

DOCKETED

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Fountain
WIND PROJECT

**California Energy Commission
Public Scoping Meeting
23-OPT-01**

November 28, 2023



Executive Summary

- ✓ **Helps California meet renewable energy Goals established by SB100**
- ✓ **Responsibly sited with 6 years of field investigations and continued refinement**
- ✓ **Improves fire safety as verified by multiple wildfire experts**
- ✓ **Generates significant local economic development and tax revenues**
- ✓ **Meets Opt-In requirements established by AB205 and will be required for public convenience and necessity**



Project Importance

Fountain Wind represents one of the very few viable wind sites moving forward in the entire state of California

New in-state wind projects are needed to meet California's clean energy laws



ROBUST WIND RESOURCE



EXISTING TRANSMISSION INFRASTRUCTURE



COMPATIBLE LAND USE



Project Location

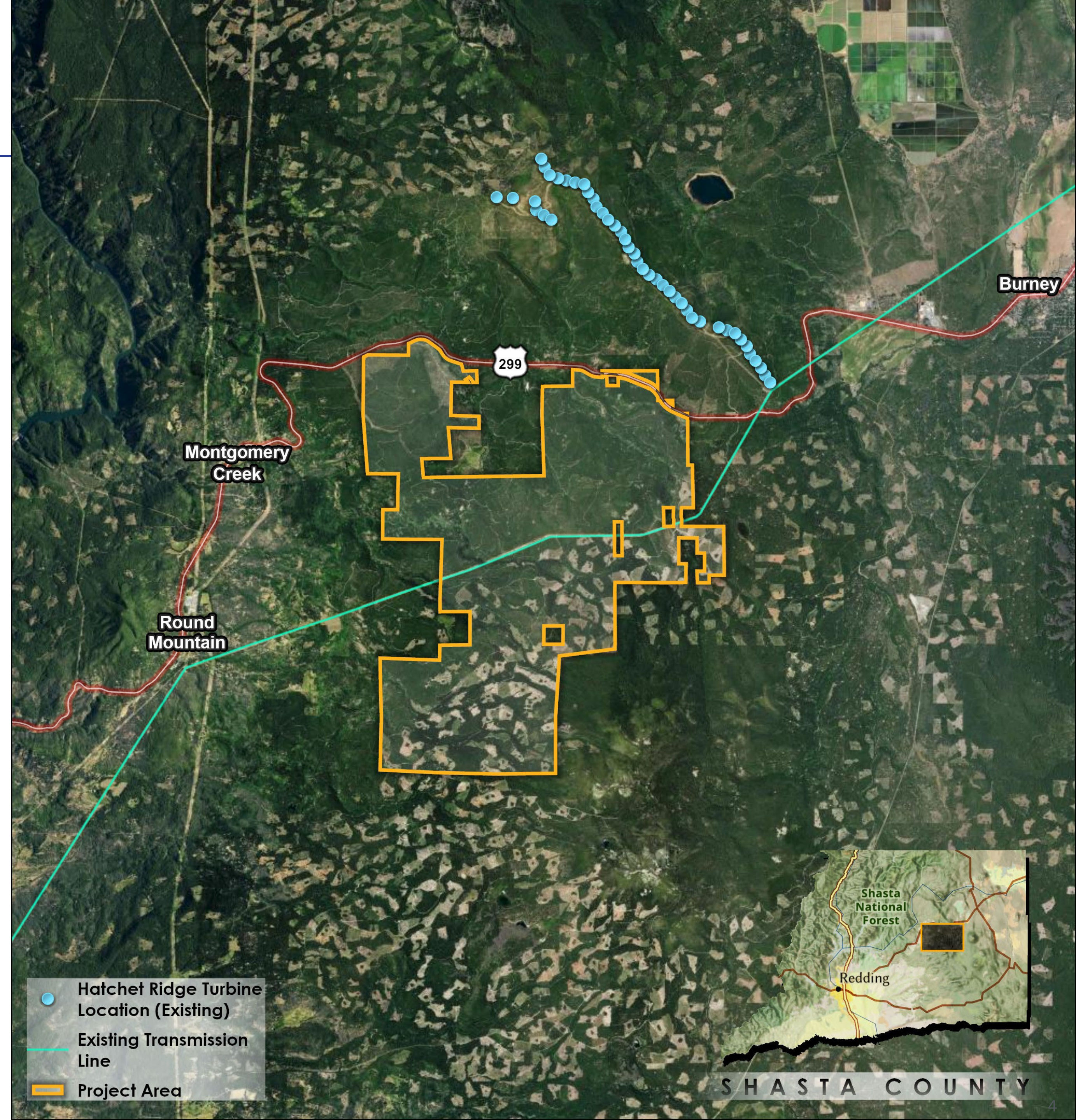
Sited entirely on privately owned land that is an actively managed commercial timber operation

Located approximately:

- 35 miles northeast of Redding,
- 6 miles west of Burney,
- 1 mile southwest of the existing Hatchet Ridge wind project

Entirely south of US HWY 299

Intersected by the existing PG&E Pit #1 to Cottonwood 230 kV transmission line



Project Components

Up to 48 turbine locations with a maximum tip height of 610 feet each

Up to 19 miles of improved existing roads and 19 miles of new roads, all approximately 16 ft. in width

