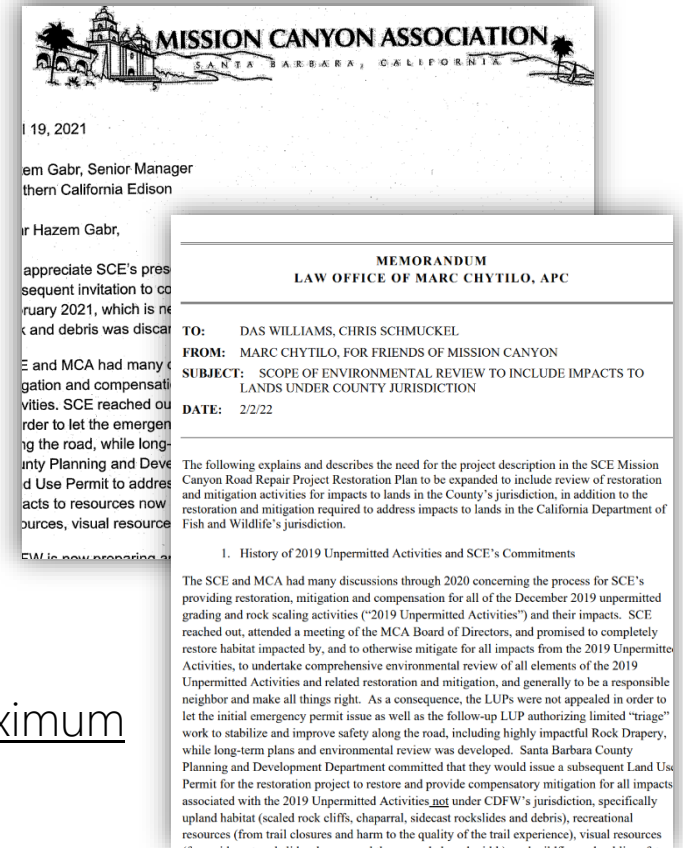
- Removal of all sidecast material
- Restoration of all impacted upland areas

MCA:

- Evaluate road turn outs expanded by the incident
- Calculate detailed sidecast volumes
- Assess alternative removal techniques

CDFW:

- Reassess and expand the Project description for maximum removal
- Perform an assessment of alternative construction techniques
- Incorporate compensatory mitigation as part of the Project



Stream Restoration Project Description: SIDECAST VOLUME ESTIMATES

- SCE has conducted **four** estimates of the volume deposited during the Dec. 2019 work.
- Each estimate increased precision of sidecast volumes.
- Estimates with greatest accuracy used for the Project; baseline (Oct. 2022) : 2,332 Cubic Yards

1) Jan. – April 2020: **Light-detecting remote sensing imagery** used to collect initial estimates

- Used for calculating penalty paid by SCE in Settlement Agreement

2) Nov. 2020: **Field-verified** volume estimates **Creek and CDFW areas**

- Used engineering equipment to directly measure dimensions and depths

3) September 2021: **Field-verified** volume estimates of **'outlying rocks'**

- Areas and volume estimates of outlying rocks added to total estimate of material

4) August 2022: **Field-verified** volume estimates of **upland sidecast areas**

- Calculated detailed volume estimates using 29 physical depth measurements
- Included distribution and composition of materials (e.g., rock size, soils/ fines)

Stream Restoration Project: Scope Development

2022 Comparative Scoping Analysis resulted in changes to Project Description:

Stream Project *Revised*

- SCE's Proposed Project will target in nearly 100% removal in all areas, with discreet areas with possible limits to removal
- Maximum extraction of sidecast material without causing harm to sensitive environmental resources, while maintaining a safe working environment

Scope Highlights Include:

