GOLDENSTATENET

Project 1 | Siskiyou Overview Packet

January 31, 2022

This map identifies the initial 18 broadband project areas and the network solutions proposed by the Third Party Administrator (TPA), GoldenStateNet, which build upon the California Public Utilities Commission (CPUC) recommended routes. Highlighted in this packet are the solutions identified for the Siskiyou Project and other geospatially registered data sets which influenced them.

GOLDENSTATENET

PROPOSED TPA FIBER RINGS

PROJECTS 1-18

1 - SISKIYOU	10 - WEST FRESNO
2 - PLUMAS, TEHAMA	11 - INYO
3 - LAKE	12 - KERN
4 - COLUSA	13 - SAN LUIS OBISPO
5 - ALPINE	14 - SAN BERNARDINO
6 - AMADOR	15 - LOS ANGELES
7 - CALAVERAS	16 - ORANGE COUNTY
8 - OAKLAND	17 - COACHELLA VALLEY
9 - CENTRAL COAST	18 - RIVERSIDE, SAN DIEGO

LEGEND

- State Routes & Highways
- Tribal Nations
- Existing Open Access Fiber
- CENIC Open Access Network
- Internet Access & Exchange Nodes
- CPUC Fiber Builds
- TPA Fiber Solutions

Project 1 | Siskiyou Summary

Through an extensive solution proposal developed by GoldenStateNet, the Siskiyou area will see substantial fiber infrastructure upgrades and an expansion of its broadband network to underserved communities in the region through new middle-mile network routes. Notably, both the Yurok Tribe and Hoopa Valley Tribal Nations will have the opportunity to directly benefit from the new network infrastructure by working with last-mile providers to offer broadband services to homes and businesses in their communities. An additional three tribes in the region will have future opportunities to take advantage of these new network assets.

To enable these benefits, GoldenStateNet is proposing a robust,183-mile new construction fiber route between Montague and Eureka along Highways 3, 96, and 299, as well as a 16-mile spur from Etna to Callahan on Highway 3. This spur can be integrated into the larger statewide network as the middle- mile project proceeds in the future.

A critical component of this project's proposed solution is a 130-mile joint build[1] between Yreka and Orleans in partnership with a telecommunications provider in the region. A joint build means partners agree to invest in the construction and development of the middle-mile network for mutual benefit. Joint builds combine partner resources to save time and funds for both parties. This network project will pass through some adjacent Tribal Nations for the benefit and support of its residents and businesses.

By working through a partnership with a telecommunications provider in this region, this route will extend from the Eureka/McKinleyville area to Redding. This will reduce costs for the middle-mile project through shared construction work. Network routes following the 101 north and across Highway 36 can connect to an Internet Access Exchange in Eureka and create a large regional resilient network ring.

GoldenStateNet recommends that the remaining construction be managed by Caltrans. The project will be able to interconnect to an existing open-access fiber network in Montague for traffic routing south towards Sacramento and will dovetail to an existing project at Redding.

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[1] A joint build brings together two or more partners who agree to share in the investments to construct and develop the middle-mile network for mutual benefit. The approach also streamlines other processes needed for construction. Joint builds provide an effort to exercise the recommended 'Dig Once' State policy

Through various partnerships including Caltrans, this initial middle-mile project will be able to reduce current costs for last-mile network providers by bringing the network edge closer to them, thereby reducing backhaul costs. This ambitious project will finally address some acute long-term broadband inequities in a region of the state.

Project 1 | Siskiyou Highlights

Type of Solution:	New Construction Joint Fiber Build
Highways/Routes:	HWY 3, Sawyers Bar Rd, HWY 96
Start and End Points or Cities connected:	Montague, Yreka, Orleans, Willow Creek
Approx. Fiber Miles:	181
Quantity of Fibers:	24 on jointly-built segments, 288 on direct, newly-built segments.
Approximate Start Date:	2022
Tribal Nations Currently on the Project Path:	Yurok Tribe, Hoopa Valley Tribe
Tribal Nations with Future Opportunities:	Karuk Tribe, Resighini Rancheria, Quartz Valley Reservation
Regional Broadband Consortium:	Northeastern California Connect Consortium
Regional Transportation Planning Agency (RTPA) & Metropolitan Planning Organizations (MPO):	Humboldt County Association of Governments, Siskiyou County Transportation Commission (CTC), Trinity CTC