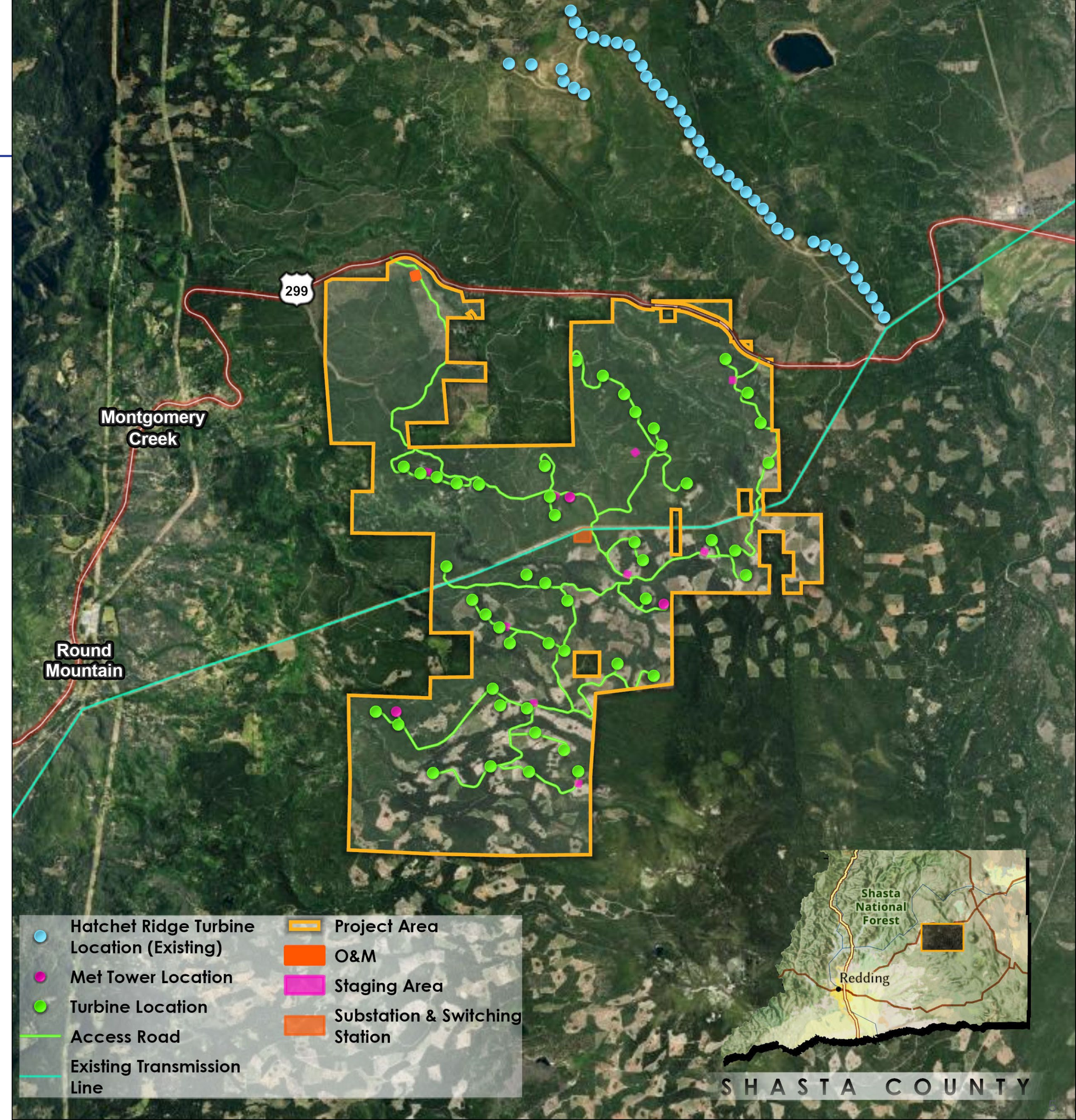
Up to 39 miles of underground collection cables and up to 6 miles of overhead collection lines

A single project substation and interconnection switchyard to facilitate connection with the electrical grid

A single operations and maintenance building

No new high voltage transmission lines

Up to 548 acres of temporary disturbance during construction and 510 acres of permanent disturbance once construction is complete



Project Need

Temperature increase translates to greater environmental risk

Increasing temperatures will result in increased energy demand and reliance on the electrical grid

Models show that without bold action to address climate change, climate-related disasters will occur with increasing frequency and greater devastation

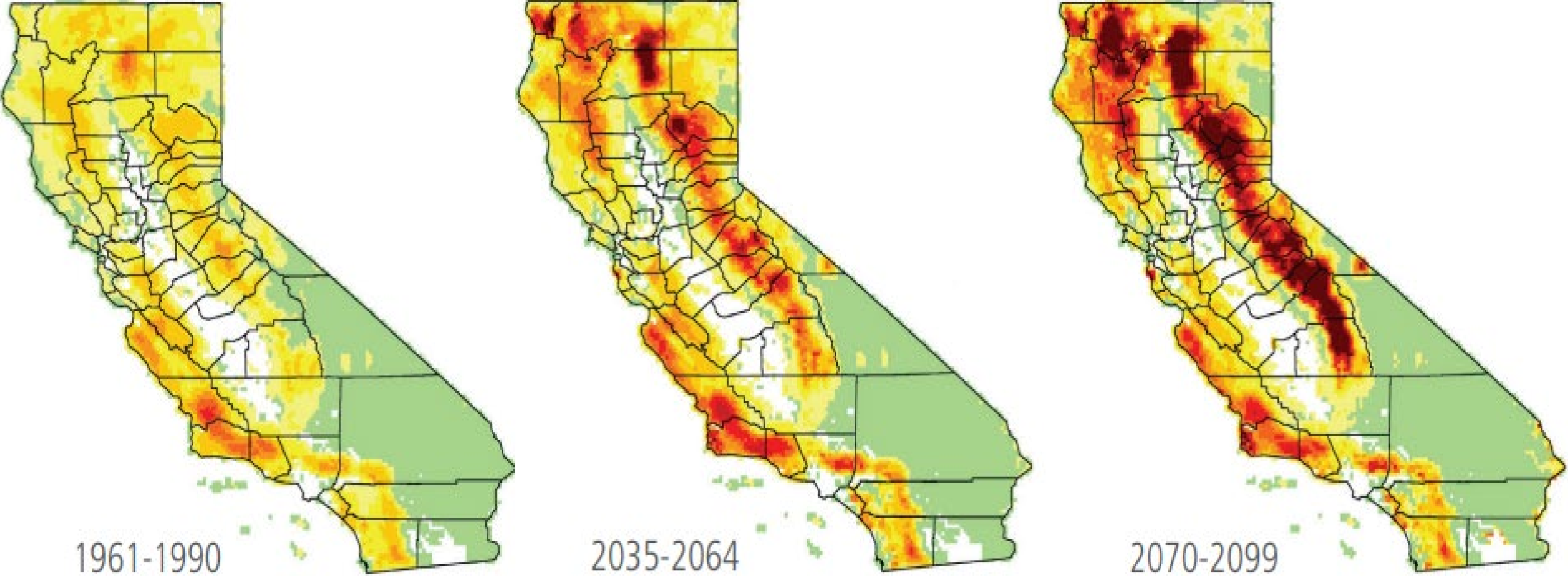
Study shows 77% increase in burned acreage by end of century on business-as-usual case