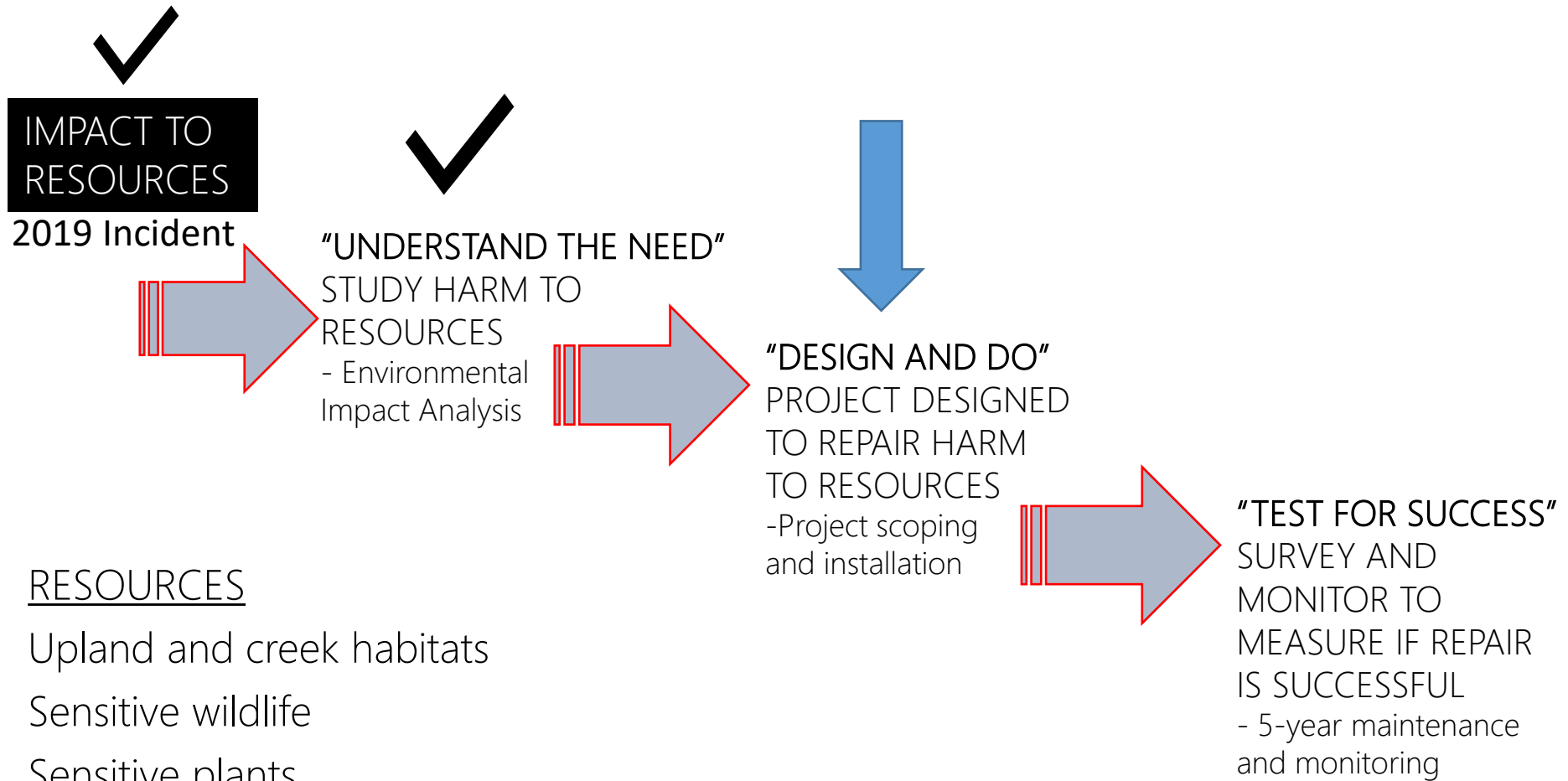
- The use of helicopter support to air lift materials from remote sections of the Project.
- The use of manual removal methods to extract all materials deposited off Tunnel Trail road where vehicle access is also limited.
- Berm height in upper road areas above the creek 5-9 will be limited to 1 ½ feet