GoldenStateNet Maps

The appended maps share detailed visualizations of the GoldenStateNet (TPA) recommended middle- milenetwork solutions. The maps illustrate the complex geographical, topological, technological, and socioeconomic landscape of California.
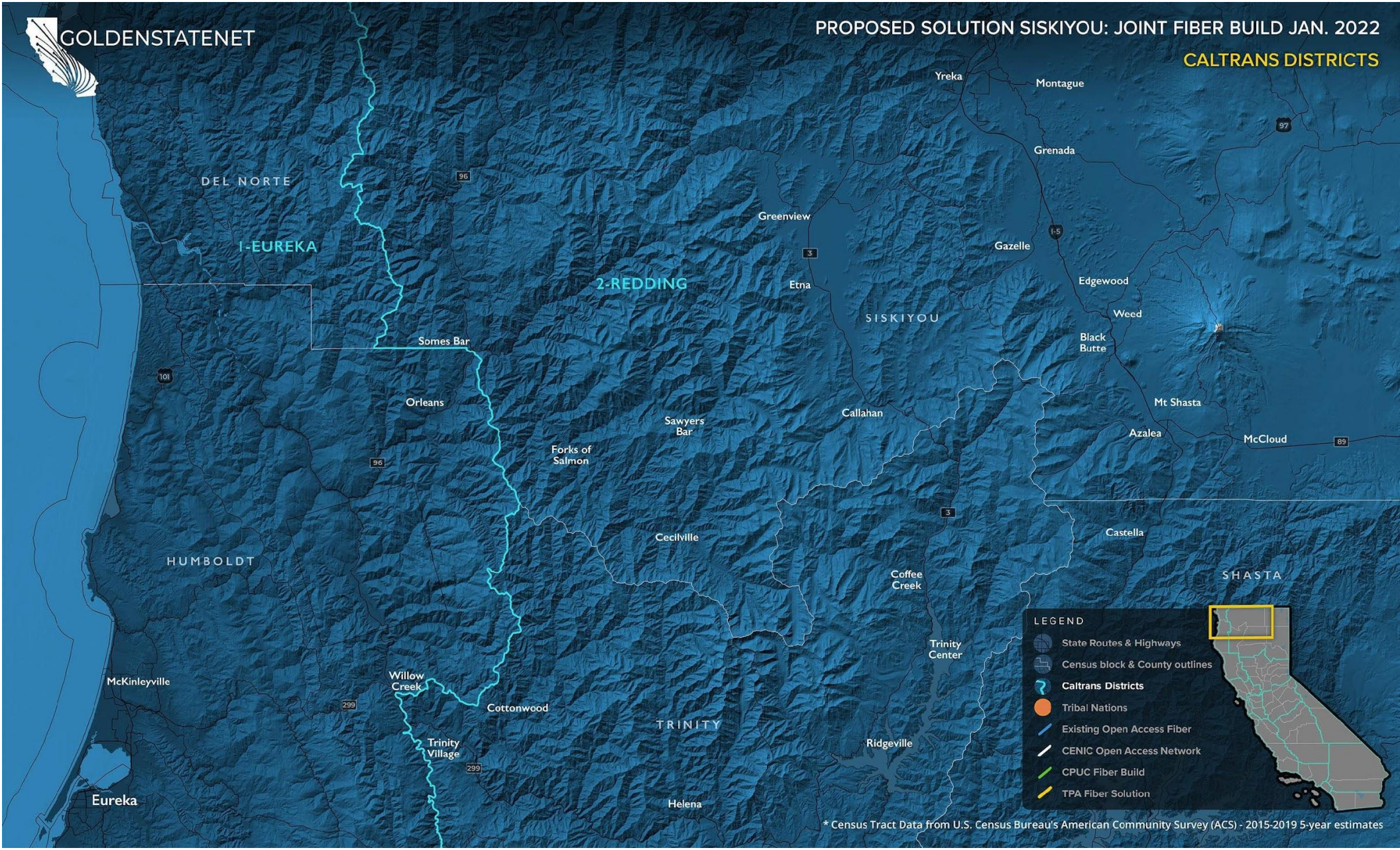