BY 2100
AVERAGE ANNUAL MAXIMUM DAILY TEMPERATURE

IS PROJECTED TO INCREASE BY
5.6-8.8°F

Depending on greenhouse gas emissions reductions. The greatest increase is seen with business-as-usual emissions levels.



Source: California's Fourth Climate Change Assessment, California Natural Resources Agency

Project Need

State law requires the development of more renewables

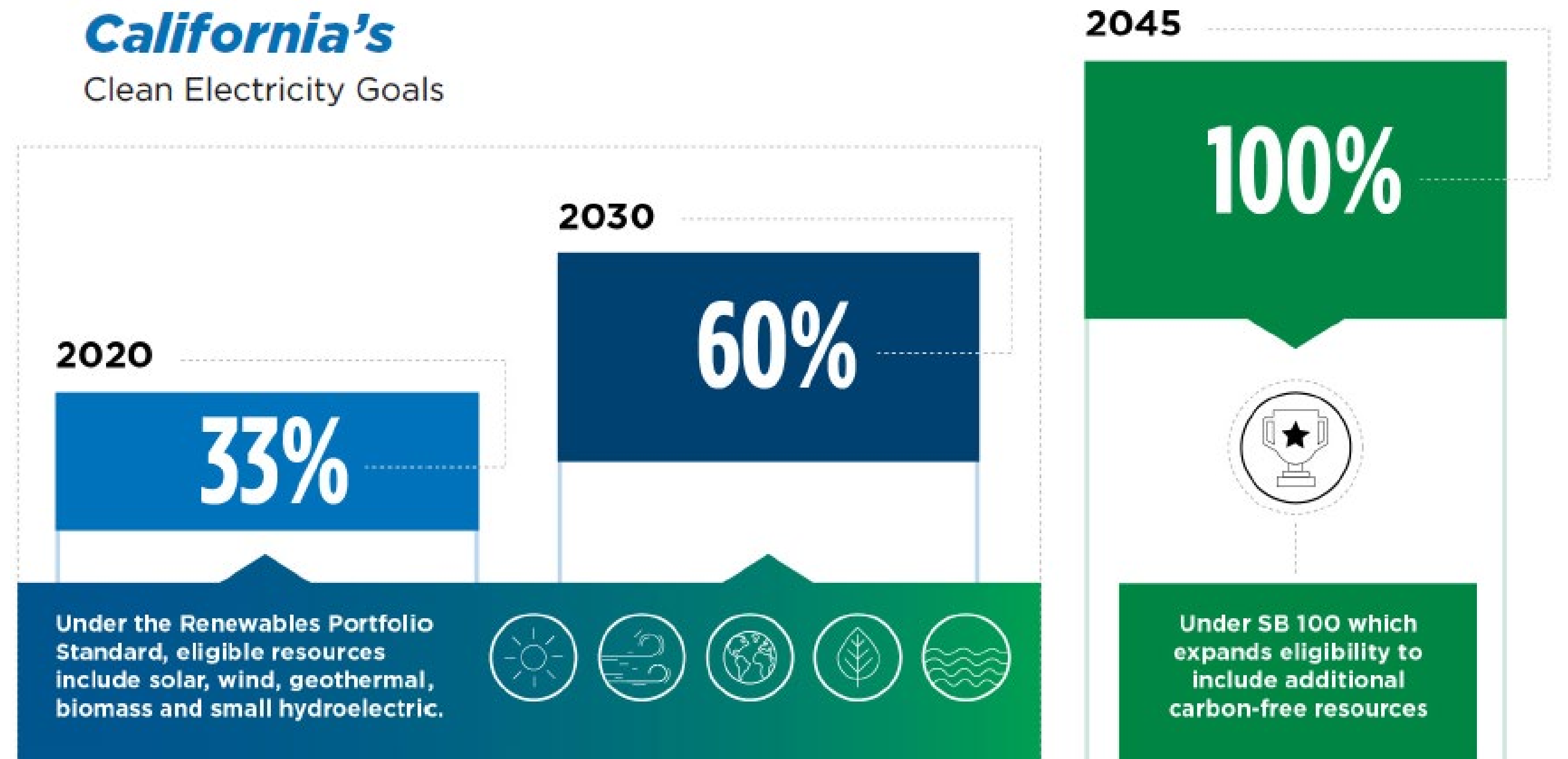
California has a long track record of being a world leader in its commitment to fighting climate change through a state Renewable Portfolio Standard (RPS)

SB100, signed into law in 2018, built upon California's renewable energy leadership by establishing bold new RPS targets

The law requires 100% of all retail electricity sold in California to come from renewable and zero-carbon resources by 2045.

