GOLDEN PACIFIC
POWERLINK

SDGE®

Welcome!

Thank you for joining us!
We are glad you are here!

Today San Diego Gas & Electric® (SDG&E®) is here to:

- Share the latest information on Golden Pacific Powerlink
- Review the work completed during the early stages of this project
- Show the potential alternative routes for environmental review
- Gather your input to help inform next steps

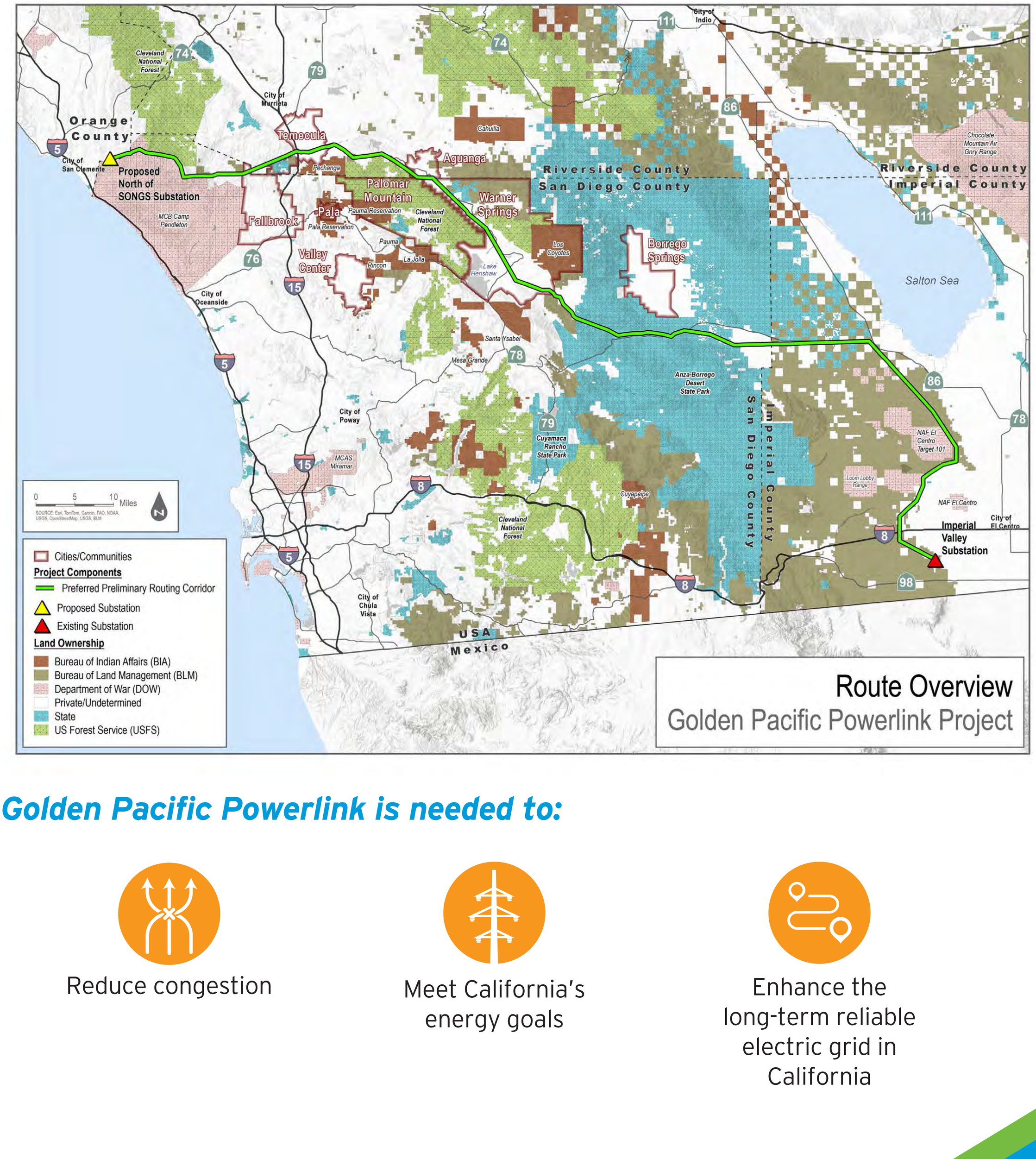
How you can participate:

- Review project materials, including display boards, handouts and maps
- Meet with project team members to ask questions
- Share your feedback about the project, alternative route options and project next steps

GOLDEN PACIFIC
POWERLINK

What is Golden Pacific Powerlink?

Golden Pacific Powerlink is a proposed 500-kilovolt electric transmission line project being developed by SDG&E.



Golden Pacific Powerlink is needed to:

- Reduce congestion
- Meet California's energy goals
- Enhance the long-term reliable electric grid in California

SDGE®

GOLDEN PACIFIC
POWERLINK

Benefits of Golden Pacific Powerlink

Supports a stronger, more resilient electric grid that can deliver energy where it is needed most

Adds additional transmission capacity to help strengthen the regional system and reduce congestion

Helps maintain reliable electric service during high-demand periods or emergencies such as heat waves or wildfires

Helps manage energy costs over time by reducing congestion-related costs on the grid

Supports electric vehicles, charging infrastructure, transit and electric-ready homes, communities and businesses

Creates good-paying construction jobs and supports long-term economic growth tied to improved, reliable grid infrastructure

As demand for electricity increases, power is there when you turn on the lights, charge a device or power essential devices - both now and in the future

SDGE®

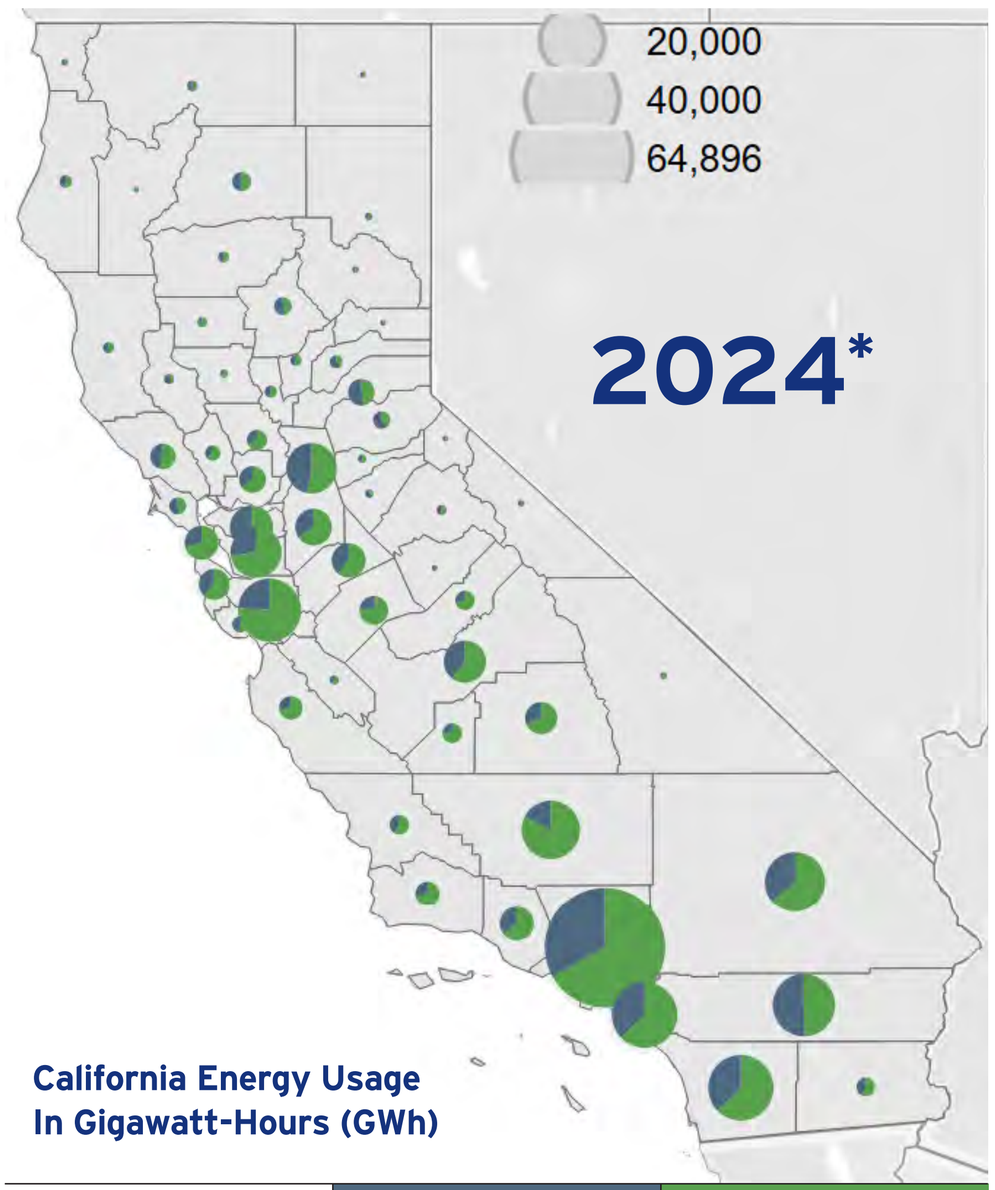
GOLDEN PACIFIC
POWERLINK

California's Energy Needs

California's grid is under increasing pressure from:

- Electrification policies
- Transmission constraints
- Increasing peak demand on very hot days
- Rapid growth in clean-energy integration

Southern California's system is strained. We need to move power from where it's generated to where it's needed.



California Energy Usage
In Gigawatt-Hours (GWh)

County	Residential	Non-Residential
Orange	7,136	12,089
San Diego	7,114	11,997
Riverside	8,766	8,653
Imperial	668	880

*Data Source: https://www.energy.ca.gov/data-reports/energy-almanac california-electricity-data/california-energy-consumption-dashboards-0

Over the next 20 years, California will need at least:

85 GW by 2035

160 GW by 2045

GW = gigawatt

160 GW is equivalent to:

- Two times the amount of ***all*** of California's current energy use
- About 1/3 of entire continental U.S. energy use
- All U.S. residential air conditioning and heating loads combined
- More than the U.S. entire current industrial sector load (130 GW)

Source: California Independent System Operator (CAISO), 2022–2023 Transmission Plan.