In combination with available network assets and regional partnerships, the map data has helped to directly inform GoldenStateNet's well-considered proposals.

PROPOSED SOLUTION SISKIYOU: JOINT FIBER BUILD JAN. 2022

CALTRANS DISTRICTS

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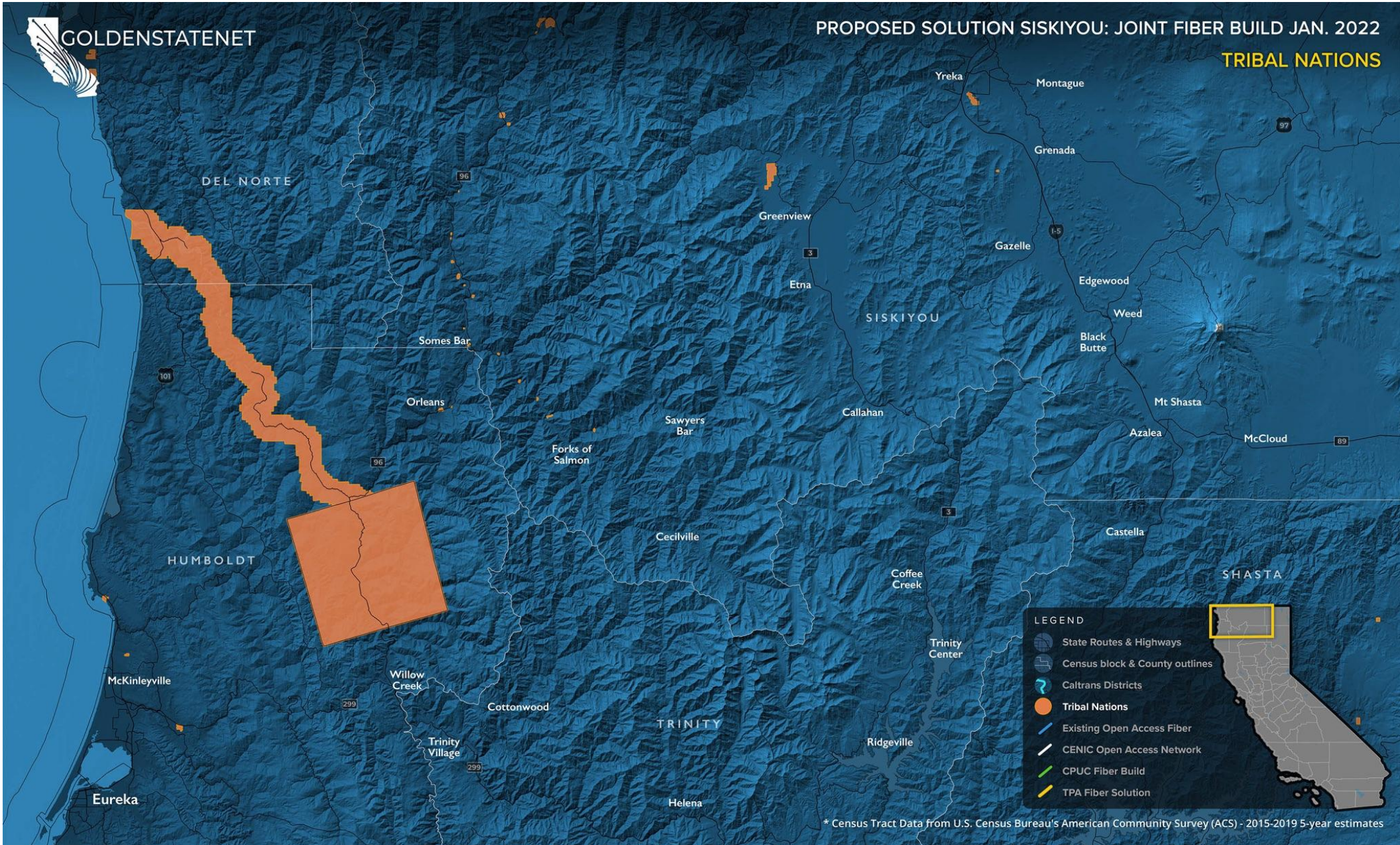
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TRIBAL NATIONS