Project Description

Energy for What's AheadSM



Stream Restoration Project: IMPACTS AND RESOURCES



RESOURCES

- Upland and creek habitats
- Sensitive wildlife
- Sensitive plants
- Native trees
- Stream hydrology and water quality

Stream Restoration Project: OVERVIEW

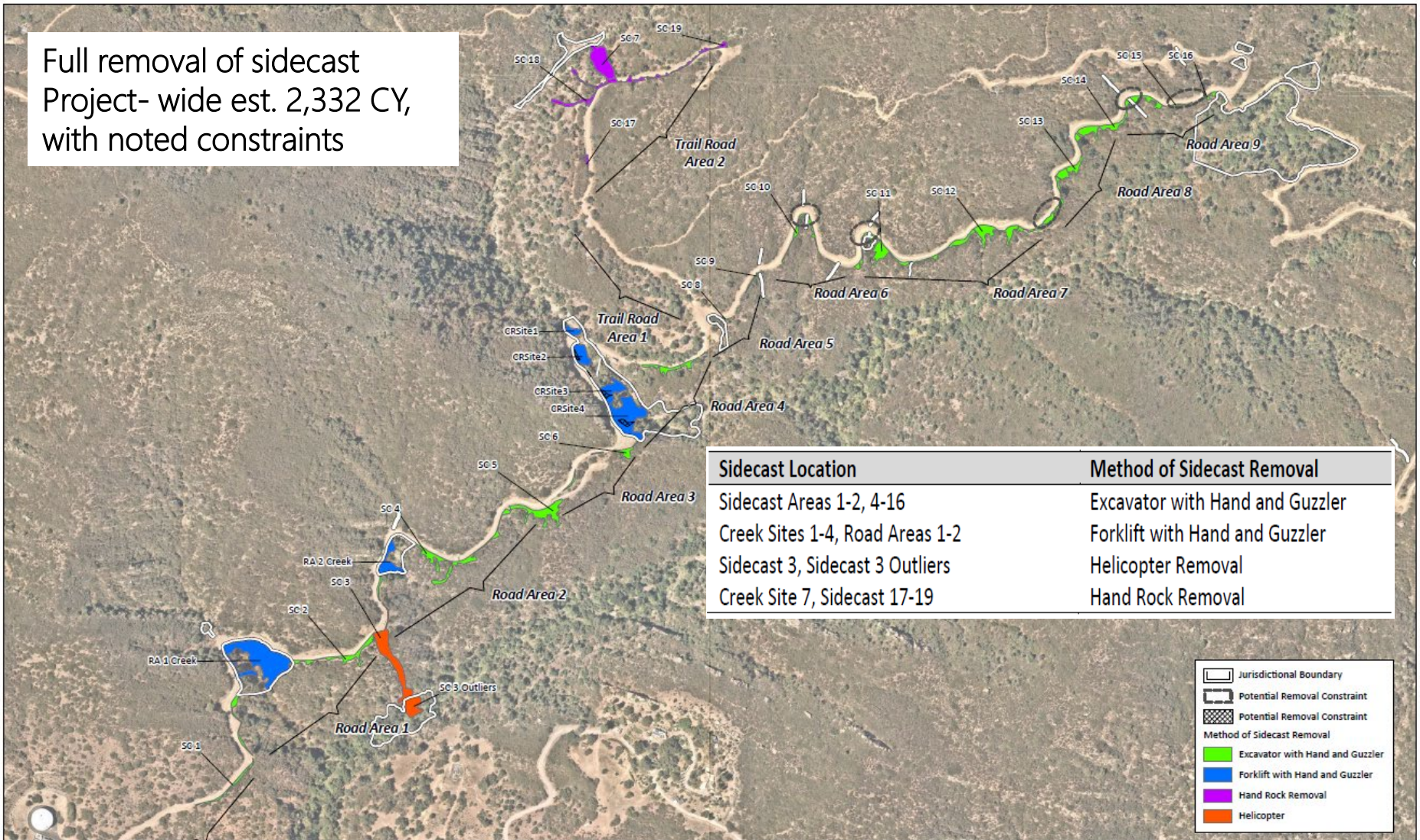
Stream Restoration Project Goals:

- **Full removal** of all sidecast material
- **Restore** stream hydrology
- **Stabilize** creek banks and slopes
- **Remediate and mitigate** for impacted native trees
- **Restore** woodland/forest *and* upland chaparral habitats
- **Rehabilitation** of sensitive species populations

- *The Project is specifically designed for the full removal of sidecast rock and sediments..., to restore stream hydrology (e.g., pools and riffles) and habitat within the Project area to support native fish use to levels that existed prior to the December 2019 work, and to stabilize creek banks and slopes.*
- *The Project will also restore impacted native vegetation habitats and promote the regrowth of chaparral and woodland/ forest habitats, rehabilitate sensitive species populations within the Project site, and remediate impacted trees within Mission Creek.*

Stream Restoration Project Description: SIDECAST REMOVAL METHODS

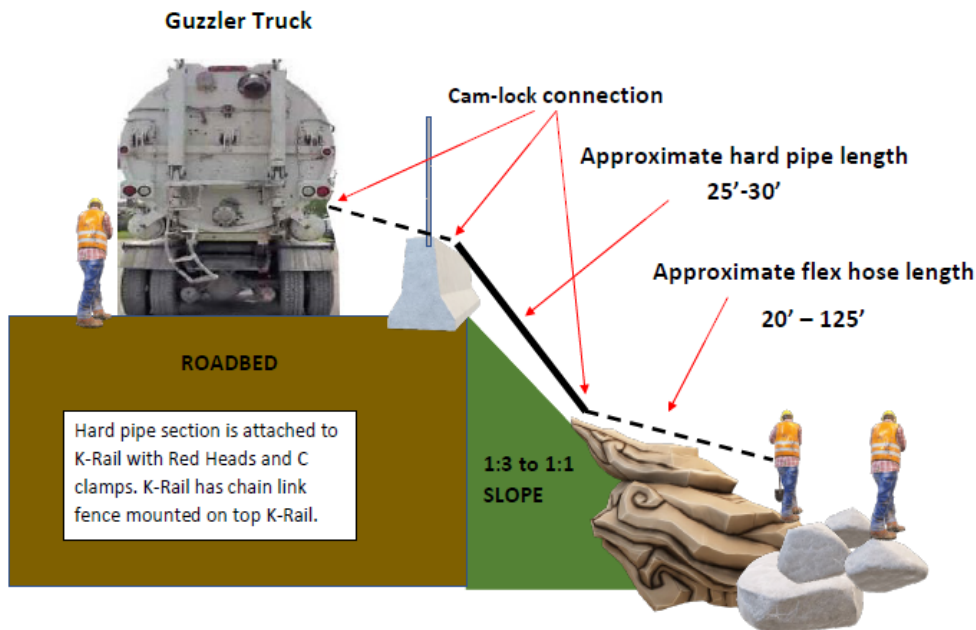
Full removal of sidecast
Project- wide est. 2,332 CY,
with noted constraints



Sidecast Location	Method of Sidecast Removal
Sidecast Areas 1-2, 4-16	Excavator with Hand and Guzzler
Creek Sites 1-4, Road Areas 1-2	Forklift with Hand and Guzzler
Sidecast 3, Sidecast 3 Outliers	Helicopter Removal
Creek Site 7, Sidecast 17-19	Hand Rock Removal