SDGE®

GOLDEN PACIFIC
POWERLINK

SDGE®

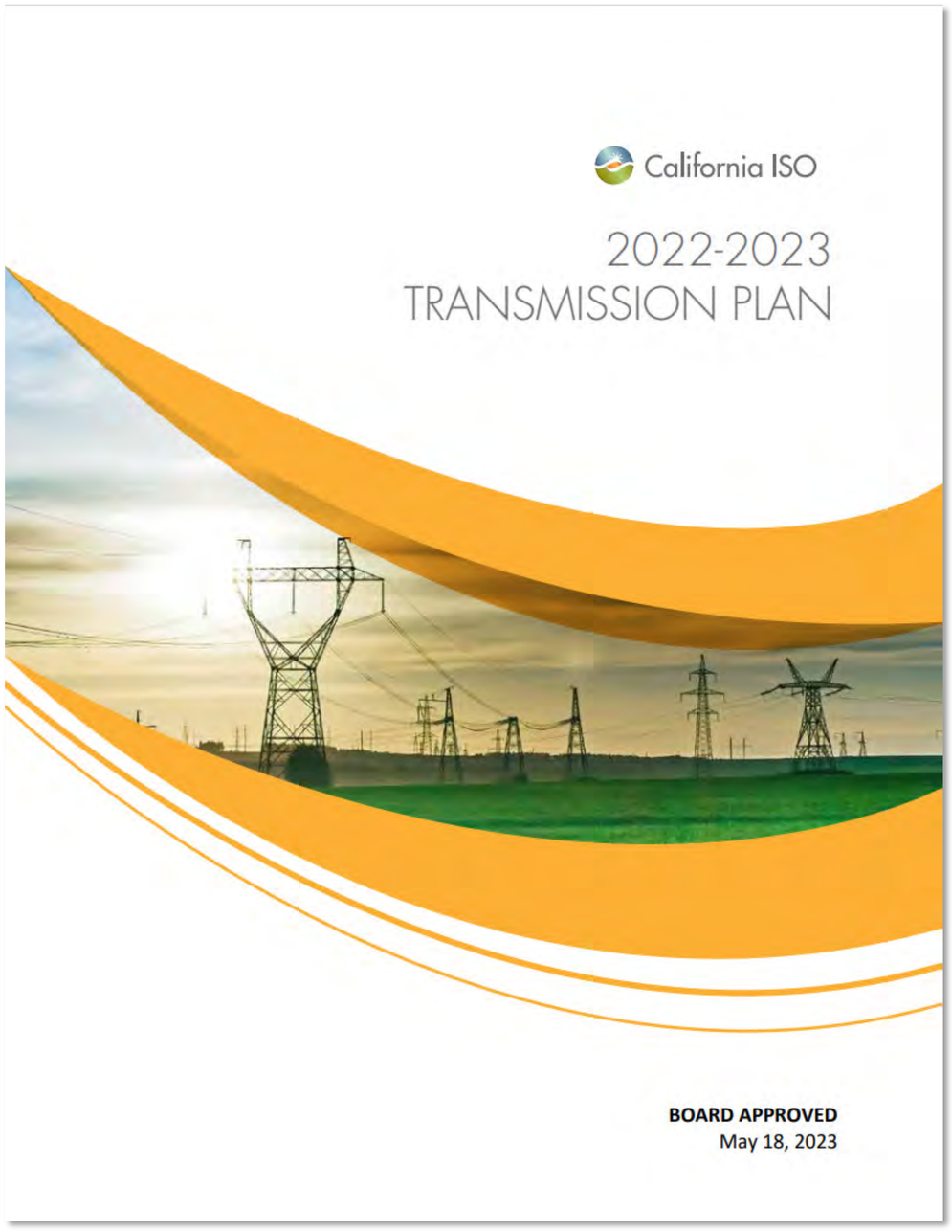
Planning a connected statewide system

GOLDEN PACIFIC
POWERLINK

Statewide Coordination

Golden Pacific Powerlink was identified in the California Independent System Operator's (CAISO) 2022-2023 Transmission Plan as one of 45 projects across the state

- Constrained Southern California transmission lines limit how much power can be delivered during periods of high demand.
- Statewide transmission planning identified a need for new electricity capacity to meet future needs.
- Without new transmission pathways, electricity cannot be delivered where the demand is highest.



How California Plans for a Reliable Electric Grid

California Energy Commission (CEC)

Creates fifteen-year energy demand forecasts and communicates projected needs of the state to CAISO.

California Public Utilities Commission (CPUC)

Determines how much generation and storage load-serving entities must plan for then communicates those targets to CAISO.

California Independent System Operator (CAISO)

The independent system operator of our electric grid. CAISO uses CPUC targets and CEC forecasts to develop transmission plans to accommodate load growth in the CAISO Transmission Plan.

CAISO's 2022-2023 Plan

Transmission Plan identified **45 projects across California** to improve power flow and reliability.

SDGE®

GOLDEN PACIFIC POWERLINK

Early Phases of Project Development

SDG&E has agreed to develop the transmission infrastructure and is now working to meet California Independent System Operator (CAISO's) objectives to refine the preliminary route, which will ultimately be reviewed and approved by state and federal agencies.

The California Public Utility Commission (CPUC) is the lead state permitting agency under the California Environmental Quality Act (CEQA).

The Bureau of Land Management (BLM) is the lead federal permitting agency under the National Environmental Policy Act (NEPA).

As the applicant, SDG&E will prepare the following for the CPUC and BLM:

- CPUC - Certificate of Public Convenience and Necessity (CPCN) with Project Description
- CPUC - An administrative draft of the CEQA Environmental Impact Report (EIR)
- BLM - Right-of-Way application with Plan of Development (POD)

CEC

- Forecasts how much energy California will need in the future
- Helps plan for long-term energy demand across California

CPUC

- Determines how much generation and storage load-serving entities must plan for
- Leads statewide energy planning through the Integrated Resource Planning (IRP) process

CAISO

- Identifies where transmission lines could be built to deliver power where it's needed most in Southern California and San Diego County
- Selects the most cost-effective transmission solution through its Transmission Plan: Golden Pacific Powerlink

SDG&E

- Conducts early engineering, environmental studies and community outreach
- Evaluates potential routes that meet CAISO requirements while seeking to reduce impacts to communities and the environment, when feasible

CPUC & BLM

(State) (Federal)

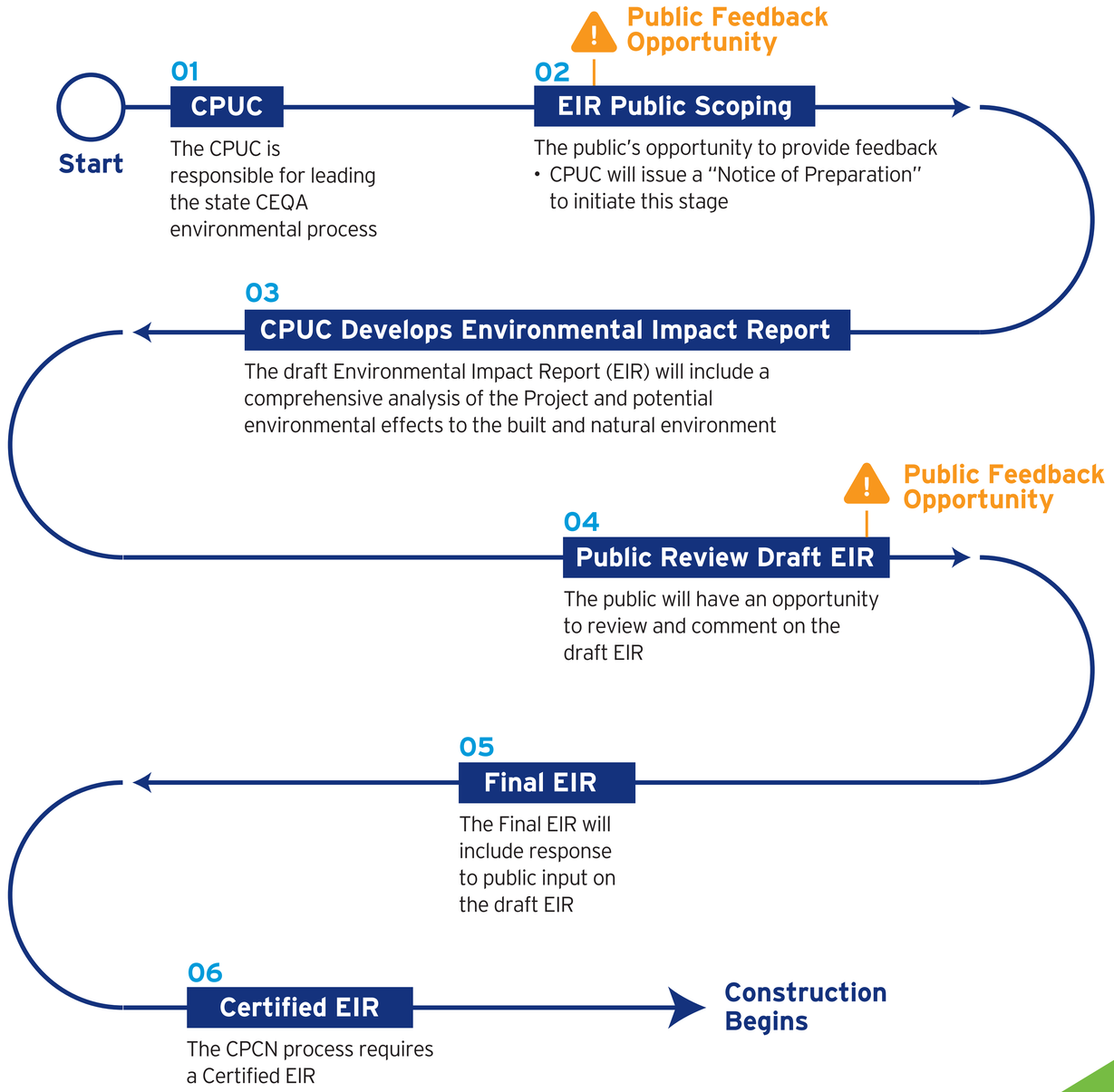
- Review environmental impacts under state (CEQA) and federal (NEPA) laws
- Decide whether to approve the project and issue required permits
- Grant necessary rights-of-way on state and federal lands

SDGE®

GOLDEN PACIFIC POWERLINK

State Environmental Review Process

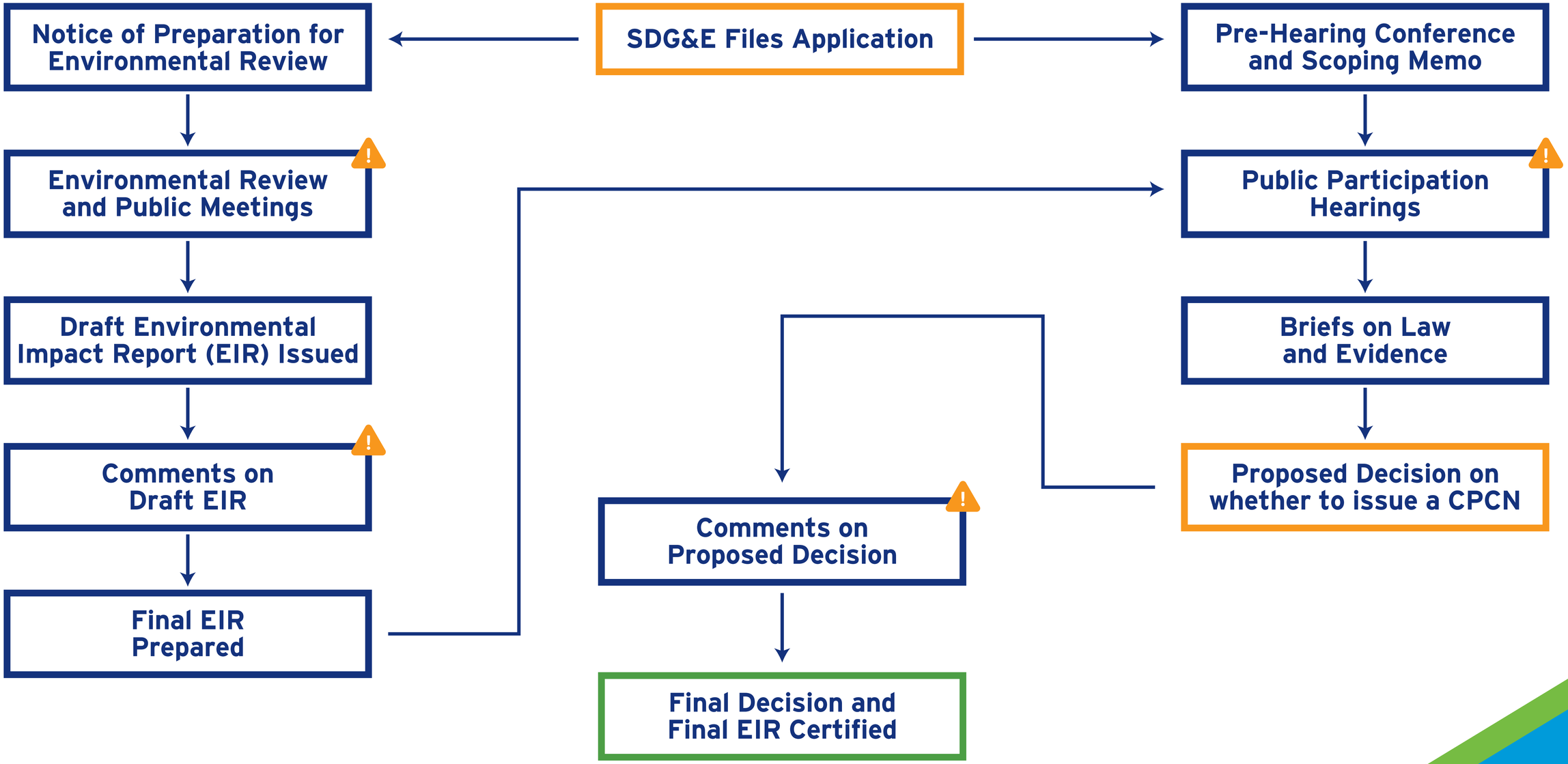
SDG&E will submit an application for a Certificate of Public Convenience and Necessity (CPCN). Following the submittal of this application, the California Public Utilities Commission (CPUC) will conduct a comprehensive CEQA environmental process with multiple opportunities for public input.