The law also advanced interim RPS goals, including;

- 44% by 2024
- 52% by 2027
- 60 % by 2030



Project Need

12.6 GW of new on-shore wind is needed to meet 100% RPS

California Clean Electricity Resources

	Existing Resources		Projected New Resources	
	2019*	2030**	2030**	2045**
Solar (Utility-Scale)	12.5 GW	16.9 GW	16.9 GW	69.4 GW
Solar (Customer)	8.0 GW	12.5 GW	12.5 GW	28.2 GW
Storage (Battery)	0.2 GW	9.5 GW	9.5 GW	48.8 GW
Storage (Long Duration)	3.7 GW	0.9 GW	0.9 GW	4.0 GW
Wind (Onshore)	6.0 GW	8.2 GW	8.2 GW	12.6 GW
Wind (Offshore)	0 GW	0 GW	0 GW	10.0 GW
Geothermal	2.7 GW	0 GW	0 GW	0.1 GW
Biomass	1.3 GW	0 GW	0 GW	0 GW
Hydrogen Fuel Cells	0 GW	0 GW	0 GW	0 GW
Hydro (Large)	12.3 GW	N/A†	N/A†	N/A†
Hydro (Small)	1.8 GW	N/A†	N/A†	N/A†
Nuclear	2.4 GW	N/A†	N/A†	N/A†

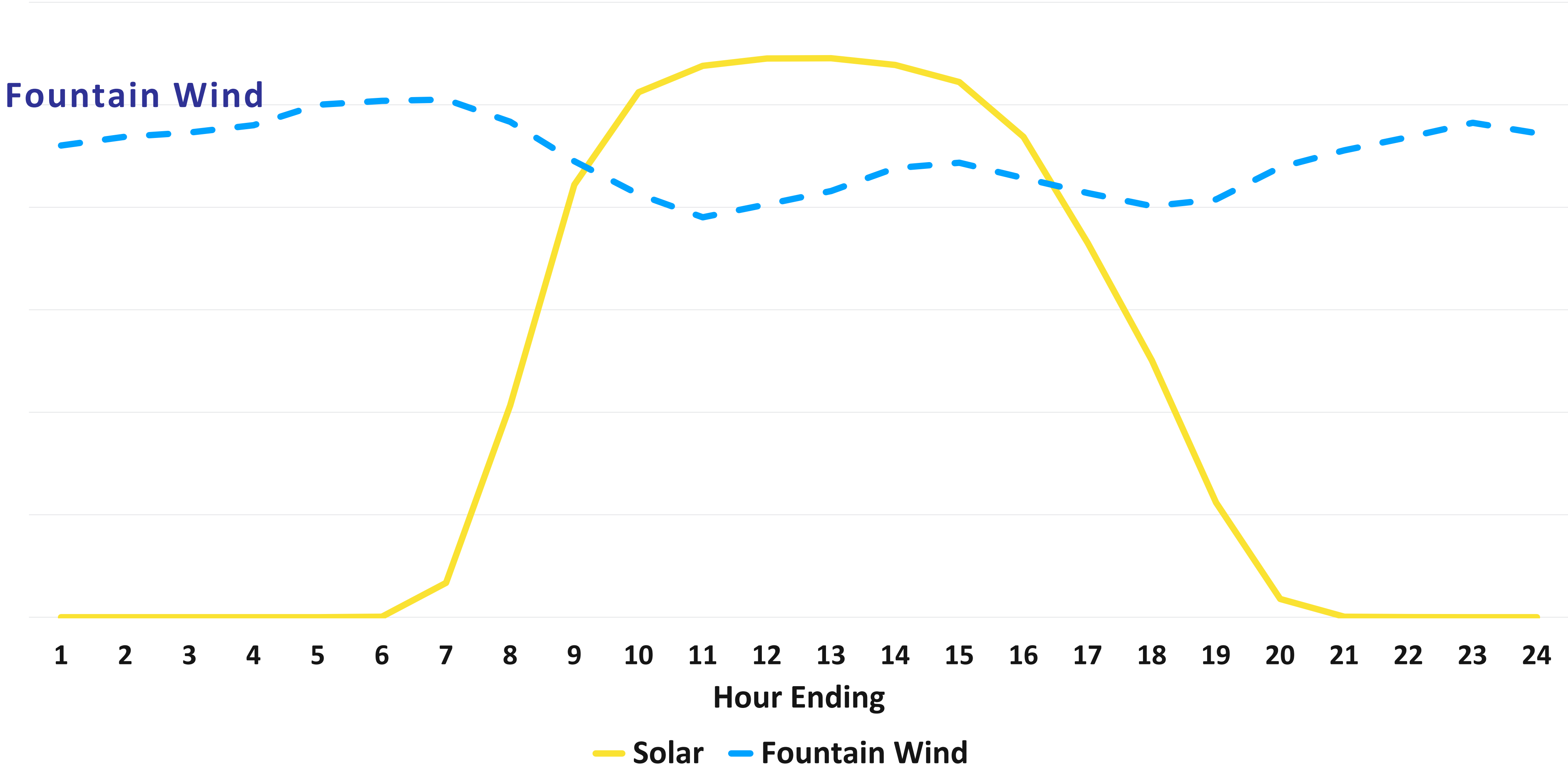


Source: 2021 SB 100 Joint Agency Report Summary Achieving 100% Clean Electricity in California, California Energy Commission, May 15, 2021

