

**Verizon/Sequoia Deployment Communication  
Tower Appeal**

**PLN23-0179; CUP23-0015; EIS23-0010**

**20896 Dog Bar Road, Grass Valley CA, 95949**

Nevada County Board of Supervisors:  
August 20, 2024  
Project Planner: David Nicholas



# Background

June 12, 2024: Zoning Administrator approved Use Permit for new unmanned wireless communication facility located at 20896 Dog Bar Road, Grass Valley,

June 24, 2024: Appellants filed appeal.

On July 9, 2024 the Board of Supervisors considered oral and written evidence regarding the appeal at a public hearing. The meeting was continued so more information can be provided by the applicant about aesthetics and whether there is a need for the cell tower.







# Analysis of Corrected Plans

- The monopine tower is closer to the southern property line, but it is still setback 100% of its height which is in alignment with the County Communication tower code.
- The communication facility is outside of the required 30-foot setbacks of the AG zoning district.
- The generator was previously 187 feet from the nearest property line, but now it is shown as 141.5 feet from the nearest property line. This results in an increase in dB(A) of 3.4 (43.8 to 47.2).
- The biological analysis is not impacted by the change.
- Exposure levels for Verizon's site are calculated to be below the FCC's most stringent General Population Maximum Permissible Exposure Limits at property lines and areas accessible by the general population.

# Additional Coverage Maps

Verizon Wireless provided additional coverage maps which were discussed in the staff report and will be discussed in their presentation.

Figure 5: Low-Band Coverage of Proposed Facility Only  
(without Existing Facilities)  
120-foot Antenna Centerline

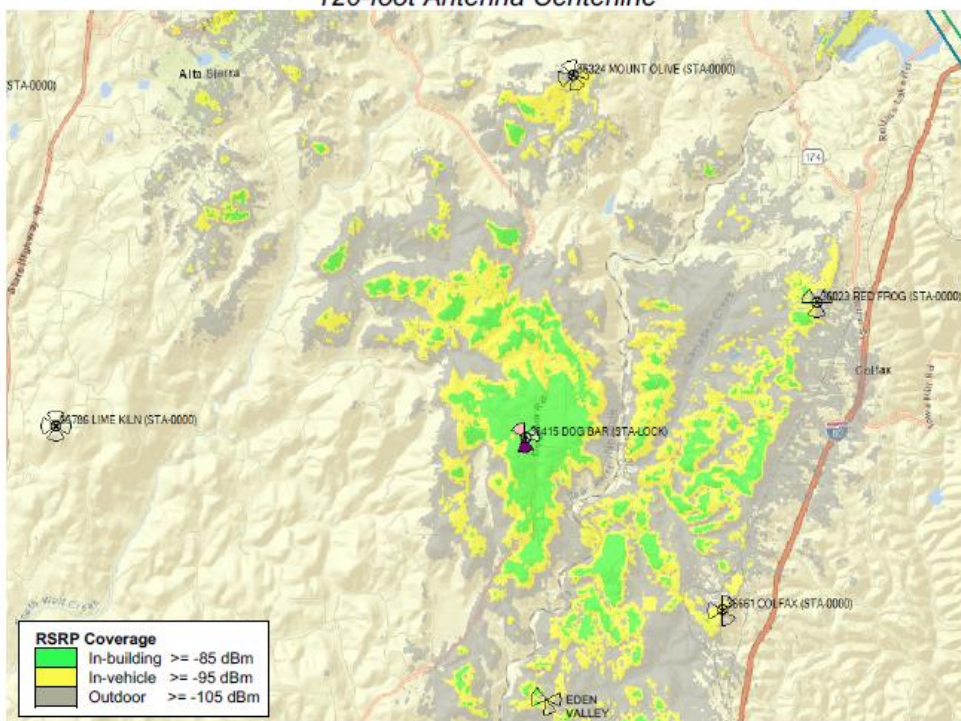
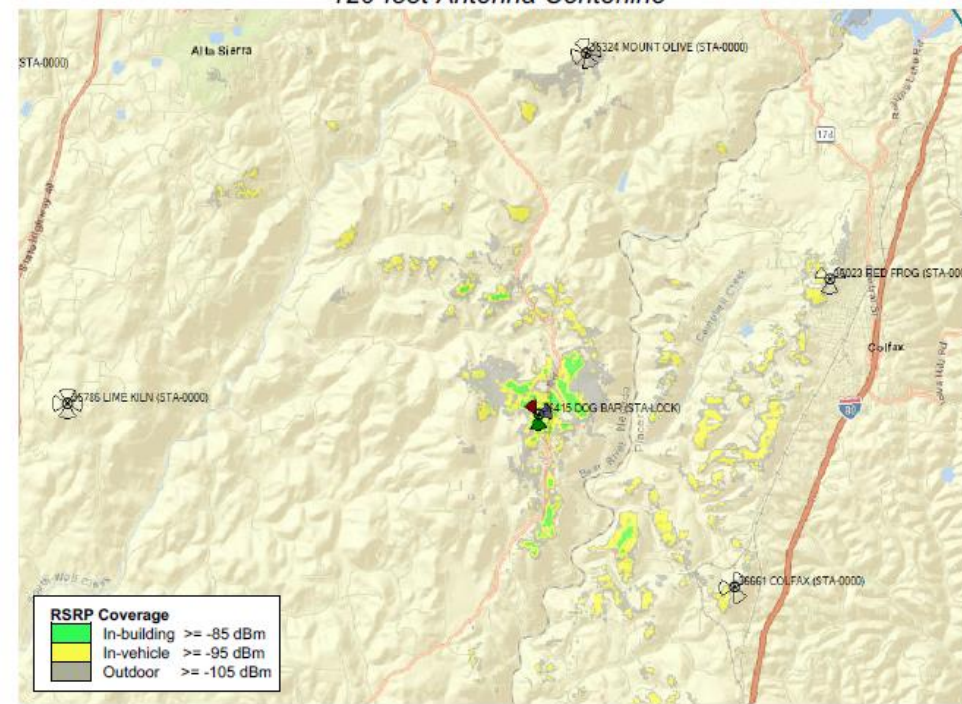