SDGE®

GOLDEN PACIFIC POWERLINK

CPUC Process - What You Can Expect



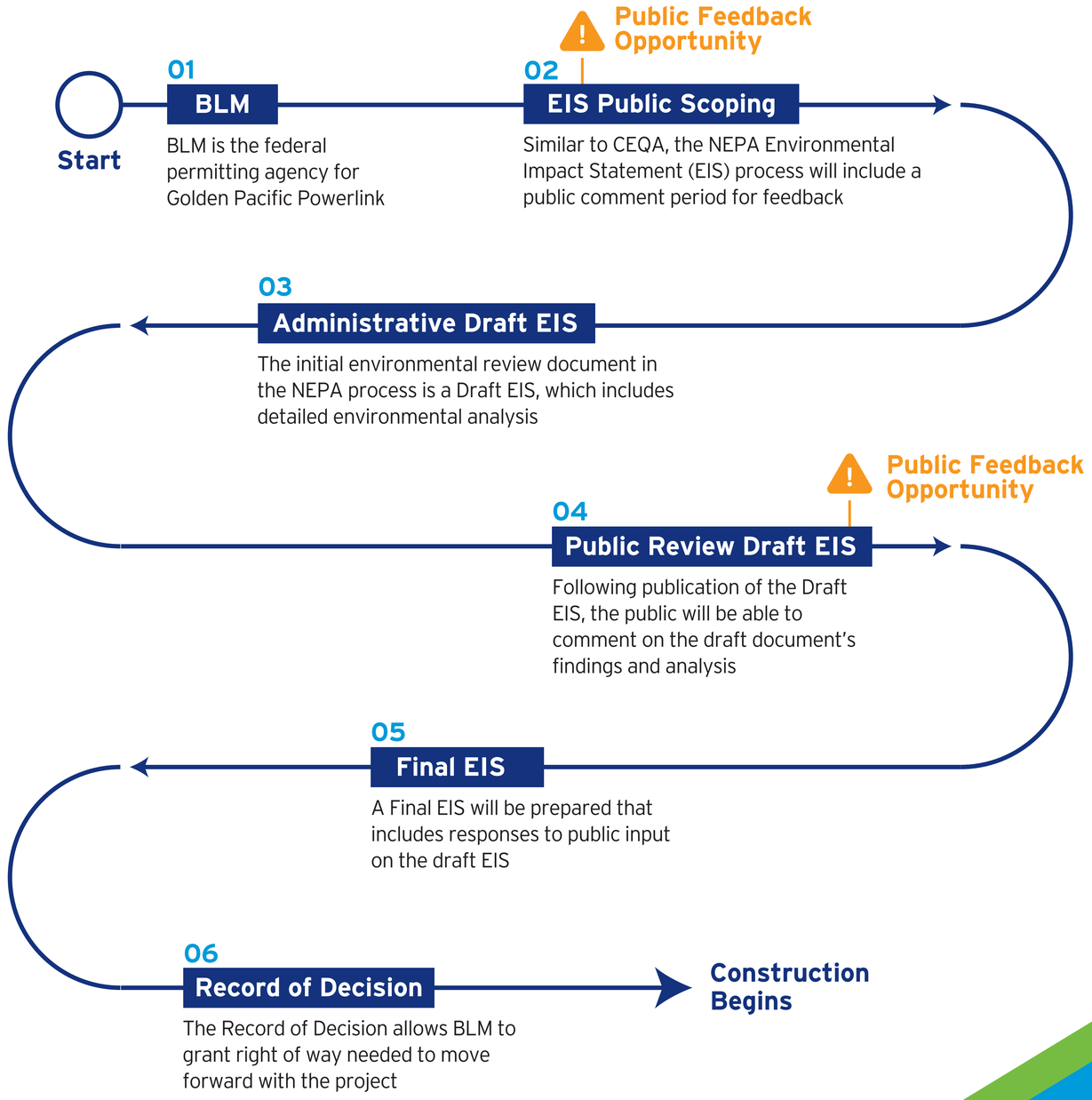
SDGE®

= Public Feedback Opportunity

Federal Environmental Review Process

Because Golden Pacific Powerlink would be built on federal lands, the Bureau of Land Management (BLM) will conduct a parallel National Environmental Policy Act (NEPA) review of the project.

The NEPA process closely parallels the state California Environmental Quality Act (CEQA) process.



GOLDEN PACIFIC POWERLINK

What Happens Next?

SPRING 2023
CAISO identifies and approves project in its annual Transmission Plan

SUMMER 2025
SDG&E assumes responsibility to build, own and operate the new line

SPRING 2026
Virtual open houses

SUMMER/FALL 2026
In-person open houses

FALL/WINTER 2026
California Public Utilities Commission Filing

Fall 2026-2029
State and federal permitting and approvals

Fall 2029
Construction

2032
New transmission line begins service

▶ **We Are Here**

Estimated dates

SDGE®

GOLDEN PACIFIC
POWERLINK

Environmental Review Considerations

SDG&E is committed to environmental stewardship and is actively reviewing opportunities to avoid, minimize and mitigate impacts to the environment.

There any many resource areas that will be studied by CEQA:

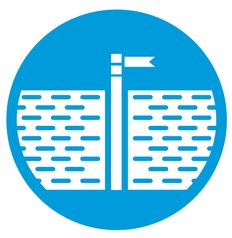
- Agricultural Resources
- Air Quality
- Avian Species
- Biological Resources
- Cost and System Requirements
- Cultural and Paleontological Resources
- Cumulative Impacts
- Engineering Feasibility
- Federal Lands
- Geology, Soils, and Mineral Resources
- Hazards, Hazardous Materials, Fire Hazards
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Utilities
- Recreation
- Restoration
- Safety
- Socioeconomics / Environmental Justice
- Special Management Designations
- Threatened and Endangered Species
- Transportation and Traffic
- Tribal Cultural Resources
- Vegetation and Habitat
- Visual Impacts and Aesthetics
- Wetlands
- Wildfire / Fire Mitigation

SDGE®

GOLDEN PACIFIC
POWERLINK

Avoid, Minimize, Mitigate

SDG&E conducts comprehensive environmental review to avoid sensitive areas, reduce potential impacts and inform project decisions. We evaluate opportunities to avoid, minimize or mitigate by reviewing:



Environmental protection measures

Construction best practices

Coordination with landowners, agencies, tribes and communities

Potential mitigation options could include:

Route and facility adjustments

Structure placement refinements

Construction timing

Vegetation management practices

Access management

SDGE®

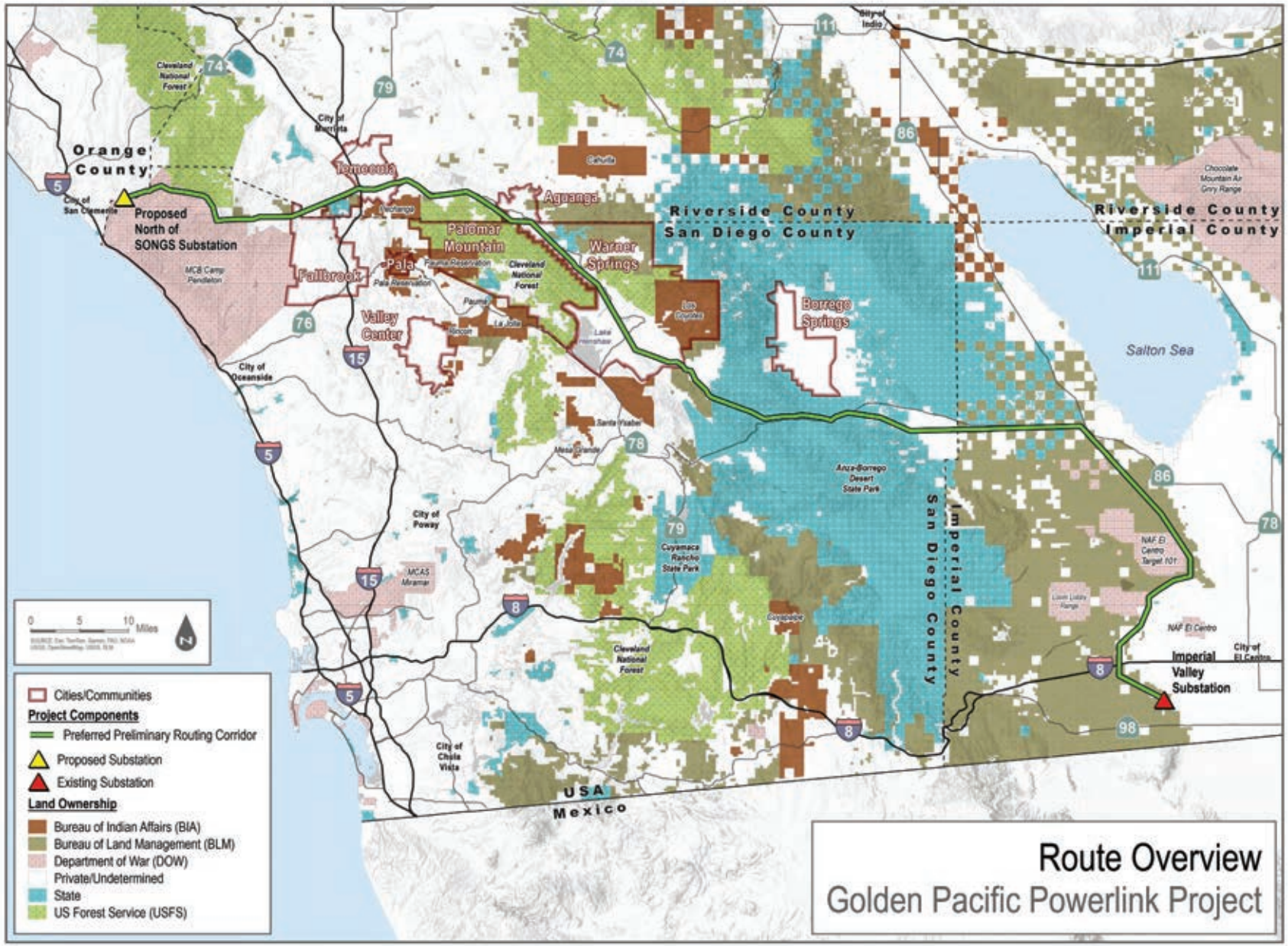
GOLDEN PACIFIC
POWERLINK

SDGE®

The Proposed Route

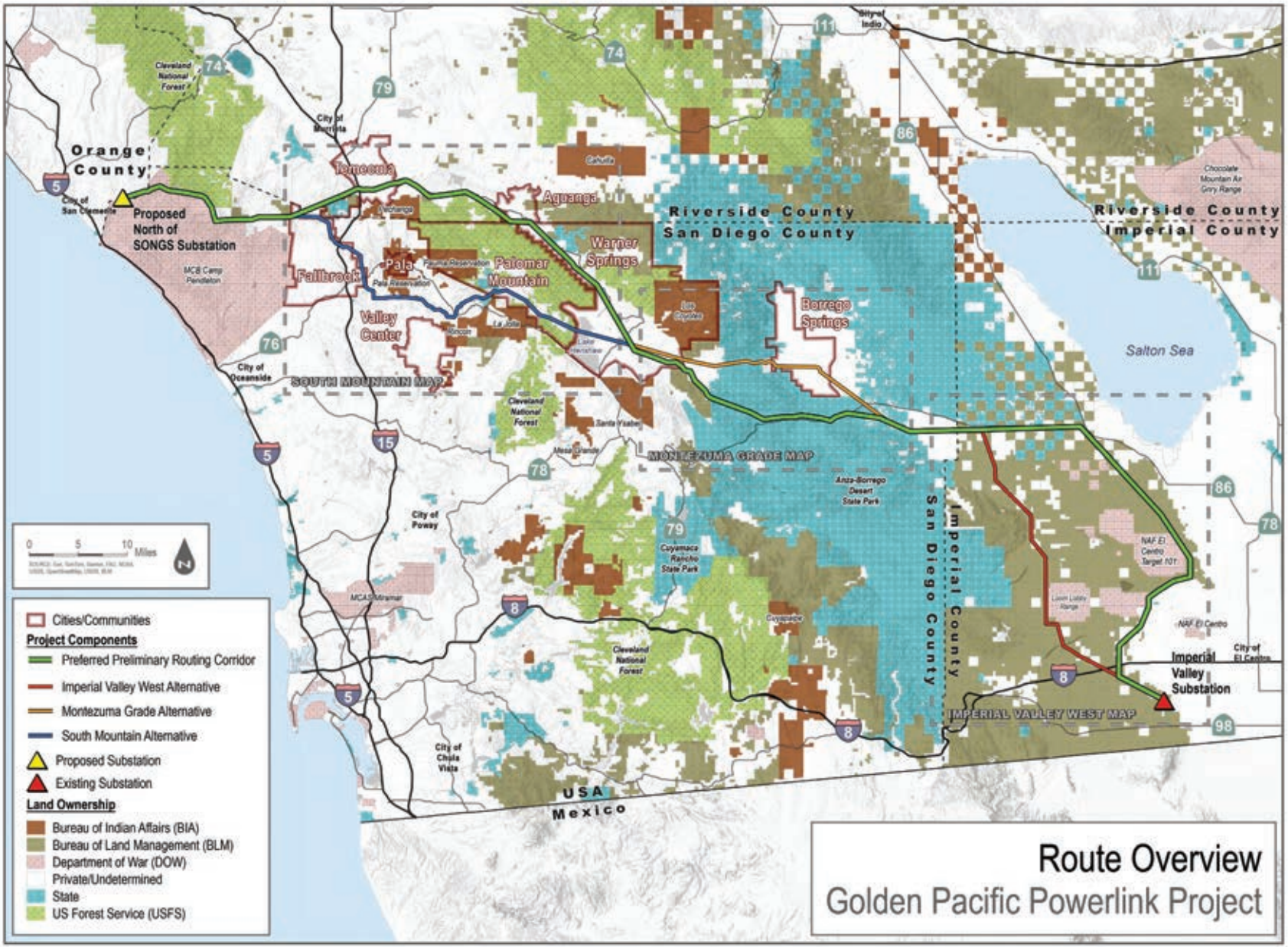
Our Proposed Route

GOLDEN PACIFIC
POWERLINK



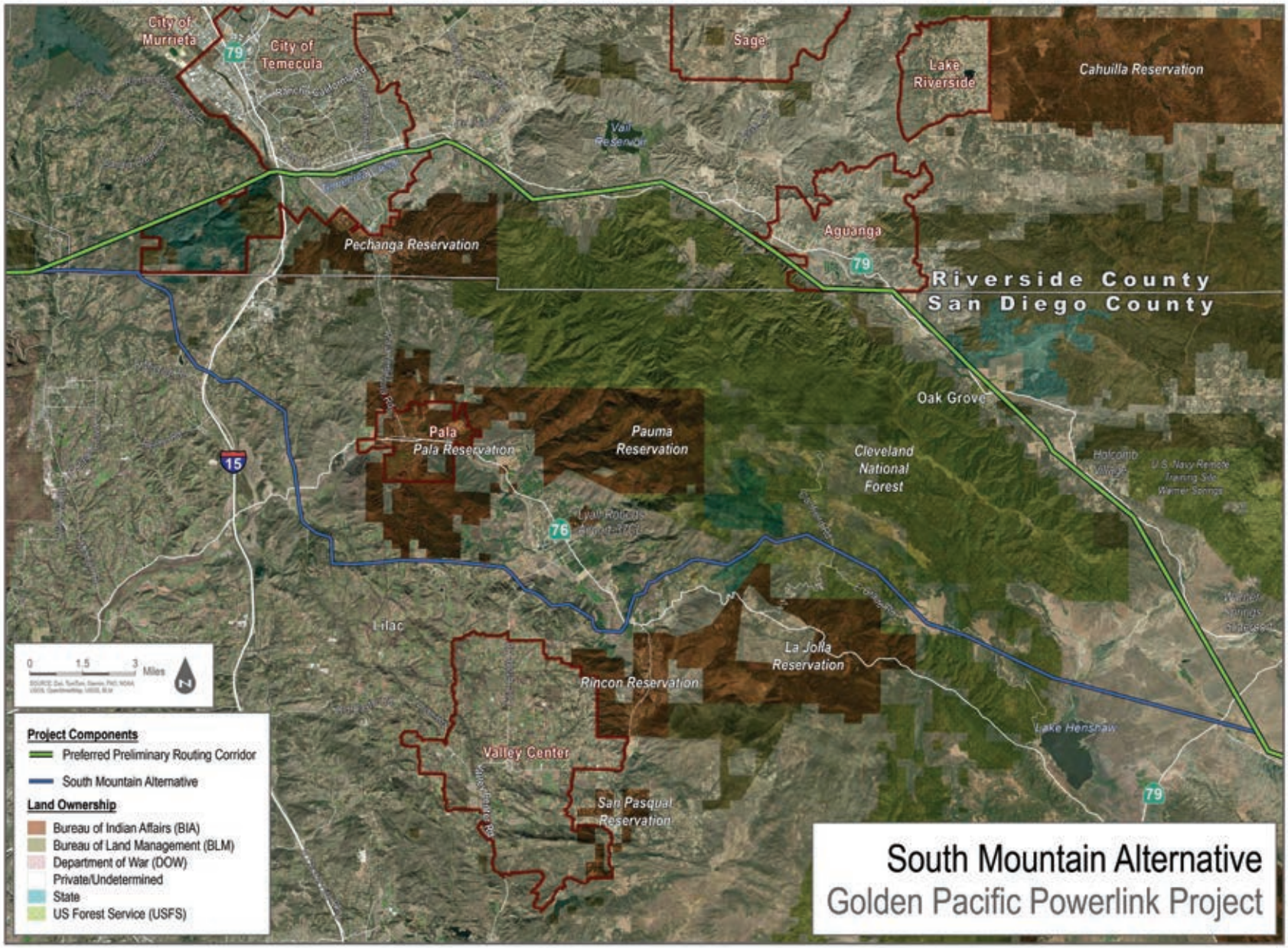
Proposed Project and Alternative Routes

GOLDEN PACIFIC POWERLINK



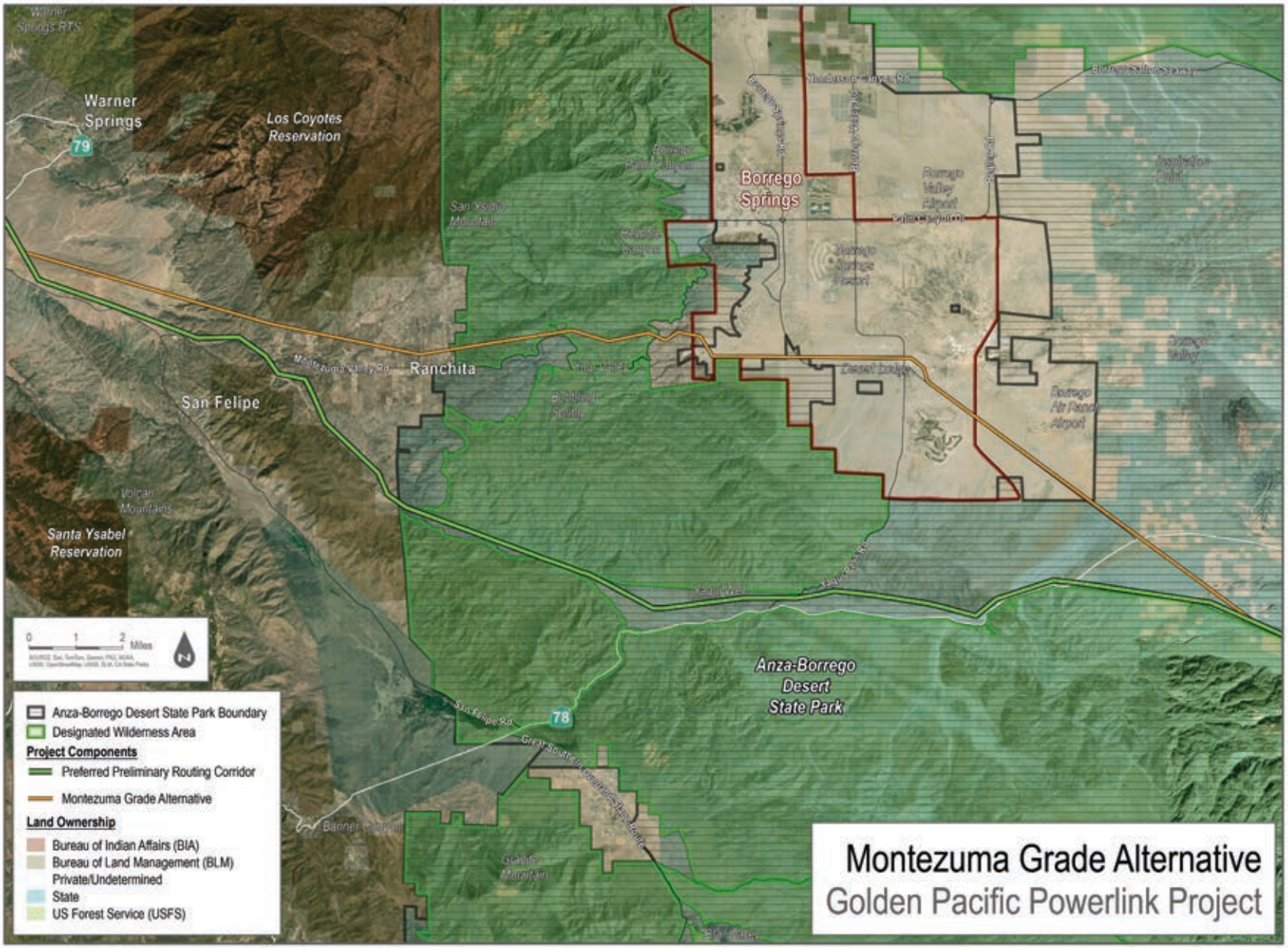
South Mountain Alternative

GOLDEN PACIFIC
POWERLINK



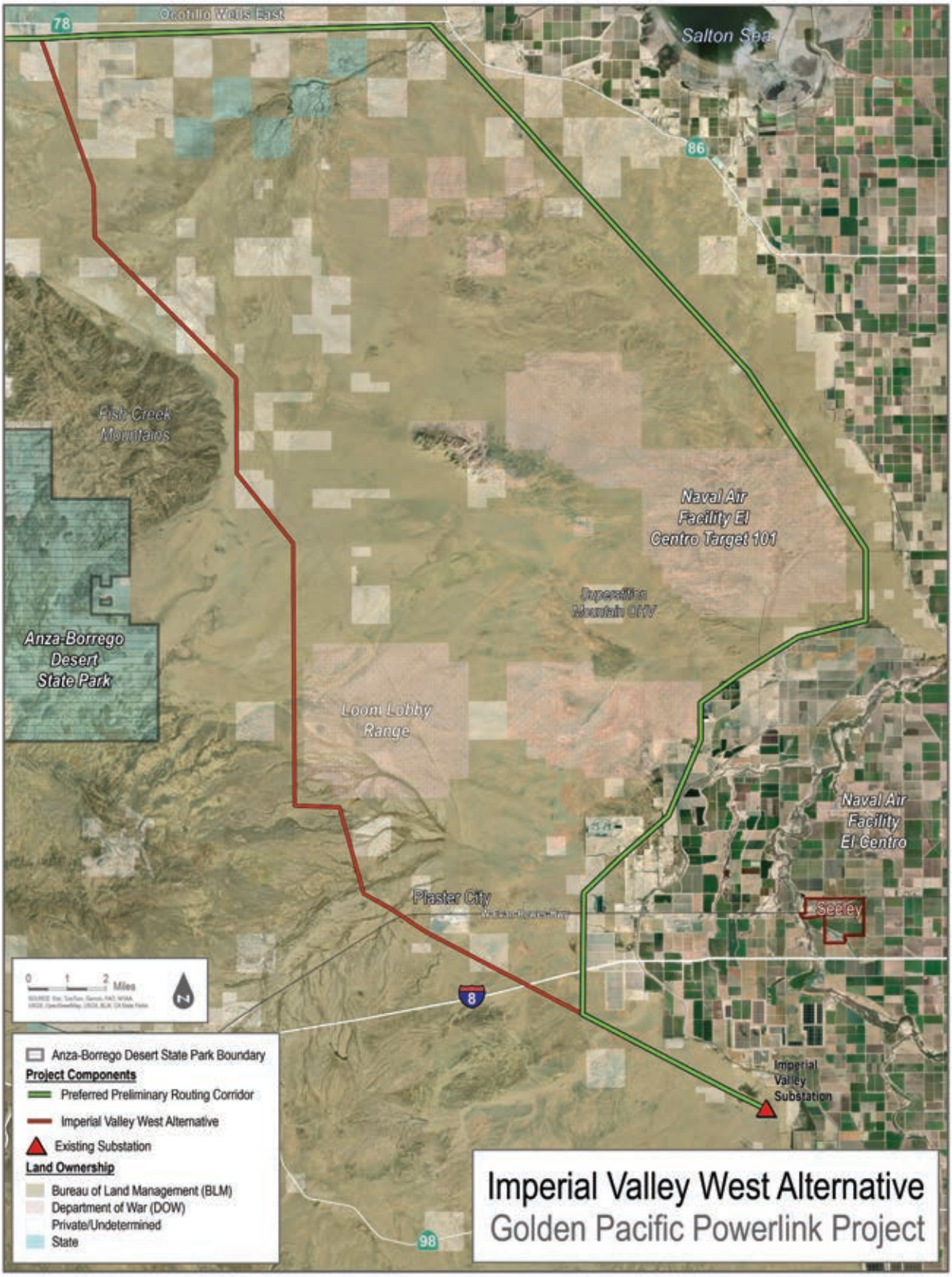
Montezuma Grade Alternative

GOLDEN PACIFIC POWERLINK



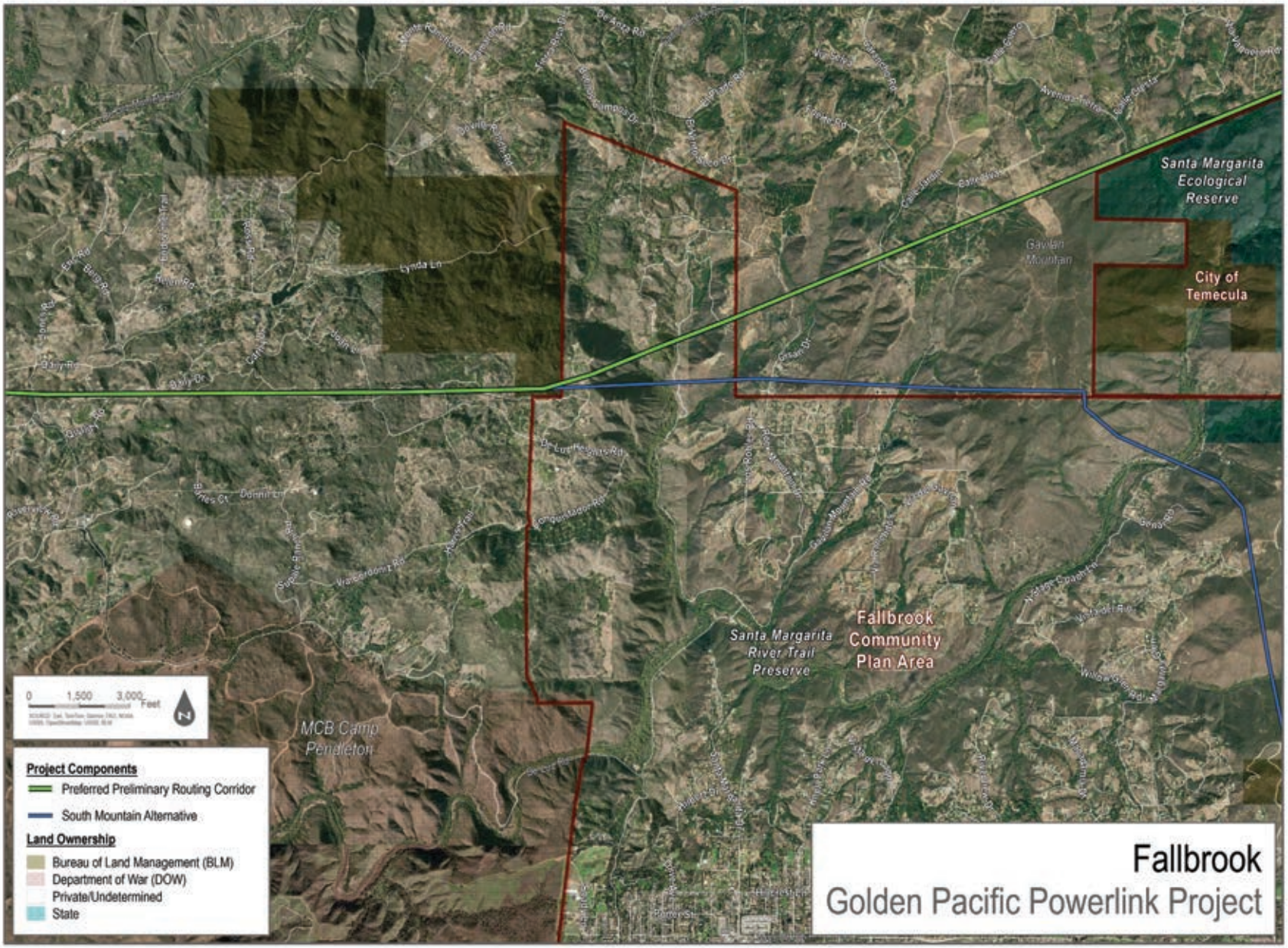
Imperial Valley West Alternative

GOLDEN PACIFIC POWERLINK



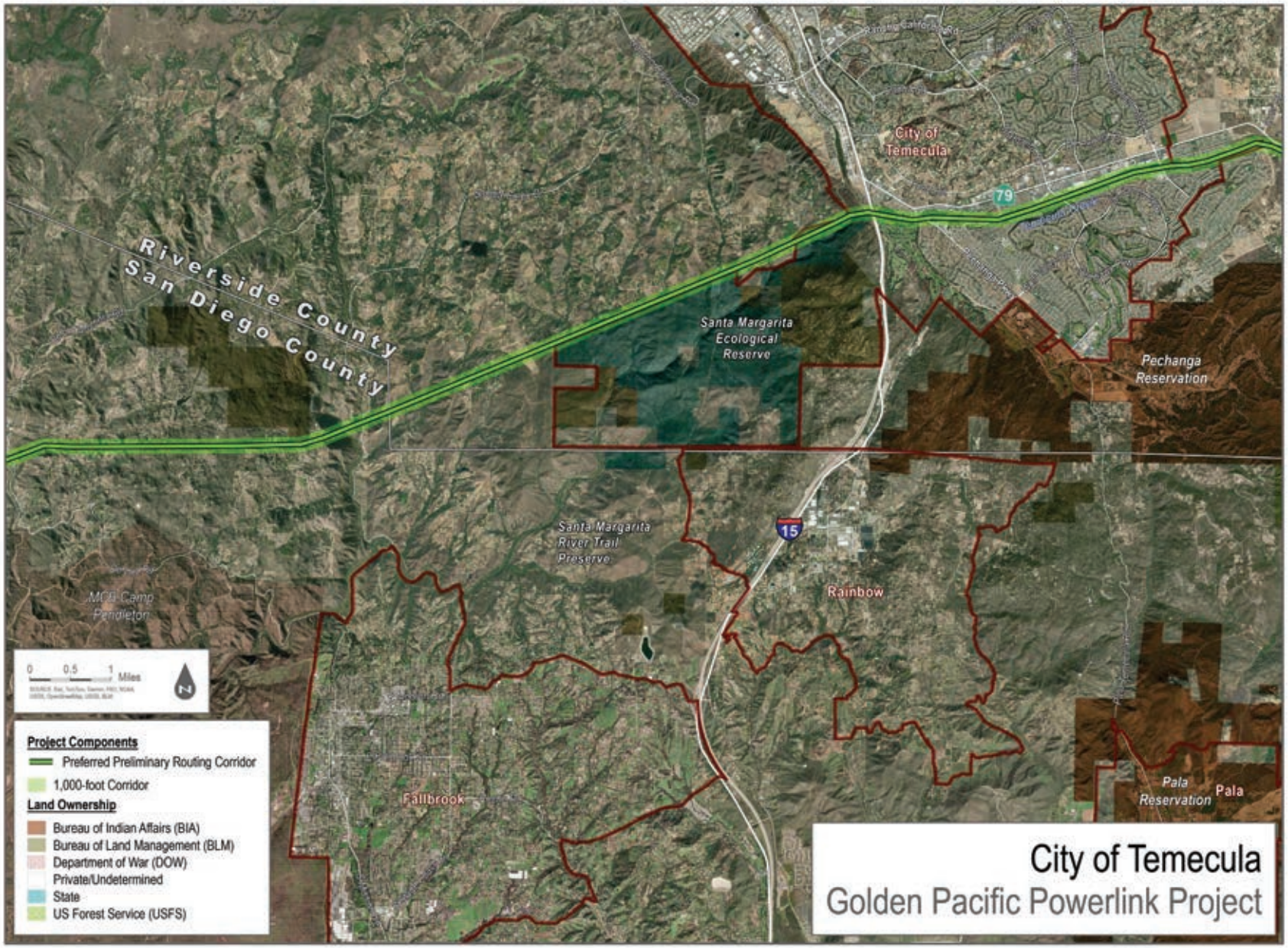
Detail Map: Fallbrook

GOLDEN PACIFIC POWERLINK

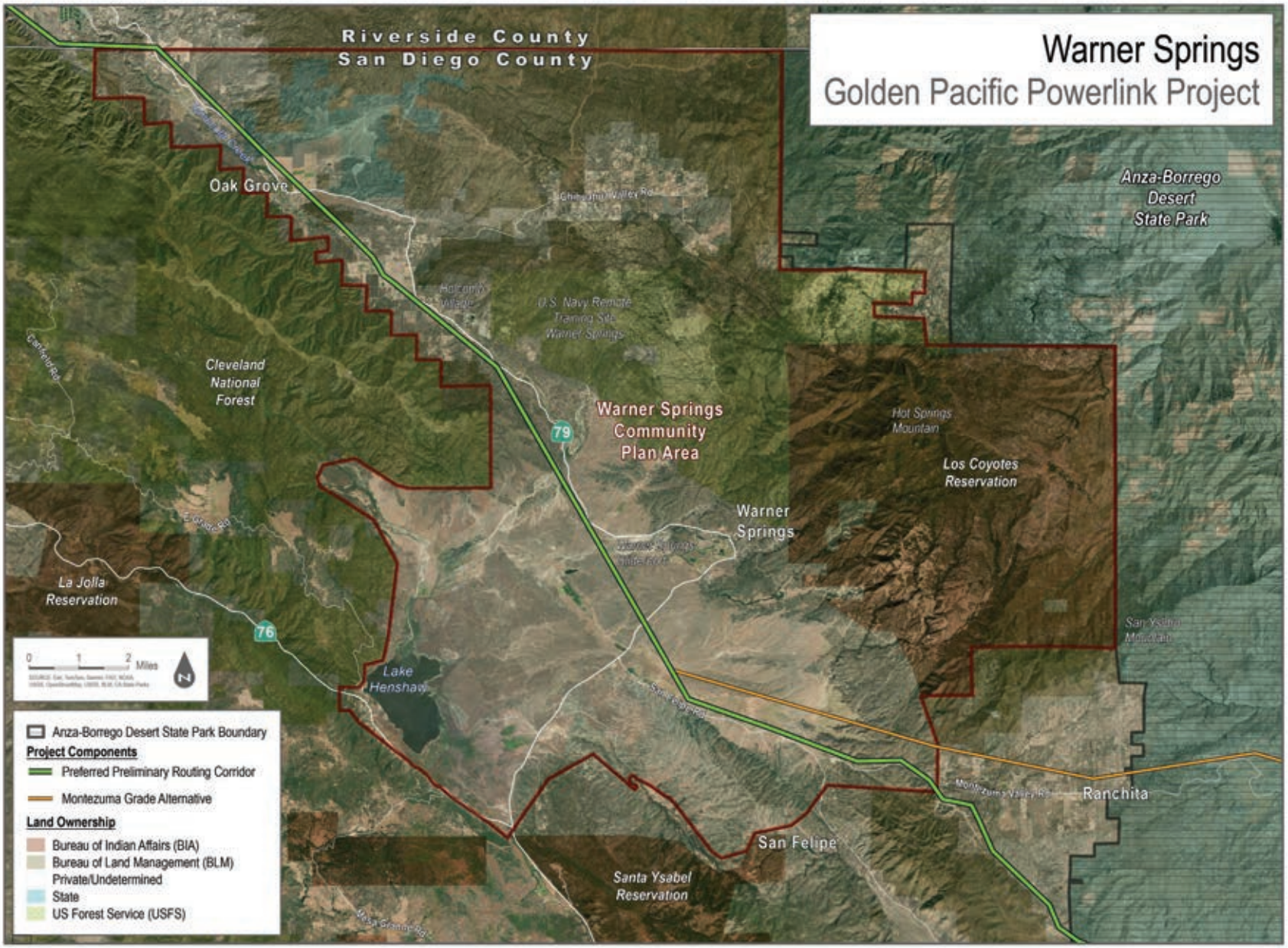


Detail Map: Temecula

GOLDEN PACIFIC
POWERLINK



Detail Map: Warner Springs



GOLDEN PACIFIC
POWERLINK

SDGE®

Community Impacts and Key Concerns

GOLDEN PACIFIC POWERLINK

What We've Heard So Far

650+ Emails and Web Submissions

16,000+ Visitors to the Project Website

800+ Attendees Across Four Virtual Open Houses

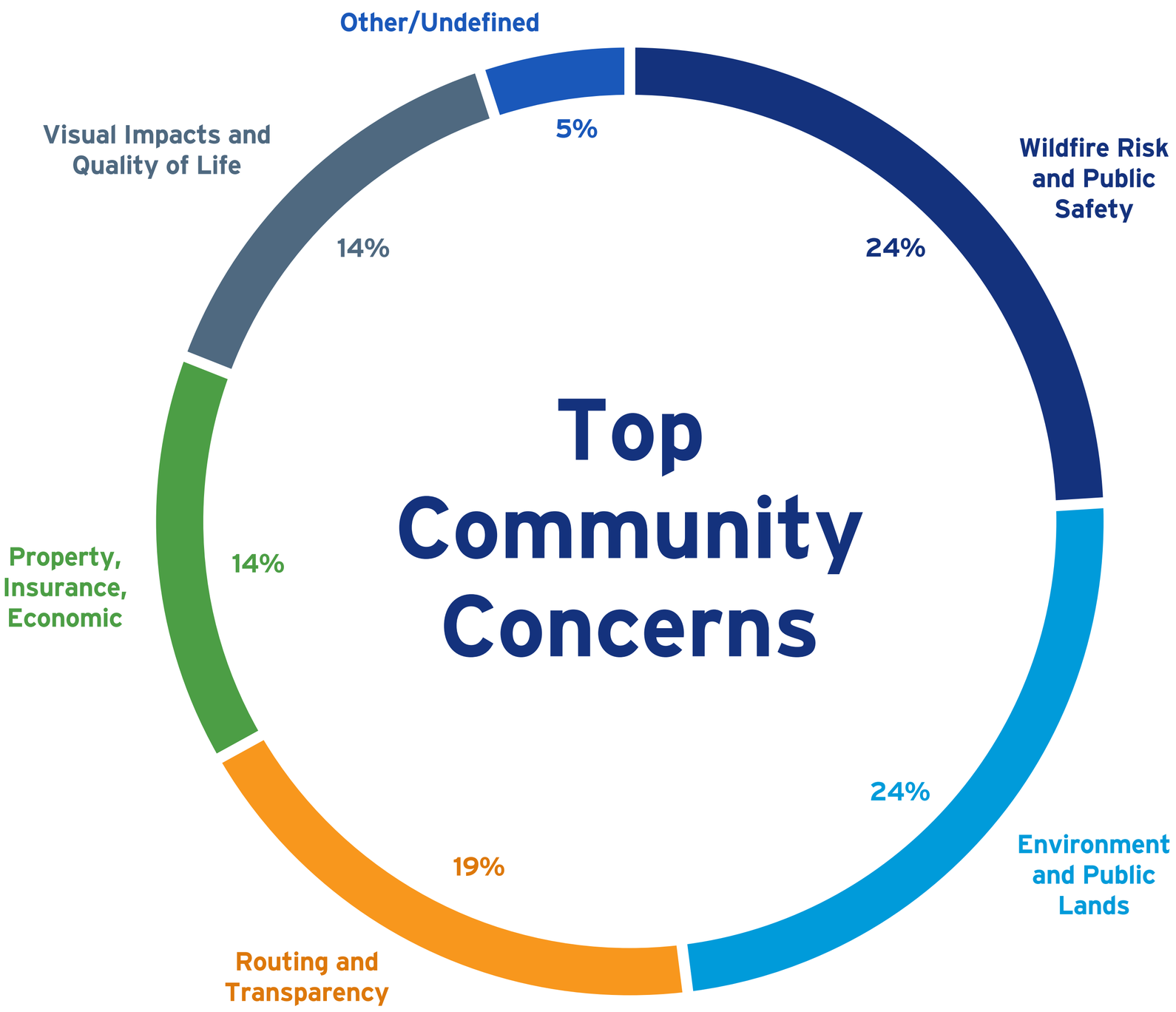
GOLDEN PACIFIC POWERLINK

220+ Responses via Project Survey on Website

700+ Comments Collected at Virtual Open Houses

120+ Direct Briefings with Community Stakeholders by SDG&E Staff

Top Community Concerns



SDGE®

GOLDEN PACIFIC
POWERLINK

What are Your Top Concerns?

We consider many environmental factors when developing the route for new transmission lines. Which do you care about the most?

Please take three dots and place one of each next to the environmental consideration most important to you.

Avian Species	
Tribal and Cultural Resources	
Fire Mitigation	
Recreation	