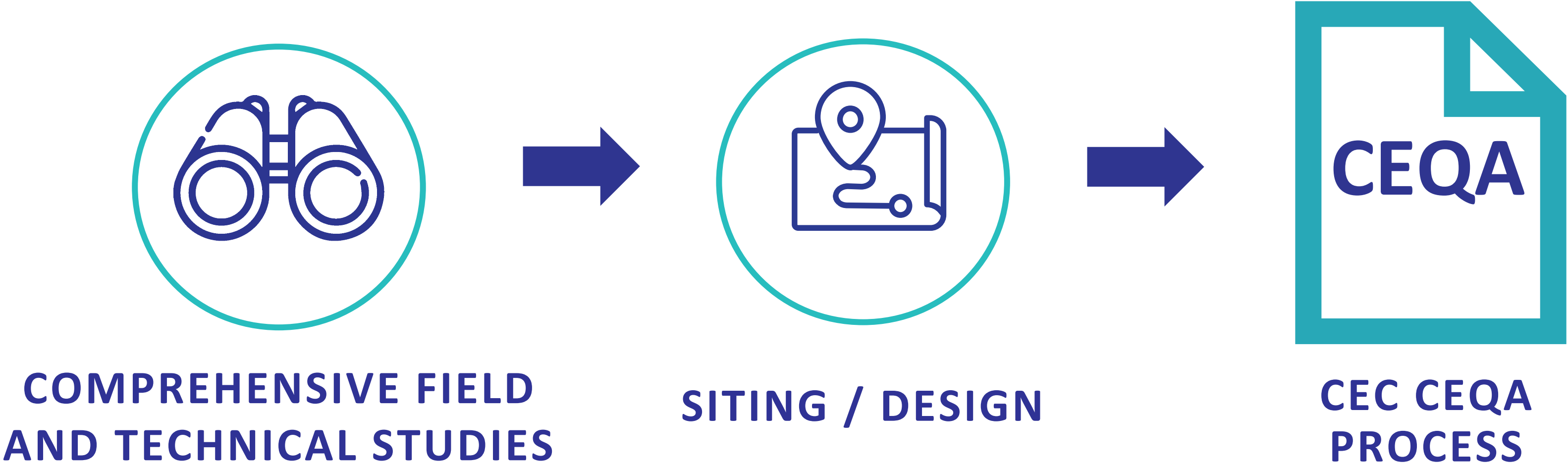
Project Need

Wind will be required to balance solar resources

Fountain Wind Production Profile Comparison to CAISO 2022 Average Hourly Solar Generation



Comprehensive Site Assessment



Since 2017, we have completed over 40 field investigations, technical studies, and environmental assessments.

- Avian and Bat Studies
- Rare Species Habitat and Presence/Absence studies
- Rare Plants & Natural Vegetation Communities Resources
- Hydrology and Aquatic
- Cultural Resources

- Aesthetics and Visual Impact Analysis
- Shadow Flicker
- Sound
- Transportation
- Hazardous Materials



Comprehensive Community Outreach

Our team completed unprecedented outreach in Shasta County to engage with members of the community and factor their input into final project design



Dozens of one-on-one and small group meetings and open house meetings in the project area



Site visits with project stakeholders



Mailed project info to more than 3,000 households



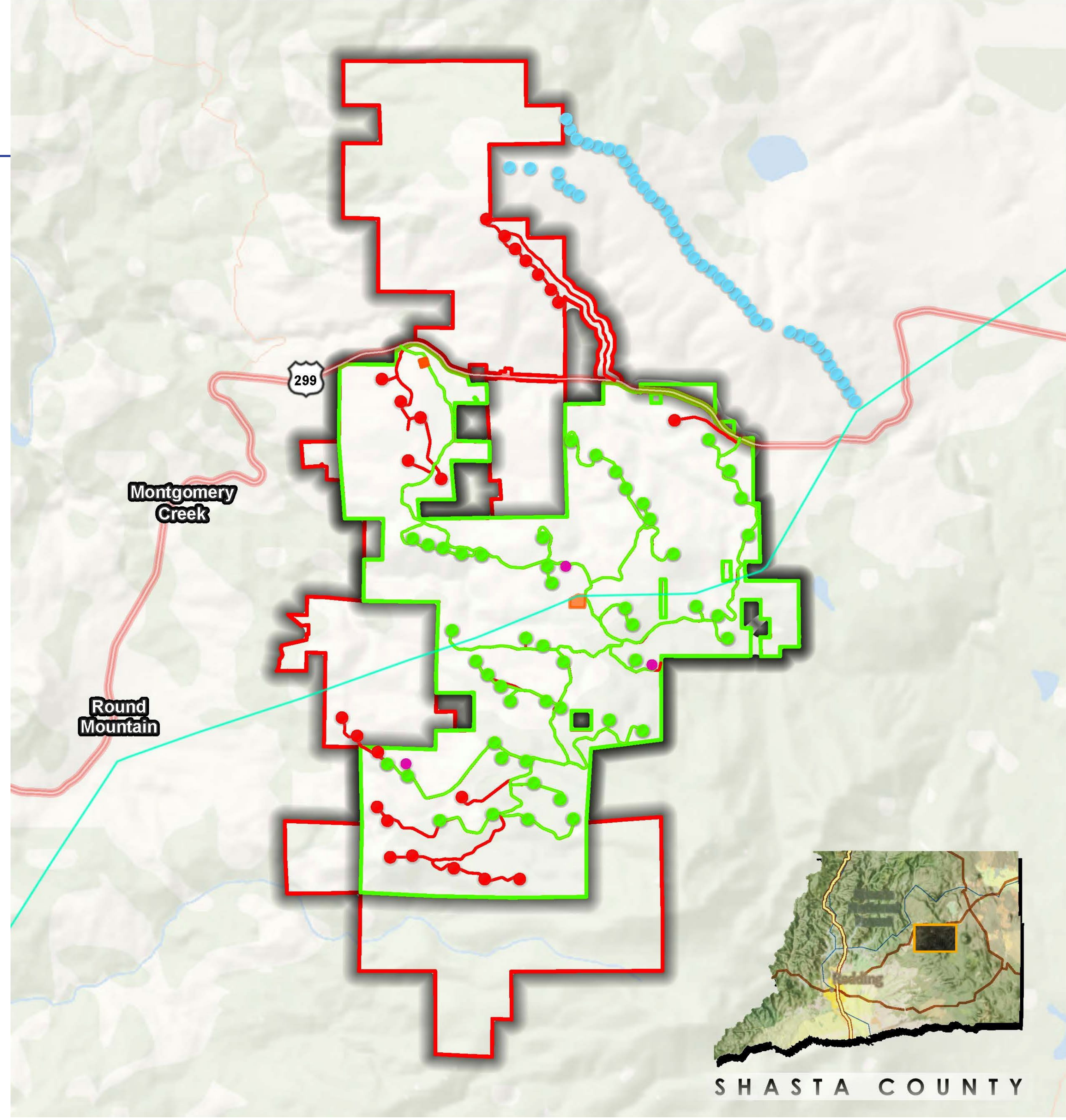
Conversations with more than 1,000 Shasta County residents



Refined Project

Based on feedback provided during the Shasta County Planning Commission hearing, ConnectGen reduced the total number of turbines from 72 to 48, resulting in fewer roads, stream crossings and impacts to habitat and wildlife.