LEGEND

- State Routes & Highways
- Census block & County outlines
- Caltrans Districts
- **Tribal Nations**
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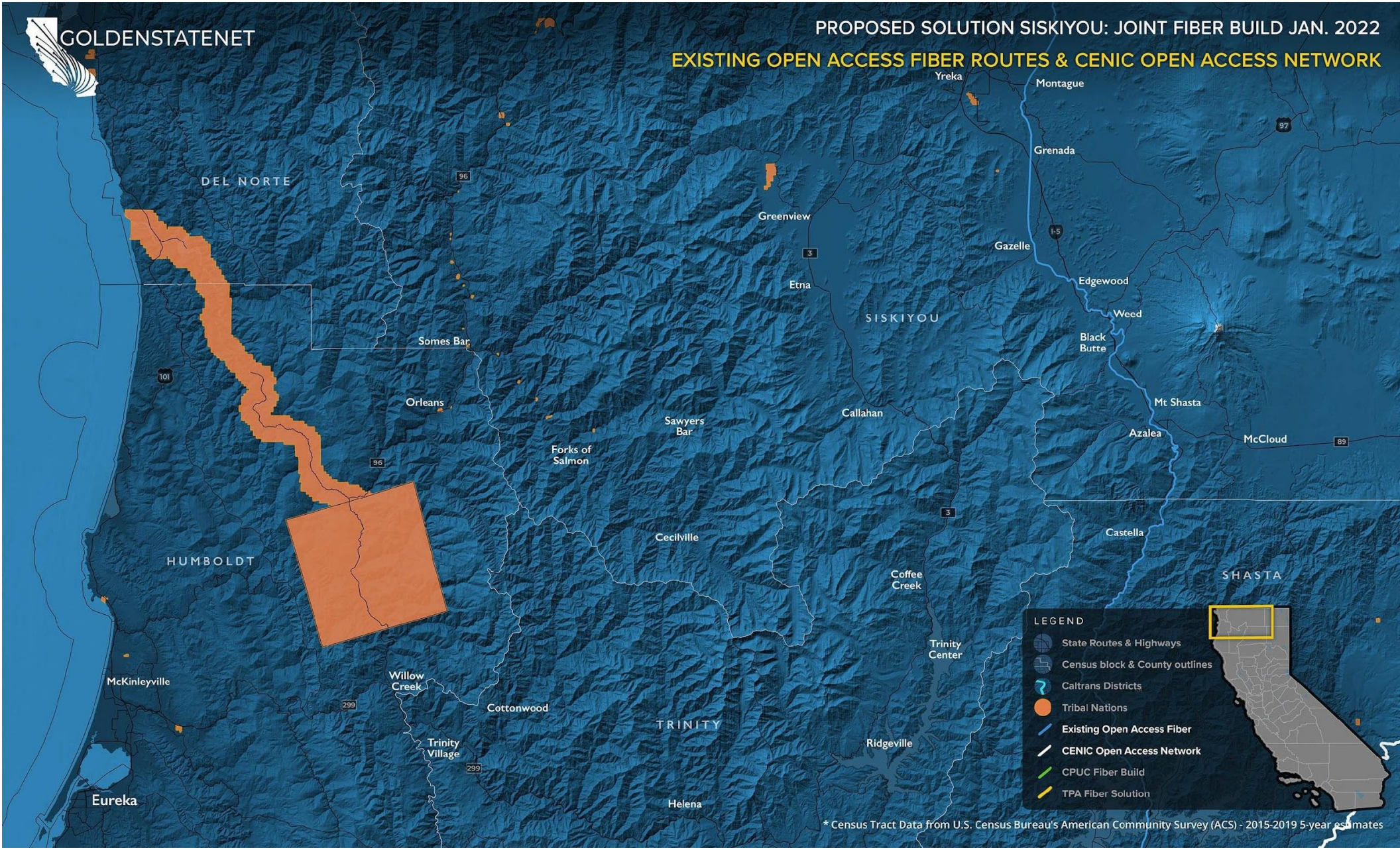* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates
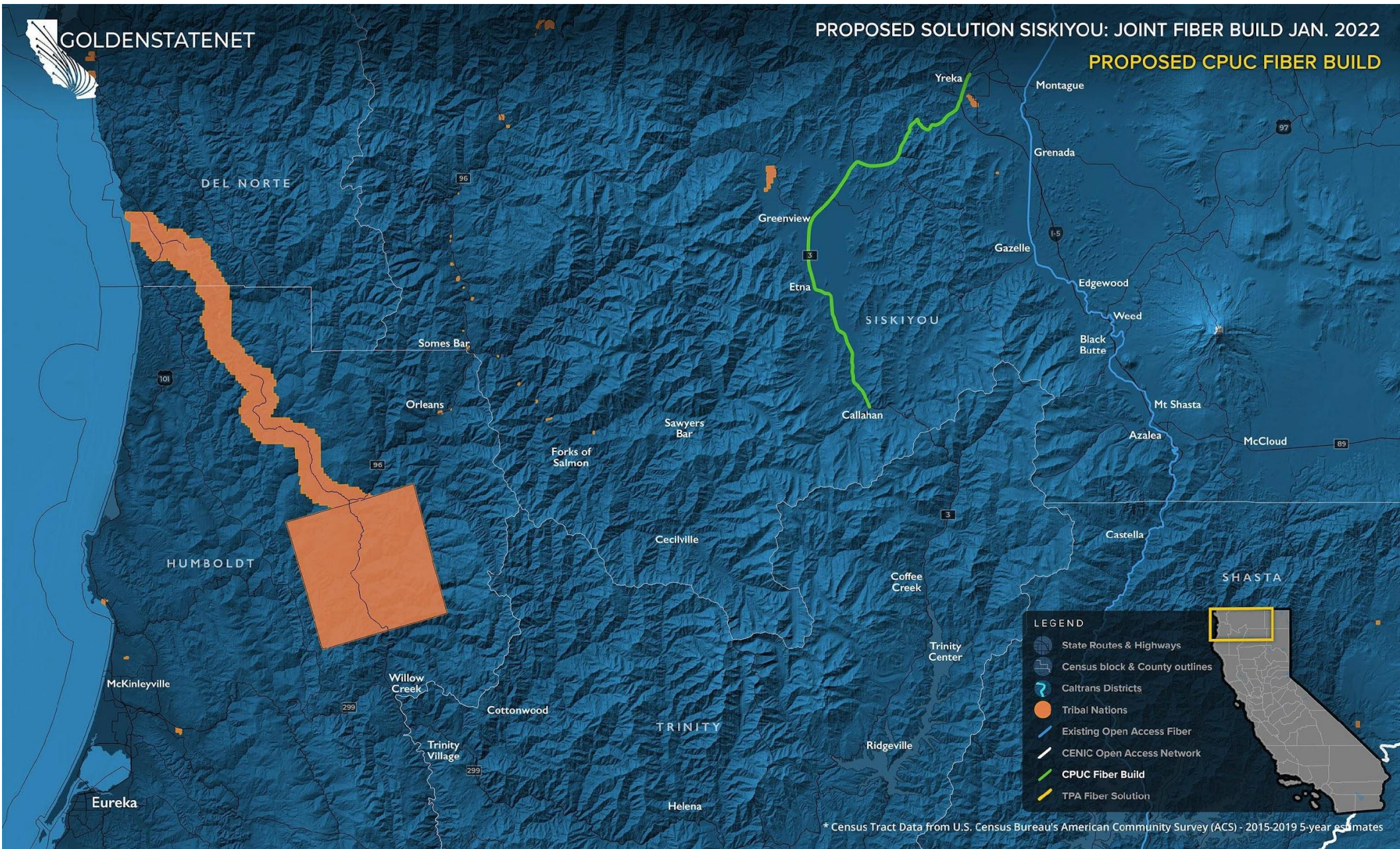
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PROPOSED SOLUTION SISKIYOU: JOINT FIBER BUILD JAN. 2022