Figure 8: Mid-Band Coverage of Proposed Facility Only  
(without Existing Facilities)  
120-foot Antenna Centerline

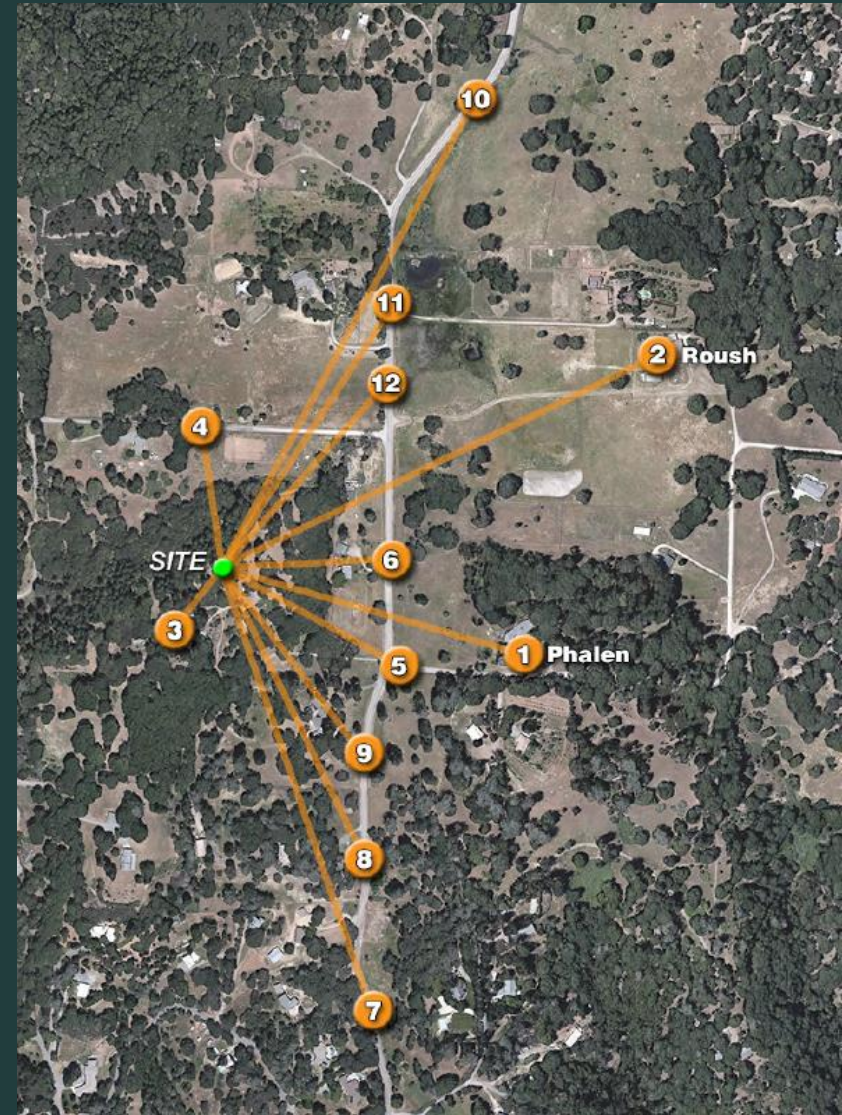




# Additional Photo Simulations

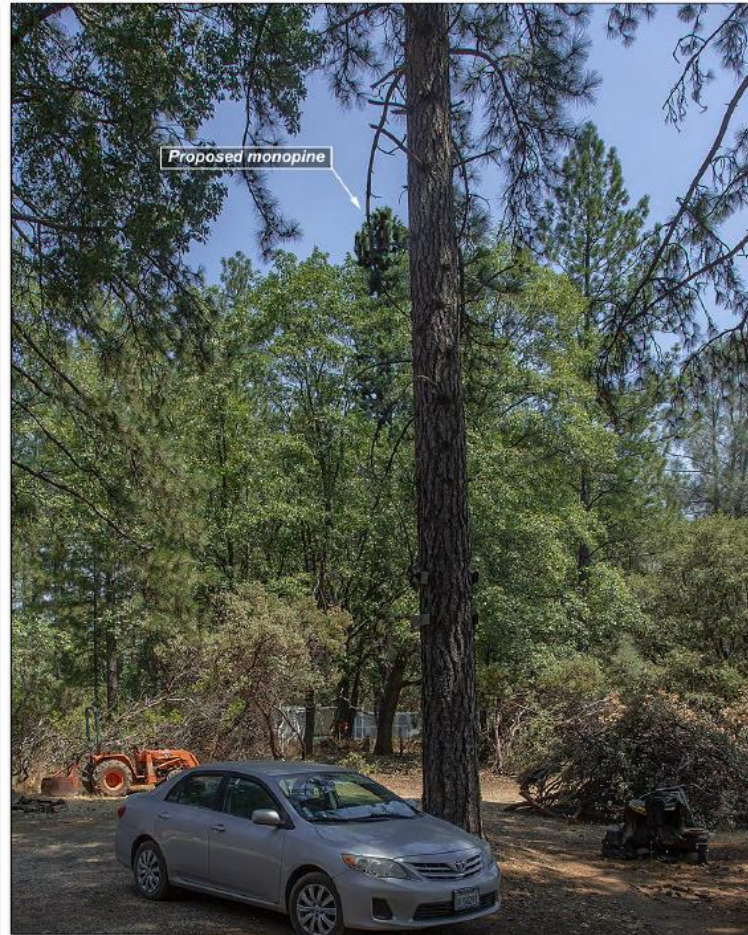