These refinements led to a significant reduction in visibility of turbines from Moose Camp, Round Mountain, and Montgomery creek, less physical disturbance to the natural and cultural environments, and a reduced risk to avian species.



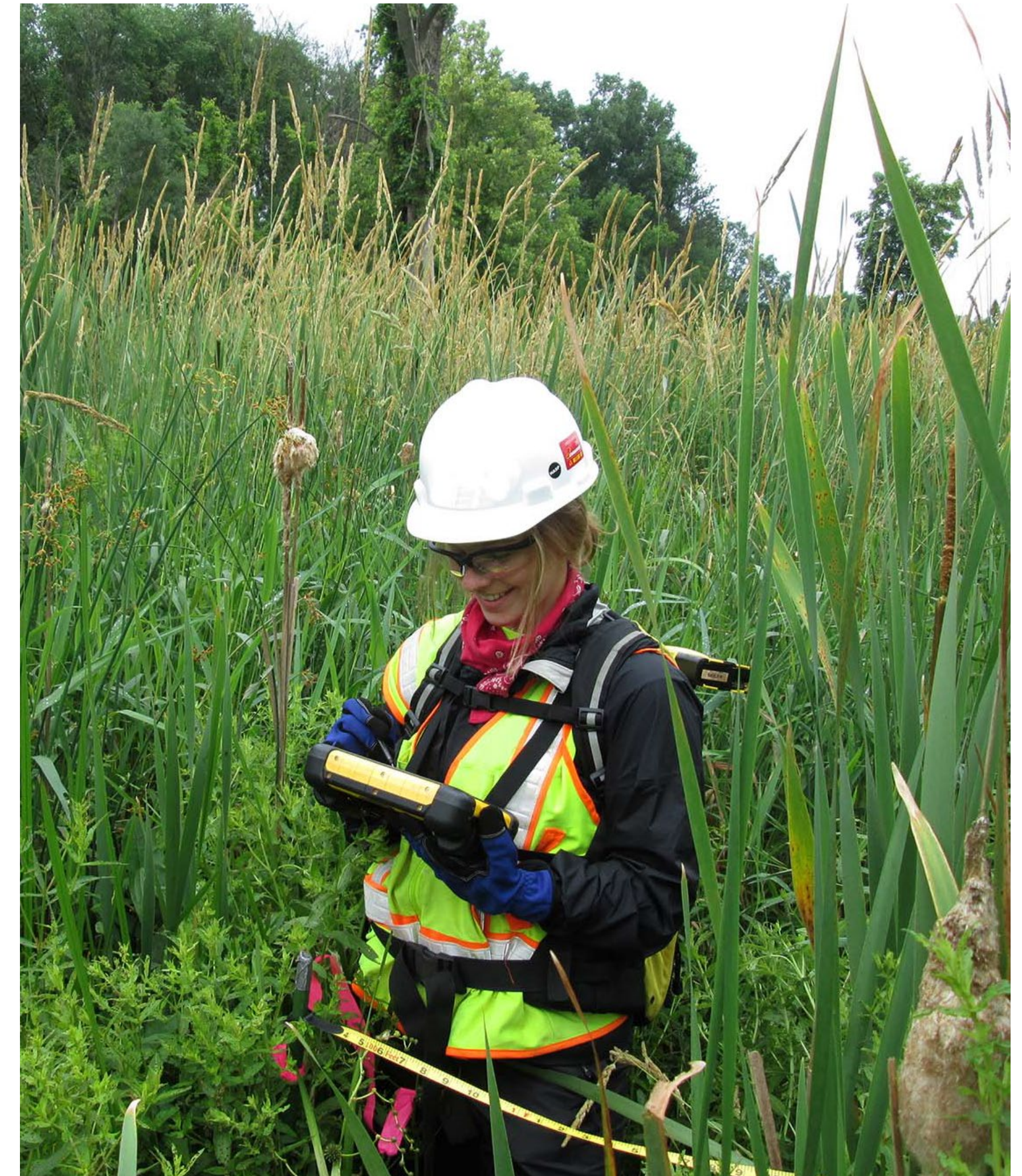
Commitment to Resource Protection

We have avoided or minimized impacts to resources through siting and design. Through detailed mitigation measures, plans, and monitoring, we will further avoid, minimize, and rectify remaining impacts.

The Project has already **committed to 130+** conditions of approval, mitigation measures, and applicant-proposed measures.

These measures will be captured and implemented through various **Resource Management Plans** which detail procedures for resource identification and avoidance, monitoring, adaptive management, and reporting to local, state and federal agencies.

Additional measures and plans may be prescribed during the CEC's review process.