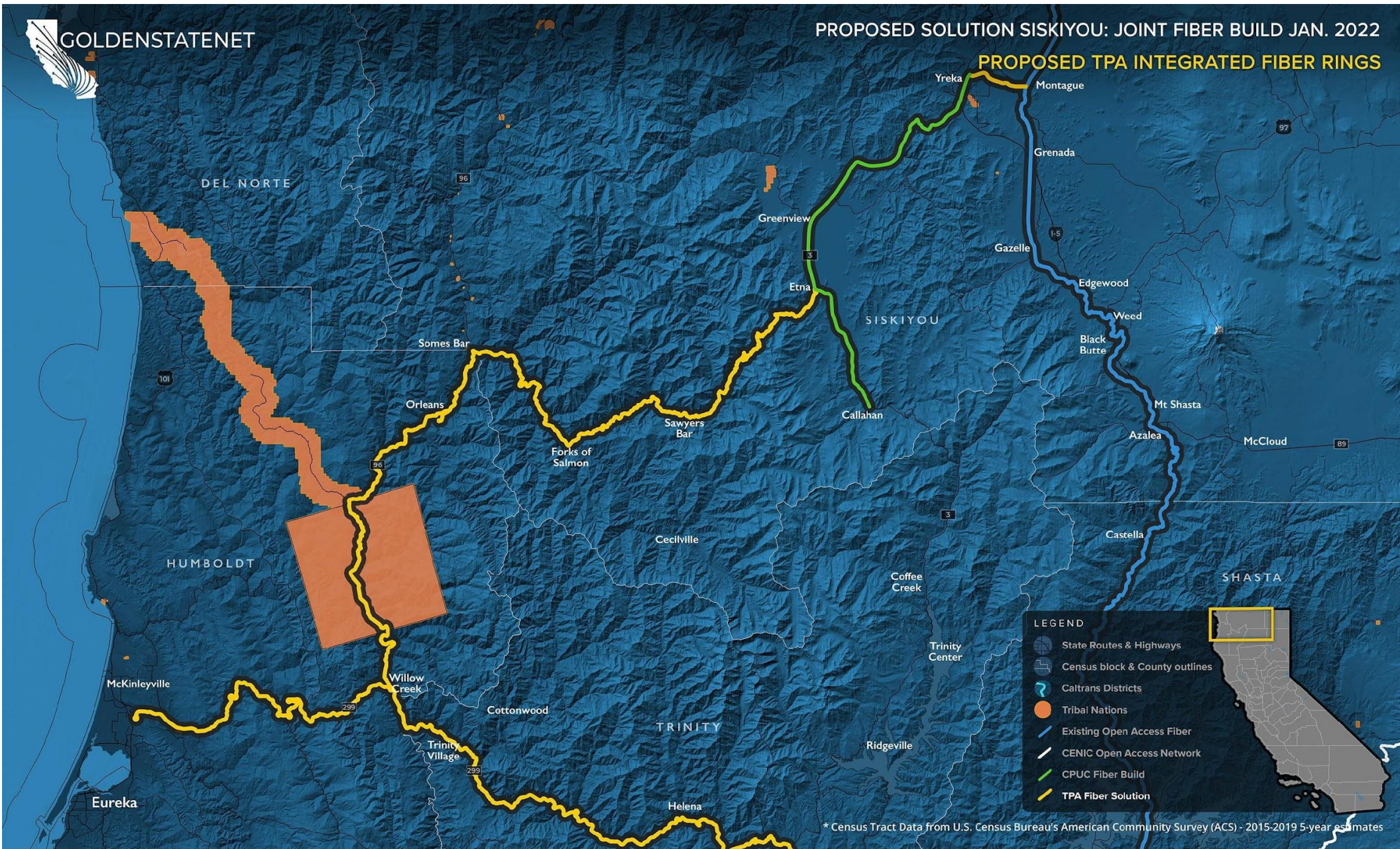EXISTING OPEN ACCESS FIBER ROUTES & CENIC OPEN ACCESS NETWORK

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LEGEND

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* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates

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PROPOSED SOLUTION SISKIYOU: JOINT FIBER BUILD JAN. 2022

PROPOSED CPUC FIBER BUILD

LEGEND

State Routes & Highways
Census block & County outlines
Caltrans Districts
Tribal Nations
Existing Open Access Fiber
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CPUC Fiber Build
TPA Fiber Solution

* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates

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PROPOSED SOLUTION SISKIYOU: JOINT FIBER BUILD JAN. 2022

PROPOSED TPA INTEGRATED FIBER RINGS

LEGEND
- State Routes & Highways
- Census block & County outlines
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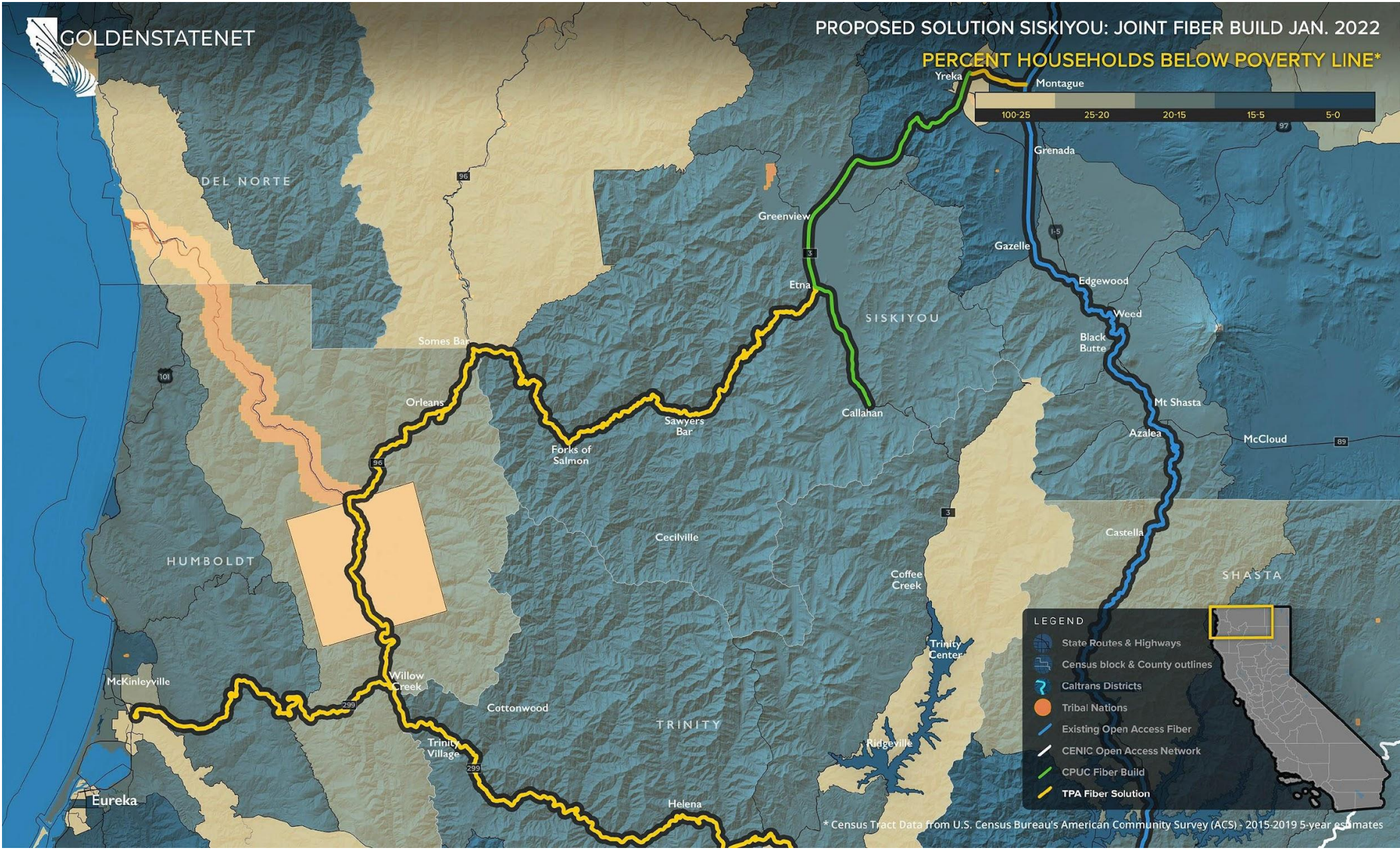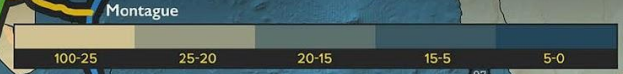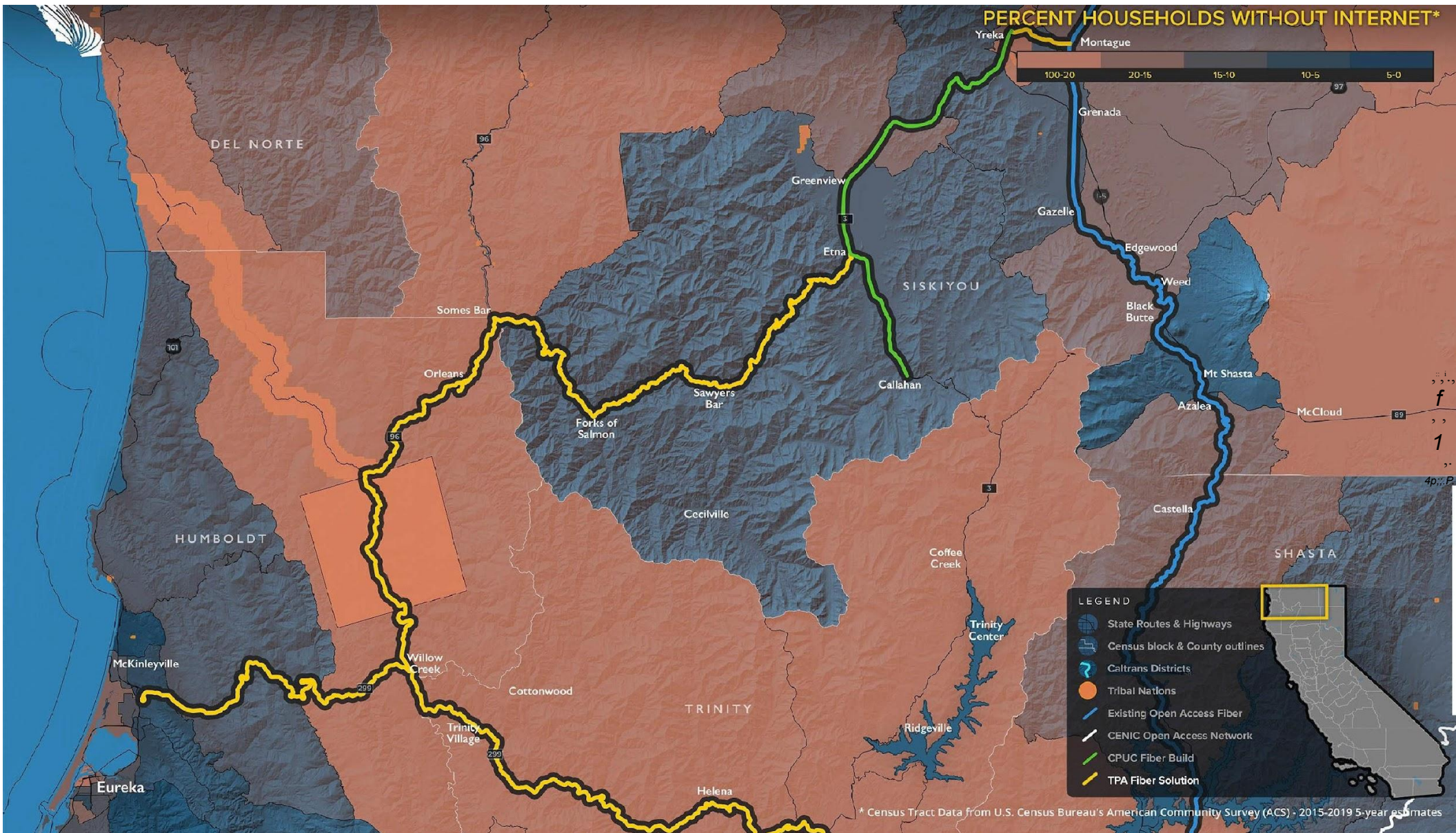* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates

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PERCENT HOUSEHOLDS WITHOUT INTERNET*

| 100-20 | 20-15 | 15-10 | 10-5 | 5-0 |

LEGEND
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PROPOSED SOLUTION SISKIYOU: JOINT FIBER BUILD JAN. 2022

IDENTIFIED AREAS WITH WIRELINE RESIDENTIAL SPEEDS BELOW 25/3 MBPS (CPUC)
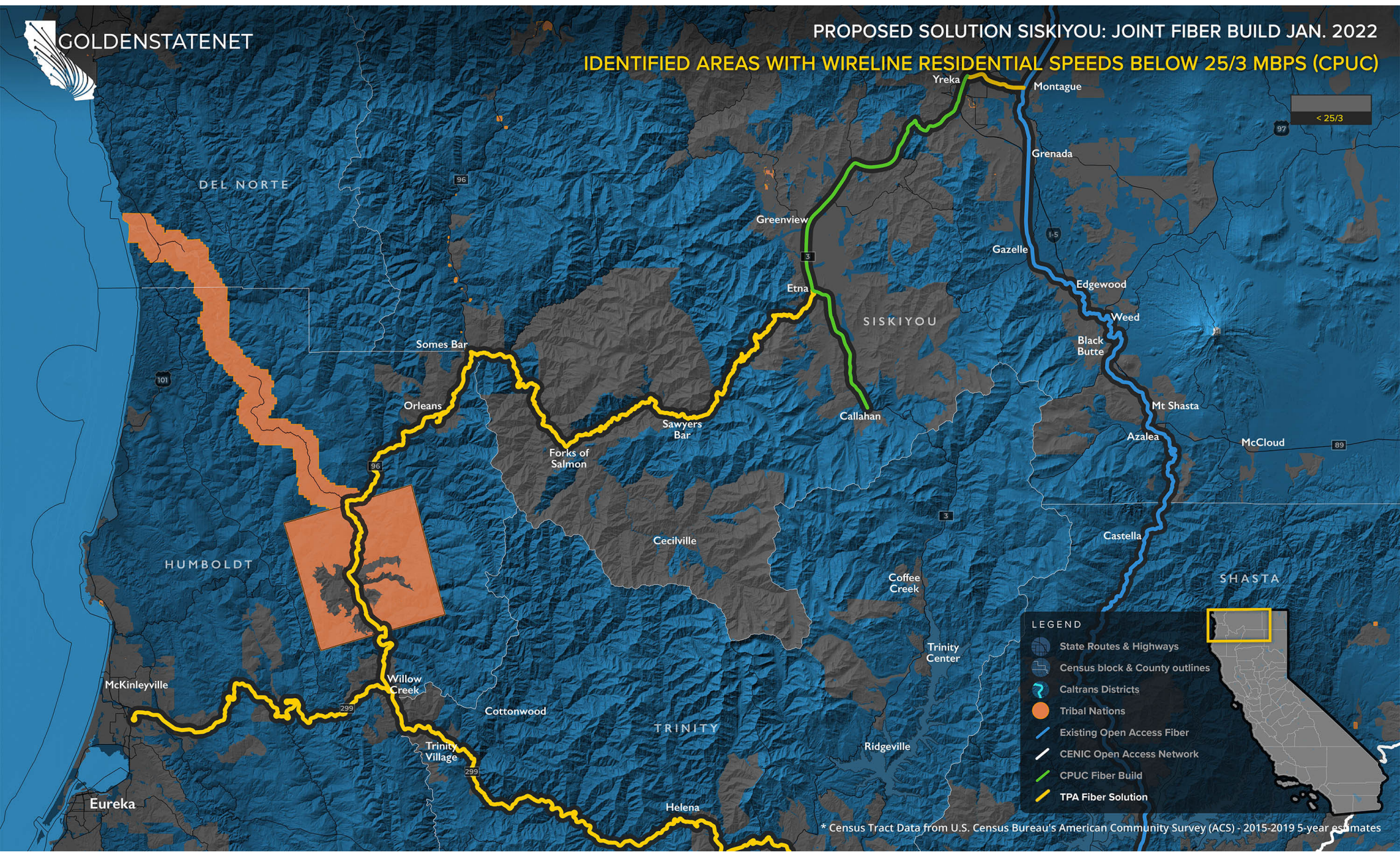
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< 25/3