Stream Restoration Project Description: HAND AND GUZZLER REMOVAL METHODS

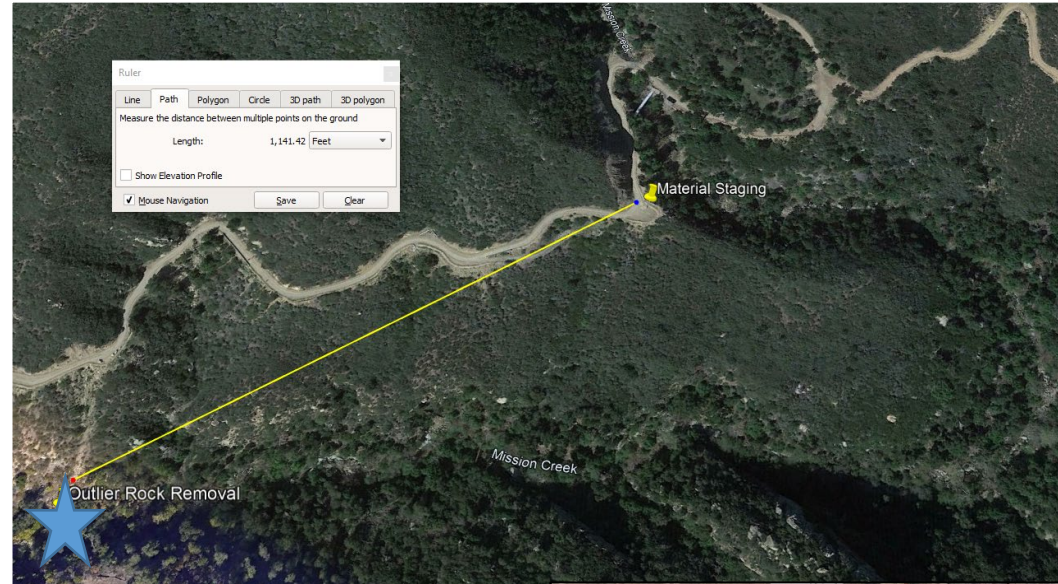
Typical Side Cast Removal Cross-section Schematic



- Use Guzzler trucks to “vacuum” smaller material
- Larger rocks will be broken manually
- Excavator or forklift staged in the road to pull up the material
- Rocks will be stockpiled, loaded and hauled to landfill
- Some materials will be processed using a rock crusher and used for berm reconstruction
- All Equipment staged in road areas
- All Material hauled off by end of construction

Stream Restoration Project Description: HELICOPTER REMOVAL

- Large boulders and rock 300 feet from roadside
- No foot or road access
- Use light duty SCE helicopter
- Rock will be manually broken or drilled and injected with an expansive rock breaking agent
- Rock will be loaded by hand crews and staged to minimize flight time
- Helicopter will hover approx. 100-150 above ground
- Flight Duration approx. 3 days
- Will require special training, sterile flight path, safety and fire prevention measures in place



Stream Restoration Project Description: HAND REMOVAL

- Consist of scattered rocks intermixed with existing vegetation
- Areas only accessible by foot
- Technicians using fall protection to manually remove rocks and transfer up slope by hand
- Large rocks will be broken; smaller fragments may be placed in packs
- Material will be collected in the road, and transported to designated storage area for haul off