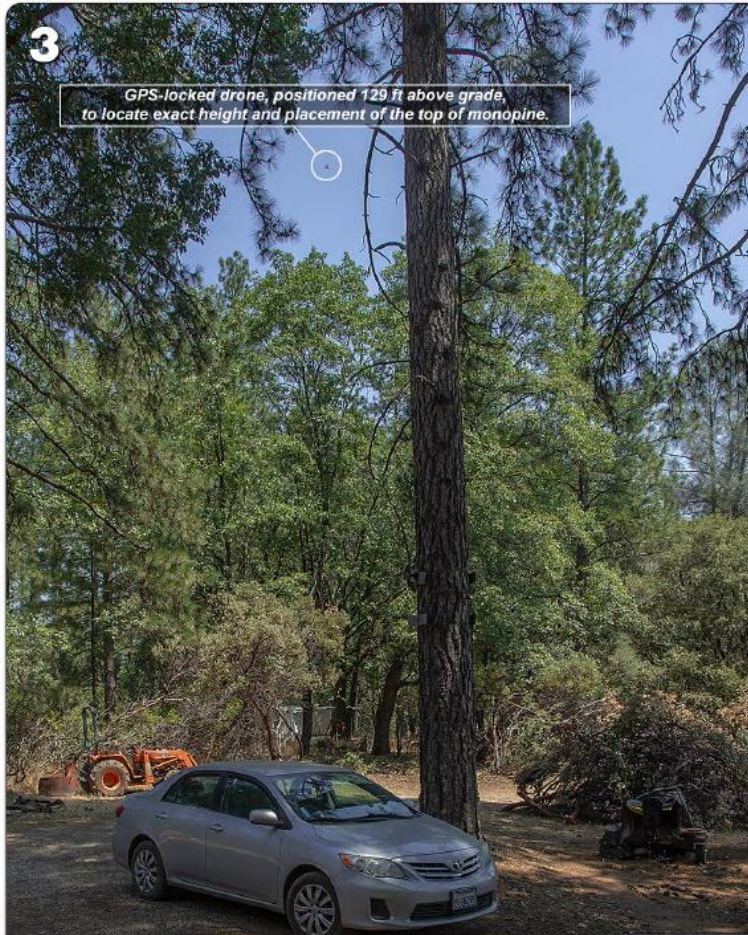
Verizon Wireless/Sequoia Deployment provided 12 additional photo simulations showing the view of the proposed monopine from neighboring private properties.