LEGEND

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* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates

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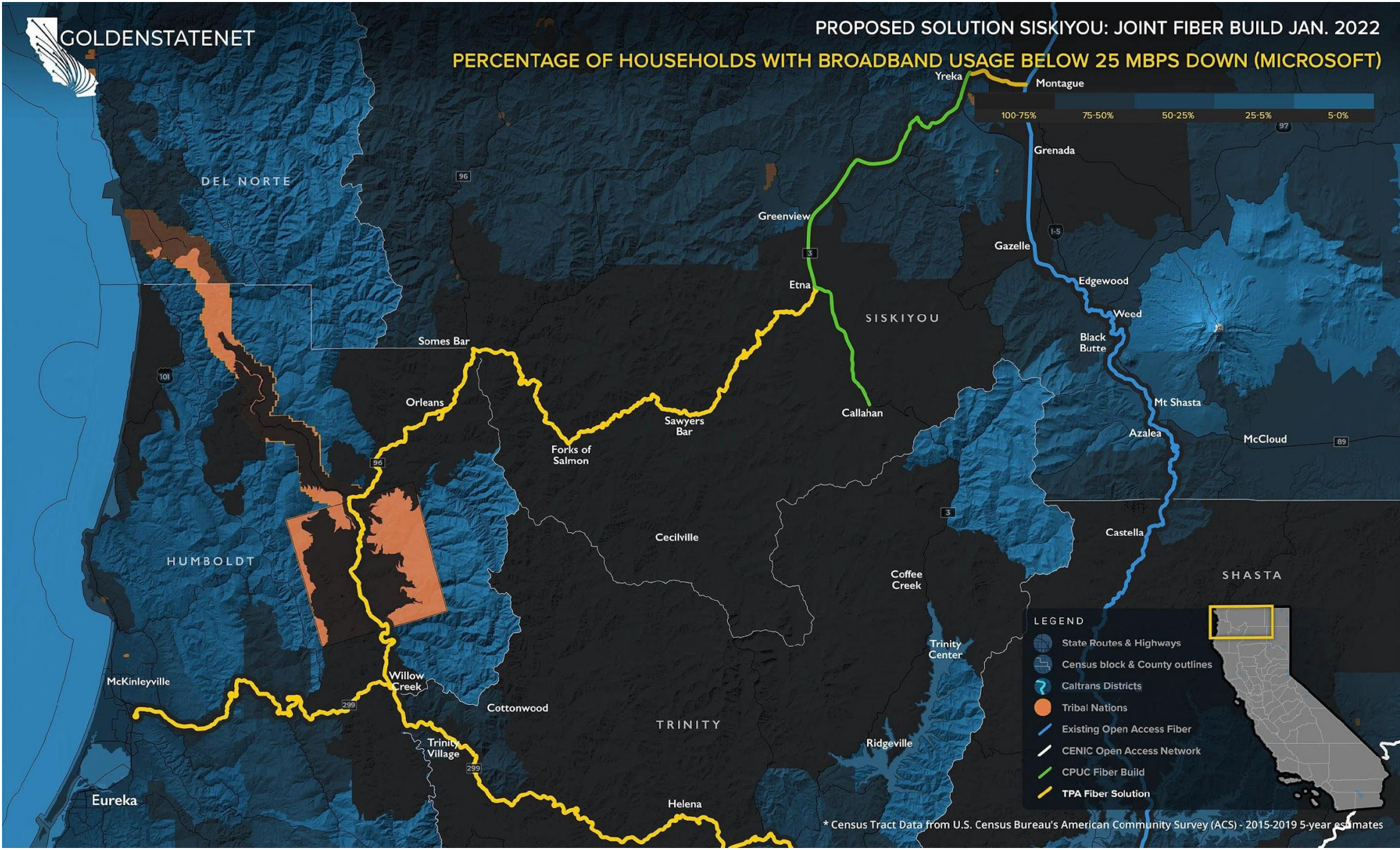GOLDENSTATENET

PROPOSED SOLUTION SISKIYOU: JOINT FIBER BUILD JAN. 2022

PERCENTAGE OF HOUSEHOLDS WITH BROADBAND USAGE BELOW 25 MBPS DOWN (MICROSOFT)

| 100-75% | 75-50% | 50-25% | 25-5% | 5-0% |

LEGEND

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- **TPA** Fiber Solution

* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates

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Data Sources*

- American Community Survey - Internet Connectivity
- American Community Survey - Poverty Status
- California 2020 Legislative District Boundaries
- California Broadband Availability Maps and GIS Data
  - 20 Layers used from combined database
- California Census Blocks
- California Census Tracts
- California Counties
- California Fire Hazard Severity Zones
- California National Highway System
- California Major Lakes and Reservoirs
- California Parks Land
- California State Highway Network (SHN)
- California Tribal Lands
- CalTrans Juridictions
- CENIC Digital Fiber Segments
- CPUC Fixed Served Status
- Existing Open Access Networks - Under NDA
- FCC Fixed Consumer Deployment
- Microsoft Broadband Usage Percentages Dataset
- Ookla Test Data Results by Census Tract
- Technology Use Demographics (e.g. Internet use in home) by Census Tract

*All data was published between 2019 - 2021 and represents the most current data available. Not all layers are represented on the maps above. However, the data was utilized as a part of the development process.

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