Stream Restoration Project Description: HABITAT

Habitat Restoration

1.34 acres Forest and Woodland Habitats

1.50 acres for Upland Habitats

2.88 Total Revegetation Acres

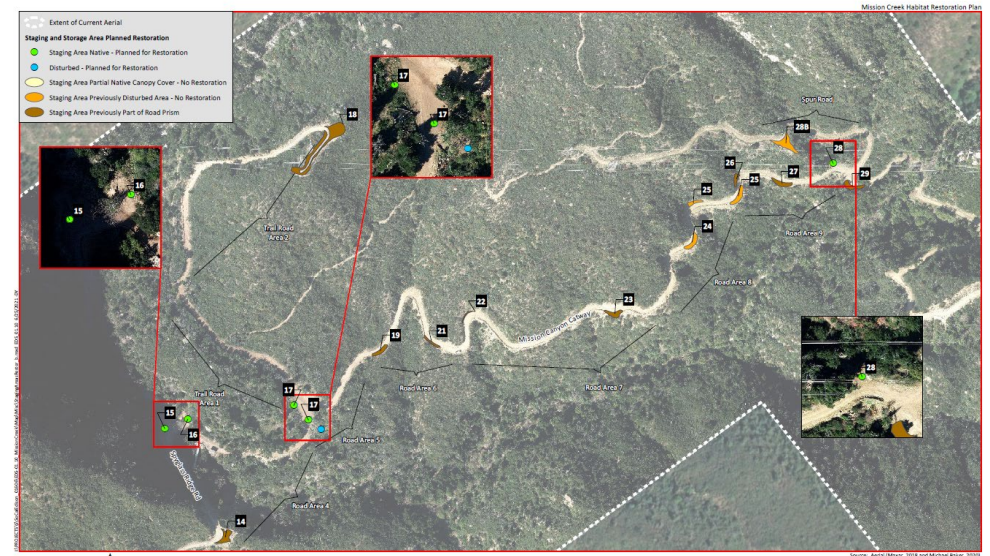
Forest and Woodland Habitats

- Native seed mix
- Planting shrubs, trees and cuttings
- Focus on controlling erosion and restoration of forest canopy structure

Upland Habitats

- Native seed mix
- Select use of plantings, and acorns in transitional areas
- Focus on erosion control and non-native species

Staging and Storage Areas Planned for Restoration



HELIX
Technologies

Staging and Storage Areas Planned for Restoration
Figure B

Select staging areas and one additional location previously disturbed (non-SCE related) will be restored to native habitats following Project construction.

Stream Restoration Project Description: SENSITIVE PLANTS AND TREES

Direct impacts to sensitive plants will be addressed by:

- **Local collection** of propagules and propagation by the Botanic Garden
- Plants/ seeds will be planted in plots within the project area
- **Successful when evidence of reproduction** is observed in 75% of the plots
- Consult with **SB Botanic Garden** and other botanical experts

Impacts to trees will be addressed by:

- **Remedial treatments** to 30 impacted trees
- **Planting 90 trees** and acorns:
- 12 Trees with 'Major impacts' will be **mitigated at 5:1** (60 trees)
- 30 with 'Moderate impacts will be **mitigated at 1:1** (30 trees)
- Perform annual **trees health assessments**
- **Minimum of 90 trees successfully established**



Stream Restoration Project Description: PROPOSED COMPENSATORY MITIGATION

- **Compensation for residual impacts** that cannot be resolved through the habitat restoration or by other mitigating actions undertaken by SCE.
- Residual impacts fall into two categories:
 1. **Temporary loss of ecological function** of CDFW-regulated habitats ("Temporal Habitat Loss"),
 2. **Sidecast material** deposited on the Project site by the December 2019 work that is **no longer recoverable** ("Unrecovered Sidecast").
- To compensate, SCE has proposed to **fund an endowment** held by a CDFW-approved entity, directed by CDFW, to benefit regional conservation efforts.
- SCE is working with the County to resolve residual impacts to **recreation and visual/aesthetic resources**.

Stream Restoration Project Description: COMPLIANCE AND SAFETY

Construction and Compliance Plans

- Fire Plan
- Biological Monitoring Plan
- Paleo and Cultural Resources Plans
- Technical Implementation Plan (stream)
- Construction Plan
- Traffic Control/ Trail Closure
- Others

Safety

- Full time onsite Safety Officer
- Specialty training for Air Ops
- Pre-job safety training and job walk
- Full time fire watch, security and safety officers
- Safety Observation Program (contractor and SCE)
- All “high-incline” work require fall protection
- Daily safety inspections, tailboards and site tailboards

Stream Restoration Project: TIMELINE

- 2023 CEQA and Permitting
 - CEQA Draft Release for 30-day Public Review expected early June 2023
 - All Environmental Permits, County LUP and Grading Permits needed by early August 2023 to meet short in-stream construction window
- 2023-2024 Construction Window (weather dependent)
 - Target Creek Implementation: August to November
 - Upland Habitat Implementation: November to March
- 2024-2029 Habitat Monitoring
 - Monitor habitat recovery and conduct biological surveys

Questions

Energy for What's AheadSM