Safety	
Residential Areas	
Special Land Designations (FAA, Military, Park, BLM, CNF)	
Threatened and Endangered Species	
Vegetation and Habitat	
Visual and Aesthetics	
Wetlands	
Other (See Flipchart)	

SDGE®

GOLDEN PACIFIC
POWERLINK

Land Survey and Review

SDG&E conducts field surveys and observational studies to:

Understand what's on the ground

Field data shows us what is actually there before design decisions are made

Identify sensitive resources

Surveys locate plants, wildlife and cultural resources so they can be identified

Design responsibly

Engineering uses field findings to refine the alignment and reduce potential impacts

Meet regulatory requirements

Studies support the environmental review the project is required to complete

SDGE®

Access to Your Property

To conduct field surveys, SDG&E may need to access your property.

You may receive a letter notifying you that we plan to enter a defined portion of your property. This will include:

- A description of the specific survey work planned
- A point of contact for questions and scheduling
- Advance notice, so no one arrives unannounced

Access is temporary and limited in scope. Crews enter only the areas described in your letter, and only for the work described.

Access Protocol

- ☑ 24- or 48-hour notice when requested
- ☑ Access instructions for fence openings or gate codes
- ☑ Awareness of pets or other animals on property

Access and field surveys will be completed intermittently over the next 18 months

GOLDEN PACIFIC POWERLINK

Your Property Rights

If the CPUC selects a route that impacts your property:

- ☑ SDG&E will work with property owners to negotiate an easement
- ☑ You will get specific information about any facilities and potential impacts
- ☑ SDG&E will seek to come to a voluntary agreement