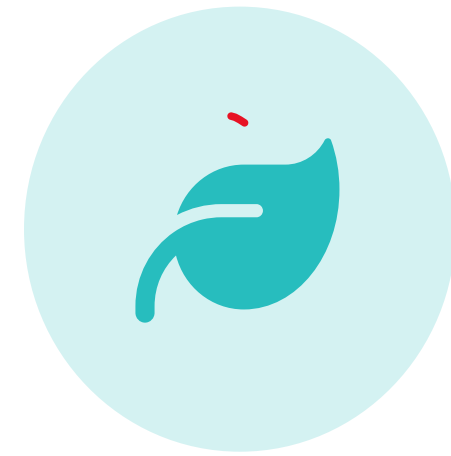


Commitment to Resource Protection



FIRE SAFETY

- Fire Prevention Plan
- Emergency Response Plan
- Construction stoppages during higher-risk conditions
- New helicopter dip tanks
- Shaded fuel breaks throughout the site



PLANTS AND HABITAT

- Construction area buffers, work timing, and "micro-siting" (e.g., avoidance)
- Construction worker environmental awareness training
- Re-vegetation and weeding to address invasive plant species during and after construction



WILDLIFE

- Adaptive management strategies, including for bird and bat species
- Pre-construction surveys and/or seasonal construction windows
- Bird and Bat Conservation Strategy
- Post-construction monitoring and reporting for the life of the project



WATER

- Siting and design to avoid impacts to water resources
- Buffers from water resources (e.g., 100 ft from vehicle and equipment servicing)
- Construction and reclamation monitoring
- Wetland reclamation and mitigation as applicable



Commitment to Resource Protection



AIR QUALITY AND GHGs

- Fugitive dust controls
- Minimization of vehicle speeds on project roads
- Idling and fuel restrictions during construction



ROADS AND ACCESS

- Upgrades and improvements to existing roads, including improved access for firefighting
- Traffic Management Plan
- Appropriate construction safety provisions (e.g., flagging, signage)
- Access to evacuation and emergency routes during construction and operations



FOREST RESOURCES

- Compatible operations with timber activities
- Community access to timberlands property
- Long-term maintenance of erosion control at existing and new roads
- Reforestation of all disturbed areas not within the final footprint
- Forest Practice Rule erosion control measures



CLOSURE

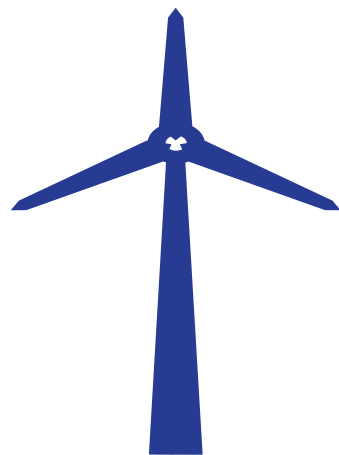
- Reclamation / decommissioning plan
- Restoration / revegetation plan
- Financial securities to ensure responsible decommissioning and restoration



Enhancement to Fire Protection



687 Acres of New Shaded Fuel Breaks



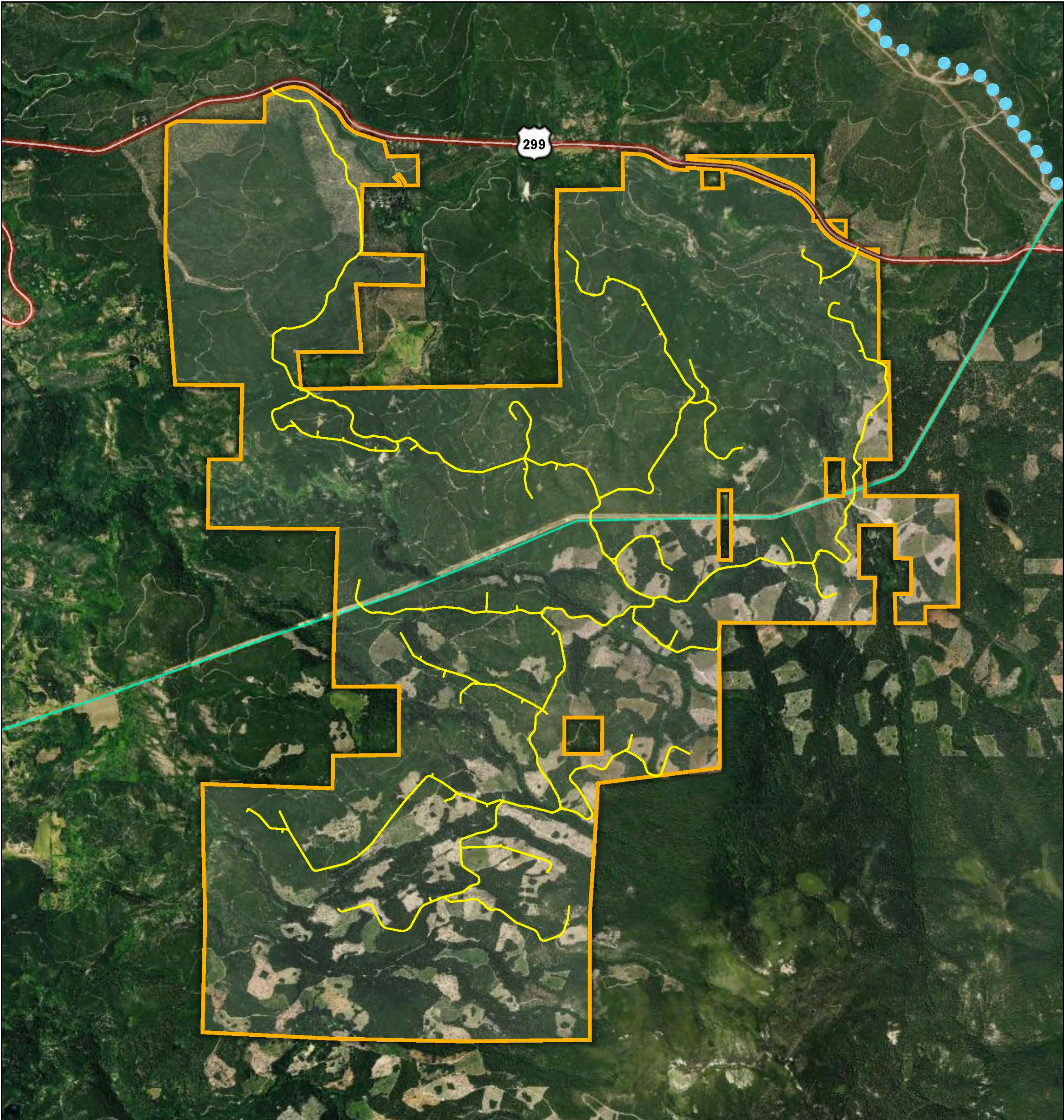
Enhanced Fire Detection & Suppression



38 miles of Enhanced Access Roads



New 5,000-Gallon Water Tanks



Understanding Fire Risk, Protection, & Prevention



Ruben Grijalva

Former Director of CAL FIRE
Former California State Fire Marshal
36 Years Firefighting Experience