This will be discussed in further detail in the applicant's presentation.





Photosimulation of the view looking northeast from the nearest neighbor to the site, camera viewpoint is 250 ft from the proposed monopine.



**Existing**

**Dog Bar**  
20896 Dog Bar Rd  
Grass Valley, CA 95949

**verizon** Fuze ID 16989172

**Proposed**

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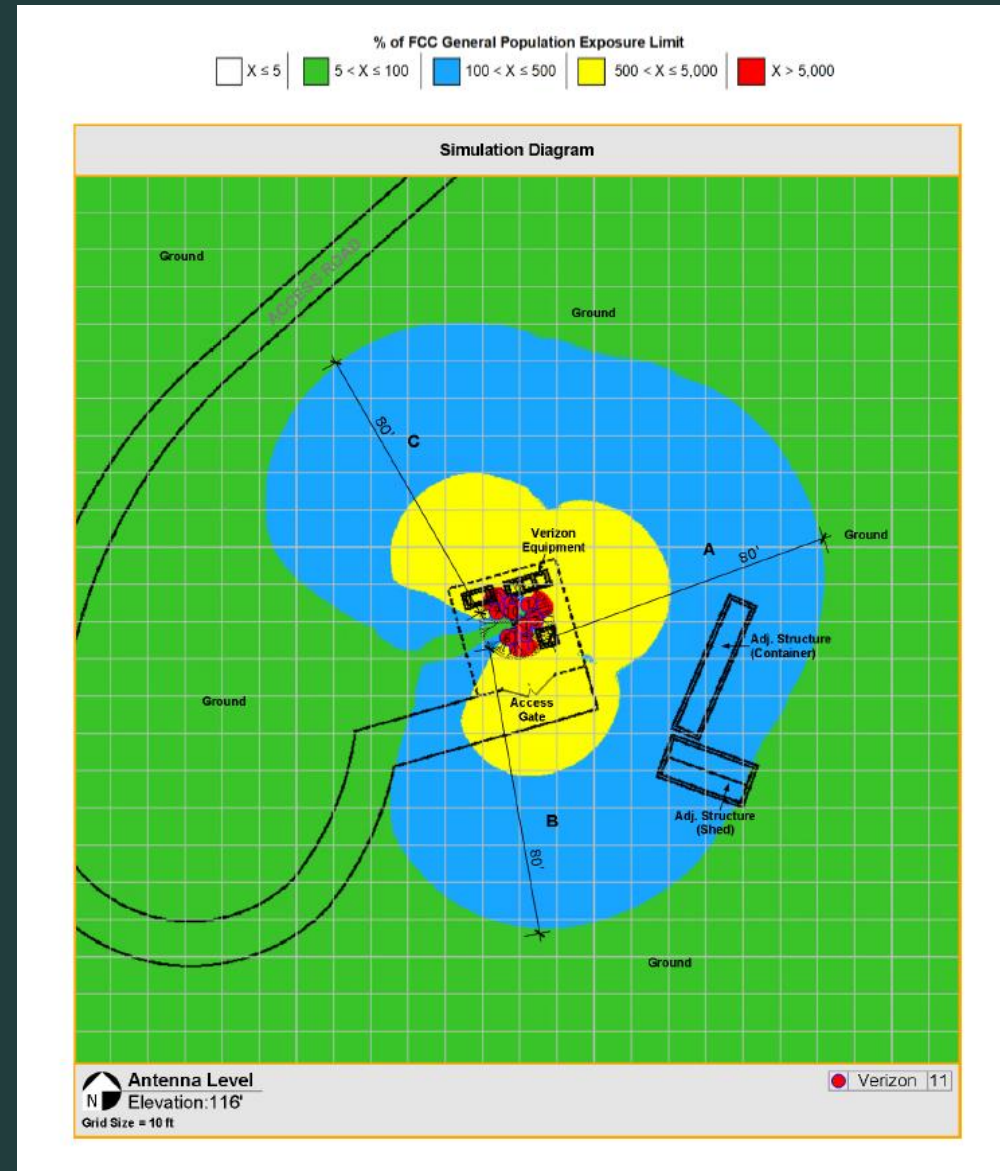
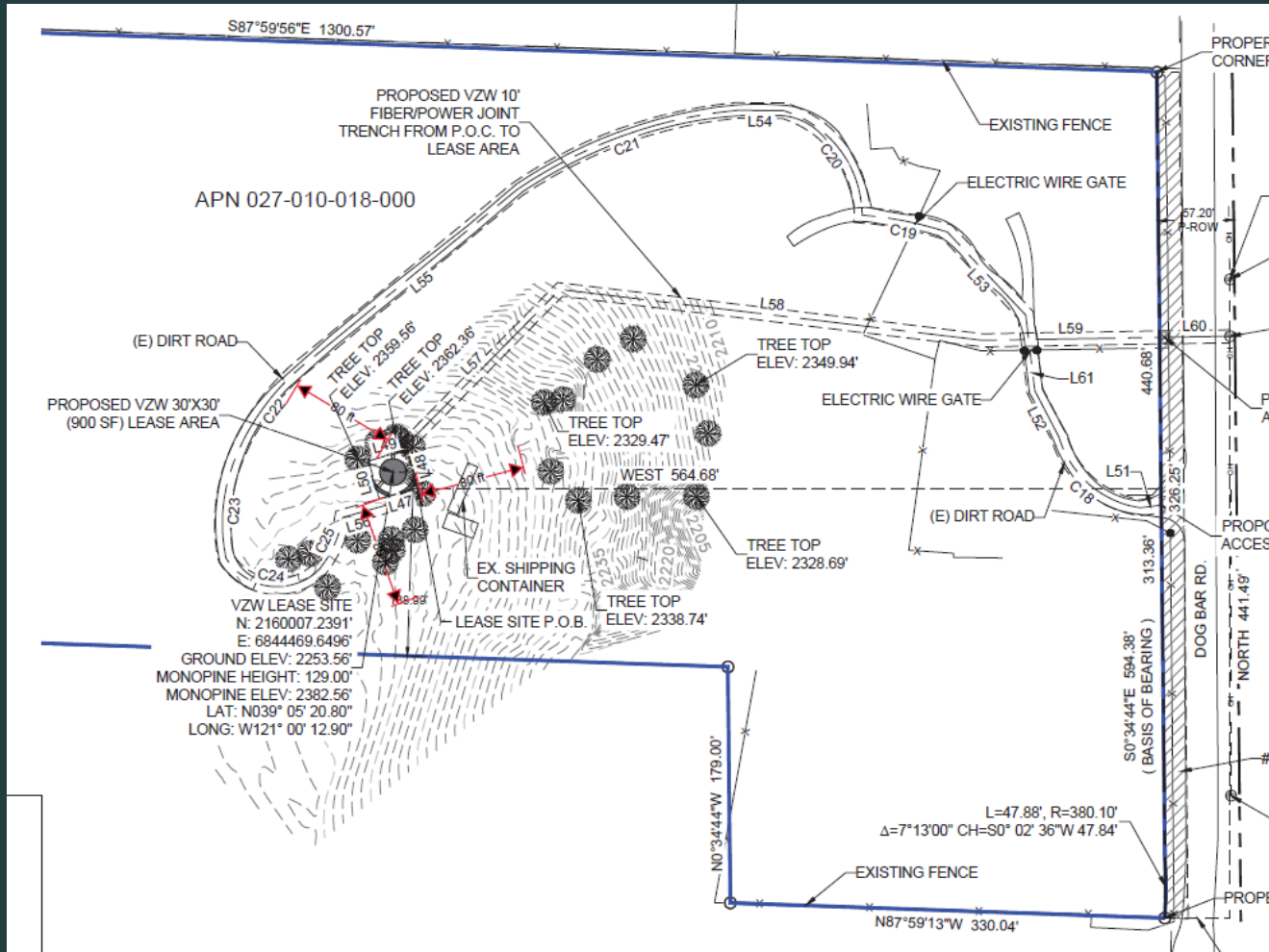
# Recommendations