Property owners are entitled to just compensation for the rights acquired:

- ☑ Compensation is based on the fair market value of the rights being acquired
- ☑ Value is established through a professional appraisal
- ☑ Owners receive an offer, with the opportunity to ask questions and discuss it

A utility easement is a legal right that allows utility companies to access and use a specific part of your property for a defined purpose

- You remain the owner
- Ownership of your property does not transfer
- Title stays in your name
- You continue to own the land within the easement area

- The utility receives limited rights to transmission facilities
- Rights apply only within the defined easement area
- The purpose and the area are both spelled out in writing

SDGE®

GOLDEN PACIFIC POWERLINK

Land and Right-of-Way

Below is an example of the general sequence for SDG&E's land and right-of-way process. Timing varies by parcel. You'll hear from us at each step that affects you.

Phase 1

Study and Refine

01	02	03	04
Outreach	**Survey Access** *We are here today*	**Field Studies**	**Corridor Refinement**
SDG&E is sending letters Owners along the study corridor are receiving written requests for temporary access to portions of their property.	**Field surveys are underway** Biological, botanical and visual field reviews are being conducted along the corridor now.		**The route is still being refined** What crews find in the field helps engineering shape an alignment that reduces impacts.

Phase 2

Easement and Agreement

05	06	07	08	09
Easement Discussions	**Appraisal**	**Offer**	**Negotiation**	**Agreement**

Phase 3

Build and Energize

10	11
Construction	**In Service**

SDGE®

Electric and Magnetic Fields (EMF)

Electric and magnetic fields exist at home and in nature - they are everywhere electricity is used.