Shane Lauderdale

Former Chief of Chico Fire-Rescue
38 Years Wildland Firefighting exp.
Operations Section Chief in response
to Camp, Thomas, & North Complex
wildfires



Darin Quigley

Former CAL FIRE Battalion Chief
20 Years CAL FIRE experience
42 Years Wildland Firefighting exp.
2014 CAL FIRE Firefighter of the Year
1992 Fountain Fire responder



John Messina

Former CAL FIRE Assistant Region Chief
33 Years CAL FIRE experience
15 Years Aerial Firefighting experience
2018 Camp Fire Incident Commander



New Jobs & Long-term Revenue Shasta County



200
UNION CONSTRUCTION JOBS



10
WELL-PAYING LONG-TERM JOBS



\$50 MILLION
IN PROPERTY TAX REVENUE



\$3.5 MILLION
IN SALES TAX REVENUE

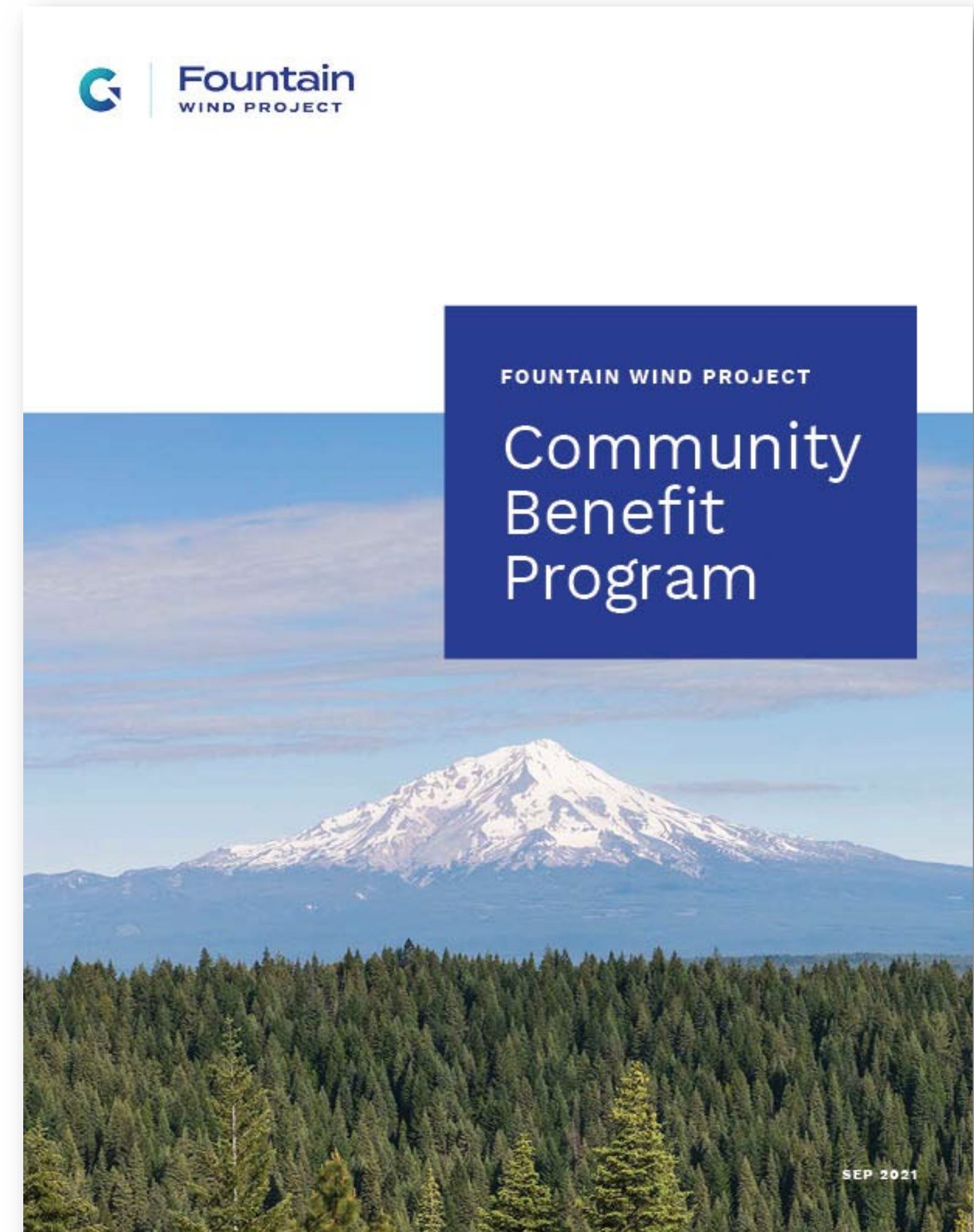


Significant Community Benefits Program






ConnectGen's core values include community engagement and community investment

Prior to the requirement outlined in AB 205, ConnectGen spent multiple years engaging with the community, learning about local issues, and crafting a program to address local needs

ConnectGen is proud to support the residents of Shasta County by committing to donate **\$2,800,000** to benefit the citizens of Round Mountain, Montgomery Creek, Burney, and all of Shasta County



Conclusion

-  Renewable Energy Required by SB100
-  Responsibly Sited
-  Improves Fire Safety
-  Significant Local Economic Benefits
-  Required for Public Convenience and Necessity

Taking all of the factors into consideration, Fountain Wind is required for public convenience and necessity and there are no other more prudent and feasible means of achieving the project objectives.