- I. Adopt the attached Resolution to deny the appeal and to uphold the decision of the Zoning Administrator to adopt the proposed Mitigated Negative Declaration (EIS23-0010) and approve Conditional Use Permit application (CUP23-0015) proposing the construction and operation of a new 129-foot tall monopine wireless communication tower within a 900 square foot fenced lease area located at 20896 Dog Bar Road, Grass Valley, in southeast Nevada County.

# Extra Slides



# Impacts from Adjustment





# Low-Band Coverage: Before/After

Figure 3: Existing Low-Band Coverage

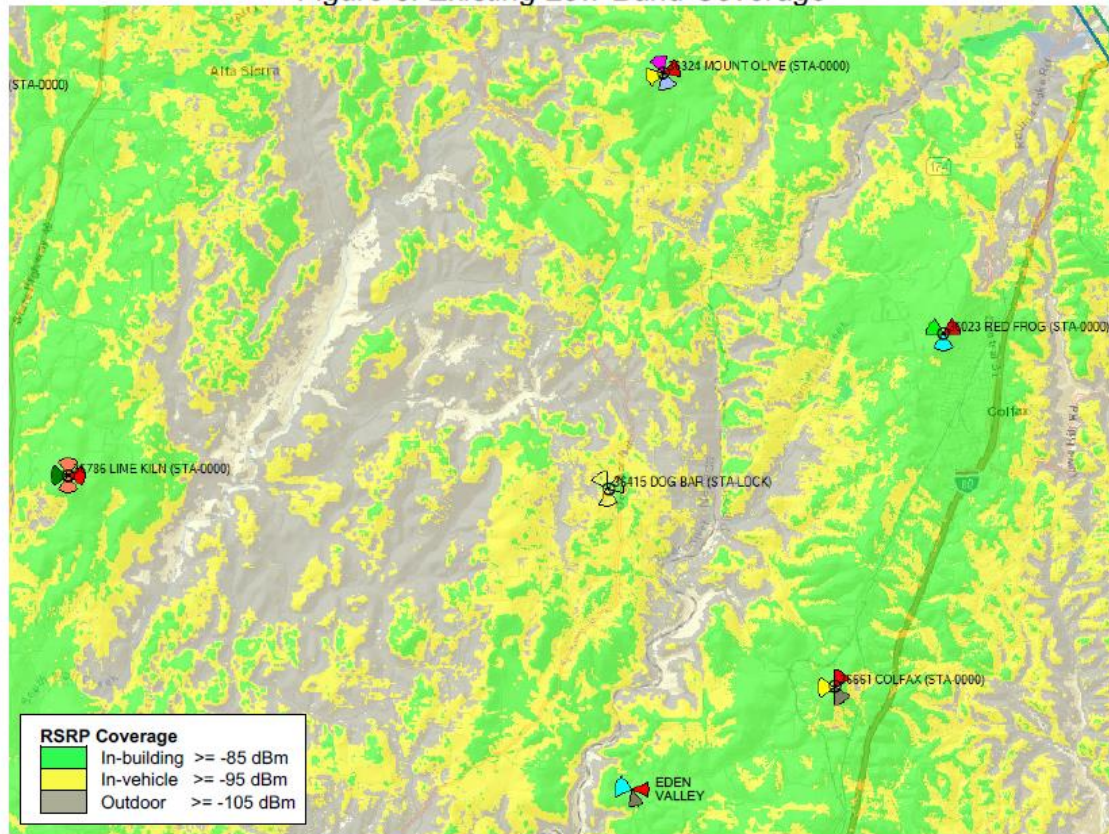
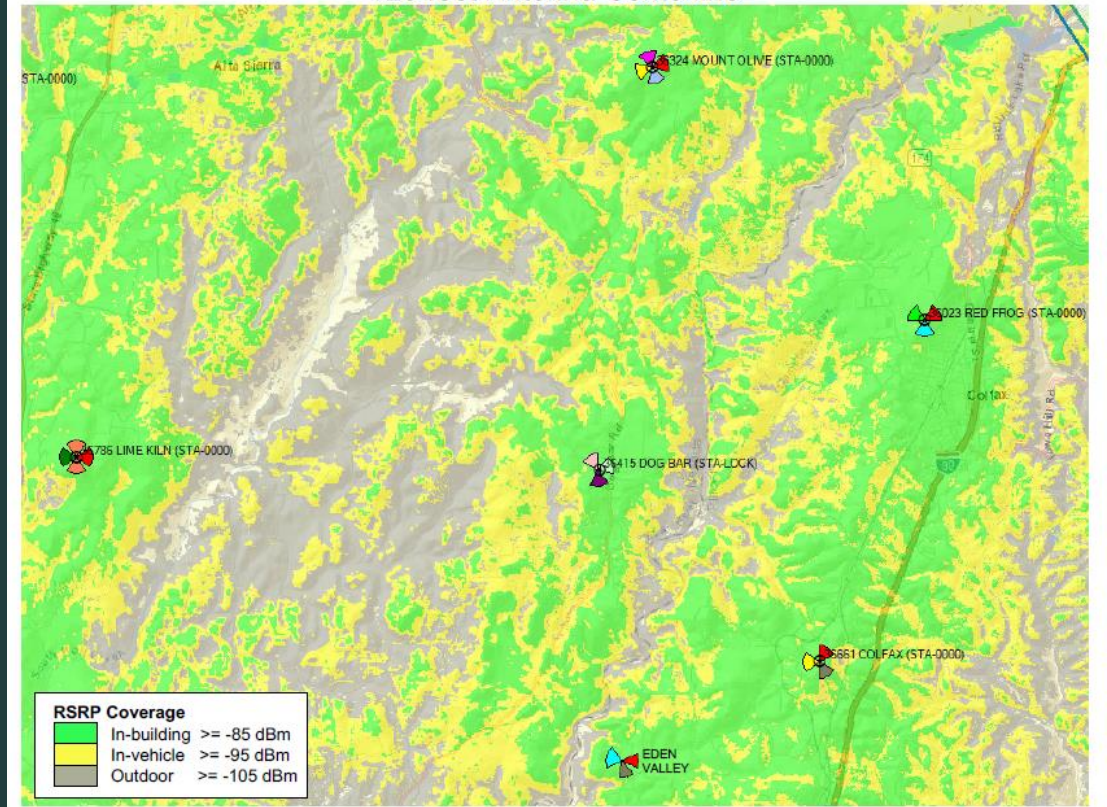