EMF Field Levels decrease with distance from the source

Magnetic fields at home

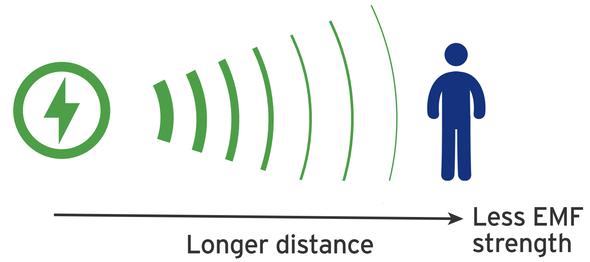
Electrical Device	At 1.2 inches from source	At 12 inches from source	At 36 inches from source
Microwave Oven	750 to 2,000 mG	40 to 80 mG	3 to 8 mG
Clothes Washer	8 to 400 mG	2 to 30 mG	0.1 to 2 mG
Electric Range	60 to 2,000 mG	4 to 40 mG	0.1 to 1 mG
Compact Fluorescent Bulb	0 to 32.8 mG	0 to 0.1 mG	0 mG
Hair Dryer	60 to 20,000 mG	1 to 70 mG	0.1 to 3 mG
LCD/Plasma TV	1.1 to 73.6 mG	0 to 2.5 mG	0 to 2.2 mG

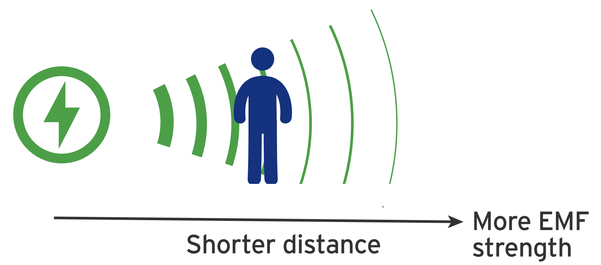
SOURCE: Adapted from Gauger 1985 & EPRI Appliance Measurement Study 2010.
Measurements are in millgauss (mG)

Magnetic fields outside

Distribution Lines	1 to 80 mG under the line
Transmission Lines	1 to 300 mG at the edge of the right-of-way

Maximum values may be lower for some California Utilities
Measurements are in millgauss (mG)





GOLDEN PACIFIC POWERLINK

Wildfire Safety and Resilience

Using technology, data and partnerships to help reduce wildfire risk

SDG&E combines real-time weather intelligence, AI modeling, stronger infrastructure and public safety coordination to support regional wildfire preparedness.

19	years without a large utility-caused wildfire	**222+**	weather stations across the region	**10M+**	virtual wildfire simulations daily
131	high-resolution wildfire cameras	**100%**	tier 3 transmission system hardened	**500k+**	vegetation inspections completed annually

A Comprehensive Wildfire Mitigation Approach

Forecast

Advanced weather monitoring and fire potential tools support real-time decisions.

Model

AI, simulations and drone data help identify and prioritize wildfire risk.

Strengthen

Undergrounding, covered conductor, inspections and vegetation management harden the grid.

Coordinate

Public safety and academic partnerships strengthen regional readiness.

SDGE®

GOLDEN PACIFIC POWERLINK

Partnering Throughout our Service Area

We collaborate with high fire-risk communities to provide funding and resources to enhance wildfire preparedness.

Project selection prioritizes:

High-Risk Areas

HFTD, Community Wildfire Protection Plan, Priority circuits/WUI

Community Impact

Homes, acres, miles protected

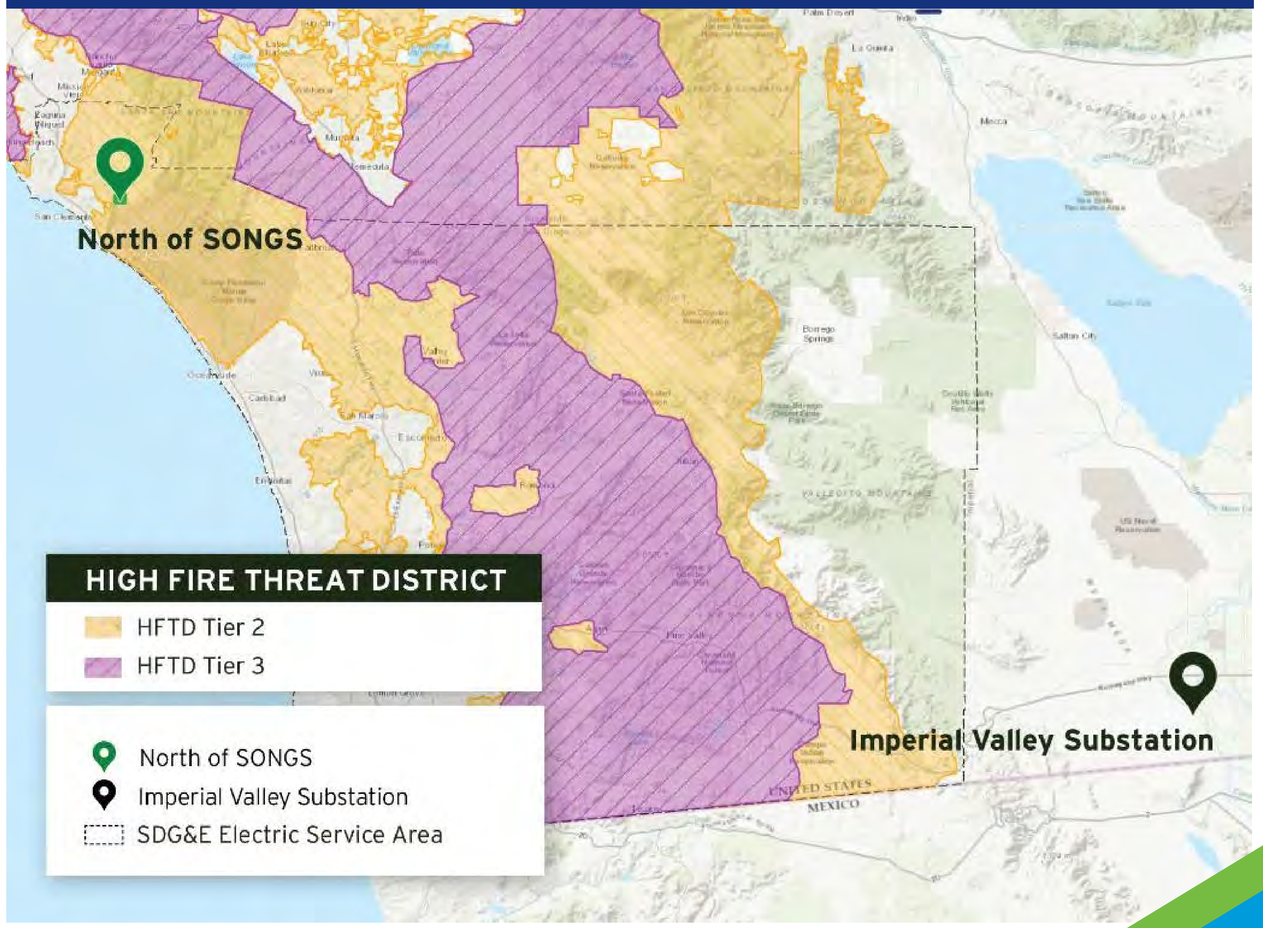
Partners and Support

Fire agency-backed, collaborative

Smart Investment

Proven partner, strong cost-benefit, repeatable model

Wildfire Risk in SDG&E's Service Area



SDGE®

Program Spotlight

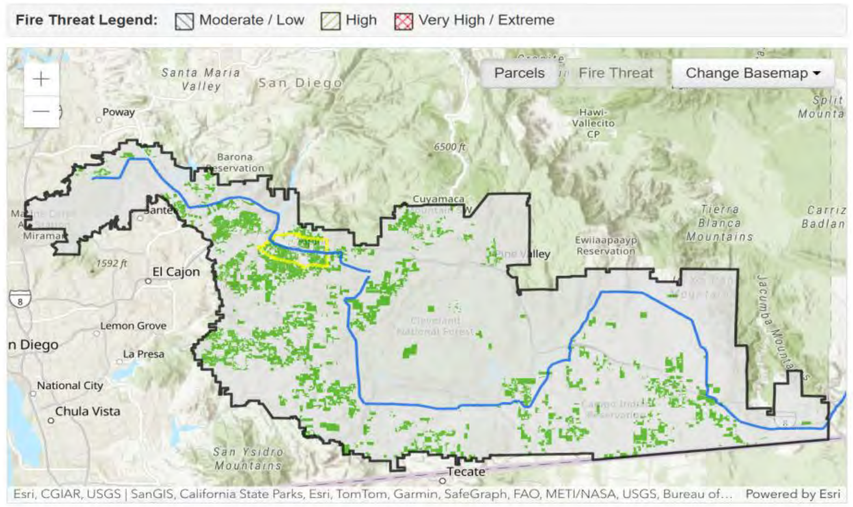
Sunrise Powerlink Fire Mitigation Group*

Through a 58-year agreement, SDG&E will fund over $315M to the Sunrise Powerlink Fire Mitigation Group.

- 7 federal, state or local fire agencies
- Support local wildfire resilience projects
- Disperse annual grants to homeowners and communities in the Sunrise Powerlink Corridor

*SDG&E funds the program as a condition of state regulatory approvals to construct and operate the Sunrise Powerlink Transmission Line.

The 2026 area of Eligibility is outlined in black. Green parcels are eligible for the program. The Sunrise Powerlink is shown as the Blue Line. The area outlined in yellow is the "Underground" area as it relates to the "Location" proximity to the Powerlink for application evaluation.



2012 - 2025 SPFMG Enabled:

63 | Community protection projects

5.9K | Structure hardening projects

12.6K | Defensible space projects

$48M | Funding from 2012-2025

GOLDEN PACIFIC POWERLINK

Partnership Spotlight

Sunrise Powerlink Homeowner Support

Assisting homeowners to comply with state and local defensible space regulations while supporting safer communities.

Zone Zero Compliance

Zone Zero is an ember resistant zone which functions to reduce ignition from embers that land near structures.

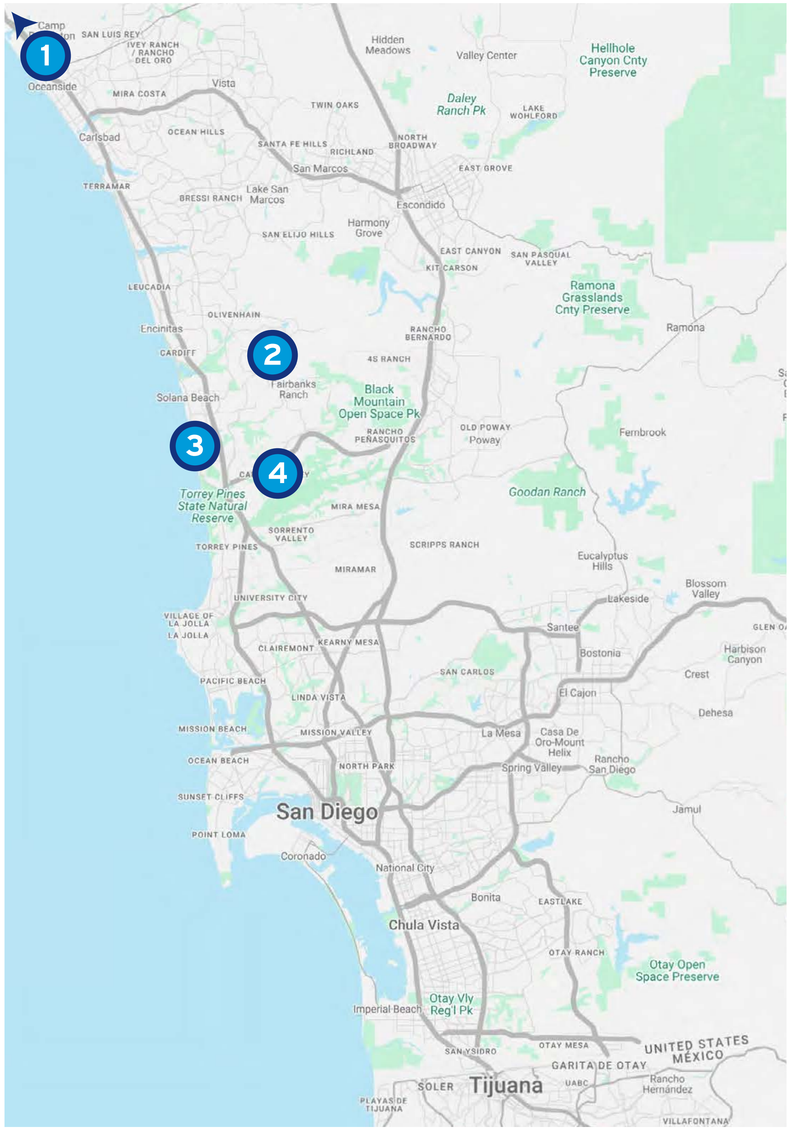
Defensible Space Projects

Defensible space functions as a barrier between a structure and an advancing fire.

SDGE®

Transmission Infrastructure in Similar Communities

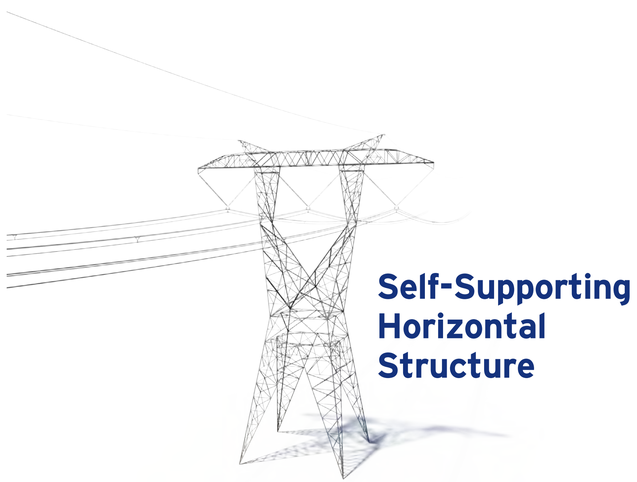
GOLDEN PACIFIC POWERLINK



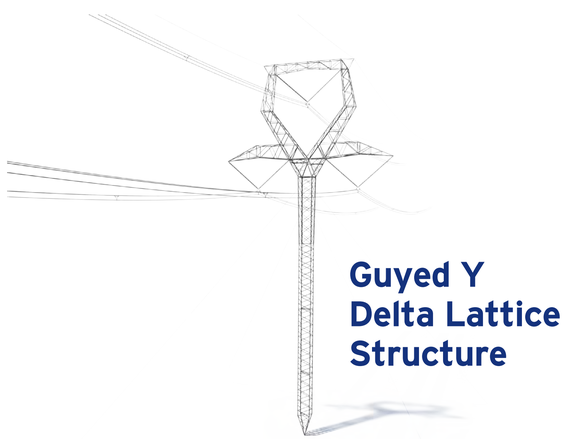
SDGE®

GOLDEN PACIFIC POWERLINK

Potential Structure Types

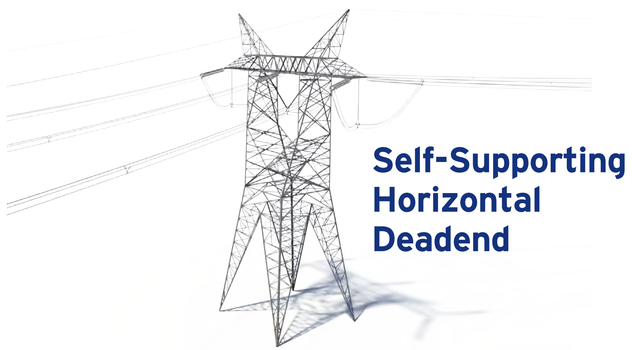


Self-Supporting Horizontal Structure

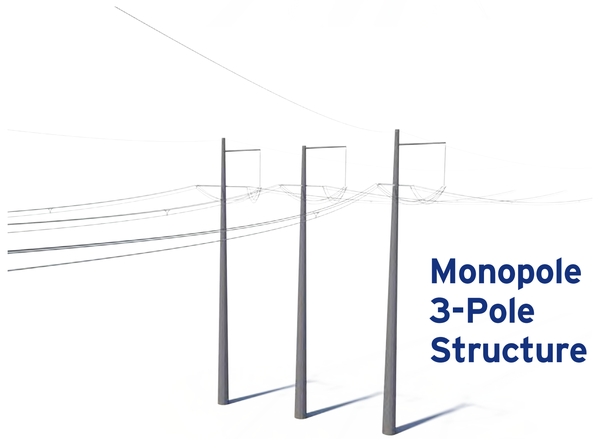


Guyed Y Delta Lattice Structure

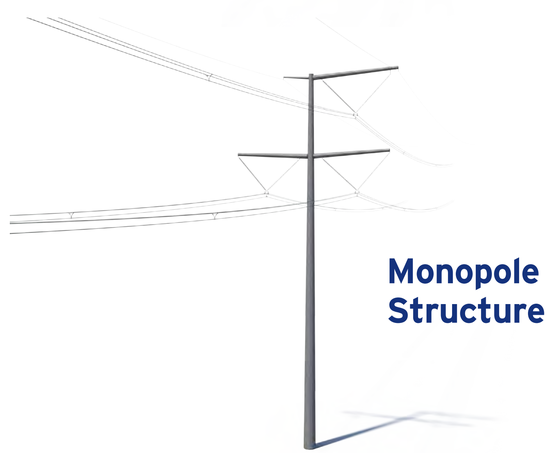
Self-Supporting Delta Structure



Self-Supporting Horizontal Deadend



Monopole 3-Pole Structure



Monopole Structure

SDGE®

GOLDEN PACIFIC POWERLINK

Tribal and Cultural Resources

What are these resources?

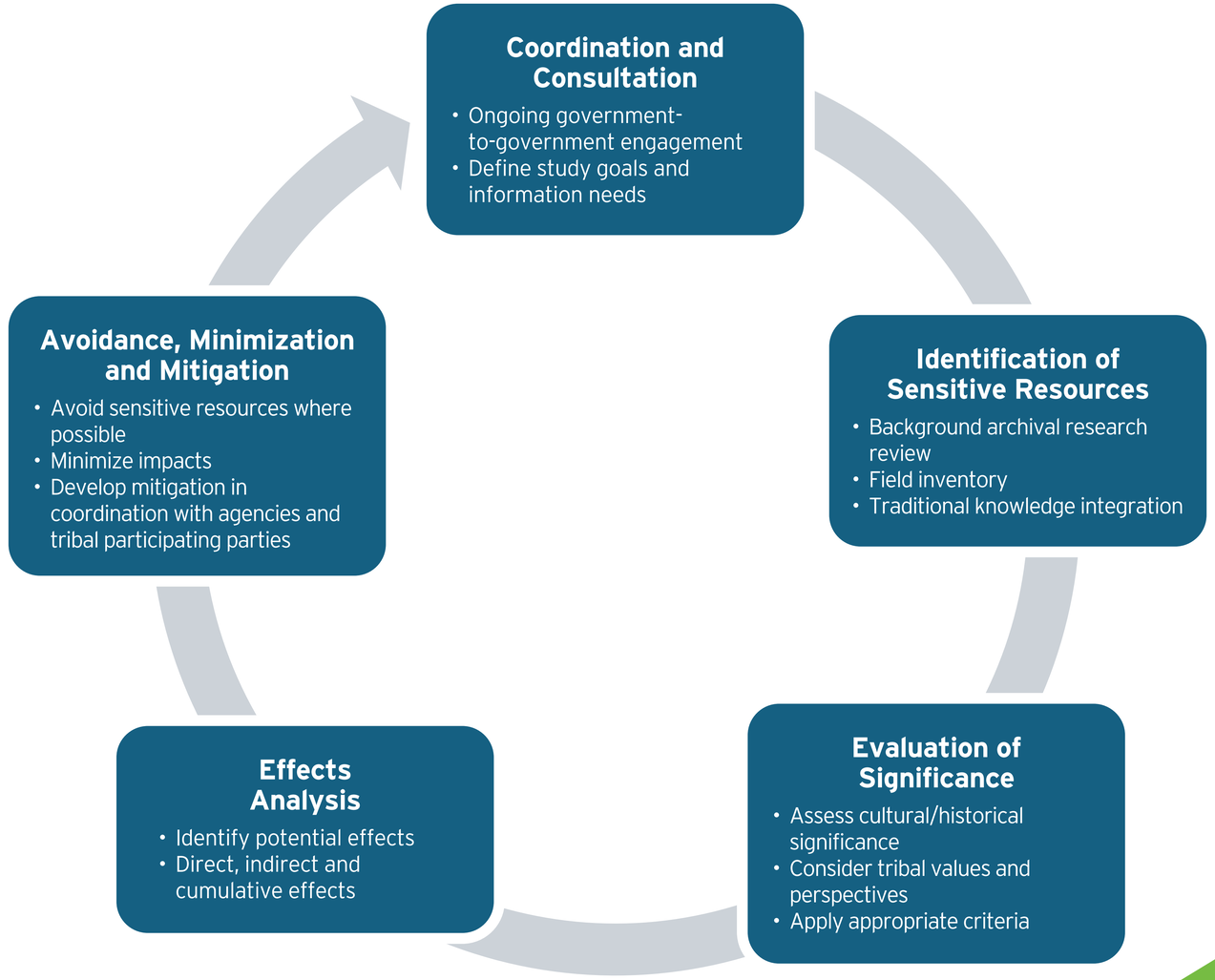
A physical site, structure, building, district or object that holds importance for its history, architecture, archaeology or tribal/cultural heritage.

How are they identified?

- Professional field surveys
- Archival research
- Native American consultation

How are Native American Tribes involved?

- Asked to share knowledge and help identify important areas
- Ongoing coordination throughout environmental review process
- Construction monitoring



SDGE®

GOLDEN PACIFIC POWERLINK

Why not Underground?

Harder to Repair

- Repairs are more complex and can take longer to complete

Large Above-Ground Facilities Still Required

- Overhead to underground transition structures are required on both ends of the underground infrastructure
- These transition stations are in the range of 2.5 to 3 acres each

Greater Construction Impacts

- Requires continuous trenching and larger construction work areas
- More traffic disruptions and utility conflicts

Higher Cost

- Underground construction could cost 4 to 14 times more than an overhead line
- Higher costs ultimately increase the cost of the project for customers

SDGE®

GOLDEN PACIFIC
POWERLINK

SDGE®

How to Remain Engaged

GOLDEN PACIFIC
POWERLINK

Giving Your Feedback

How Do I Share Feedback?

You Have Multiple Opportunities to Share Feedback:

Complete a paper or online survey

Share your concerns with a member of the project team

Email the project at:
GoldenPacific@sdge.com

What Happens With My Comments and Questions?

CPUC and SDG&E

SDG&E will collect and analyze all feedback shared during this engagement period for consideration during project development.

SDG&E will share the feedback with the CPUC as part of its permit application.

In 2027, the CPUC will begin a public scoping comment period, for you to share your feedback on Golden Pacific Powerlink.

Sign up for our project mailing list and stay tuned for additional information:

GoldenPacificPowerlink.com

SDGE®

GOLDEN PACIFIC
POWERLINK

Thank You

We Want to Hear from You!

We hope you stay involved with Golden Pacific Powerlink.
Please visit our project website at ***GoldenPacificPowerlink.com***, where you can:

Learn the latest about the project

Share your feedback via a comment form or project survey

Request a briefing from SDG&E officials for your organization or neighborhood association

Learn about upcoming outreach opportunities

A Lasting Partnership with the Community

SDG&E will remain a strong community partner throughout the remainder of the project planning process, into design and throughout construction.

Please sign up to our project mailing list and feel free to reach out at any point as the project continues.

GoldenPacificPowerlink.com

SDGE®