Figure 4: Low-Band Coverage with Proposed Facility 120-foot Antenna Centerline





# Mid-Band Coverage: Before/After

Figure 6: Existing Mid-Band Coverage

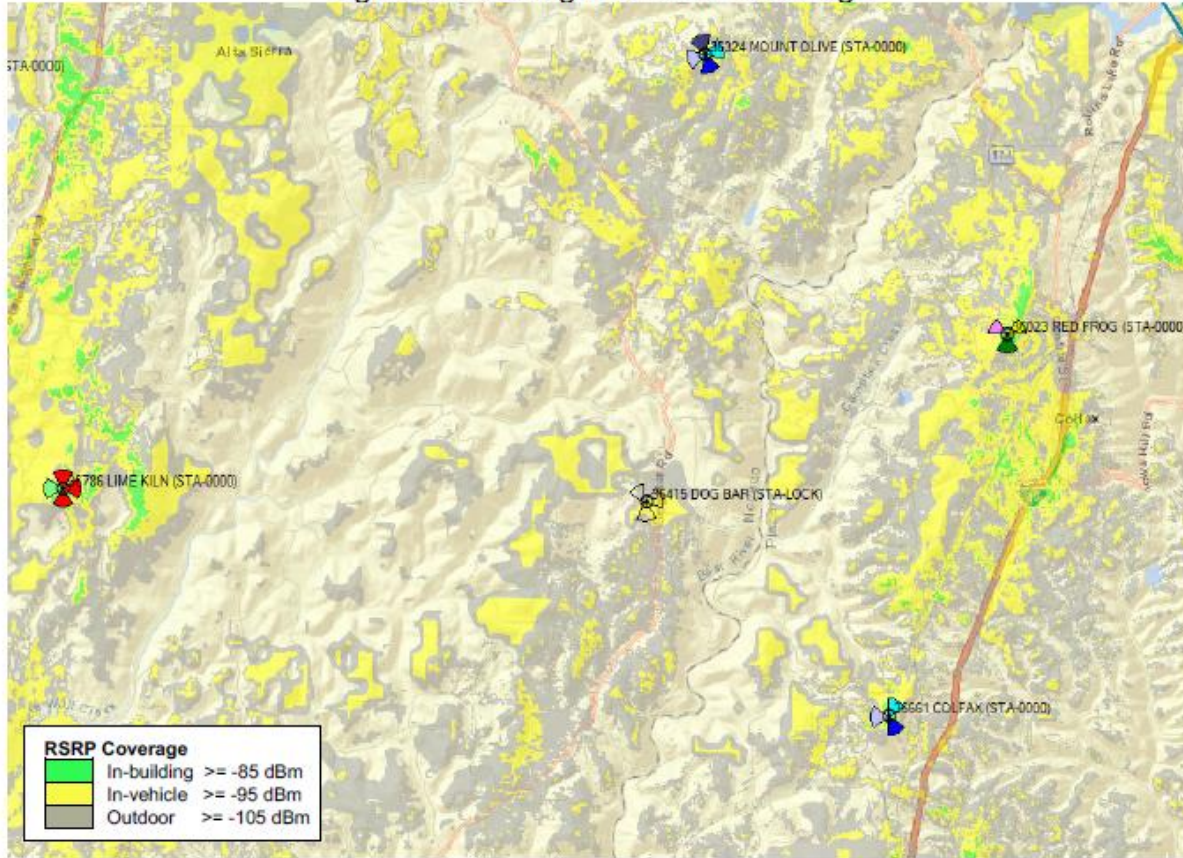
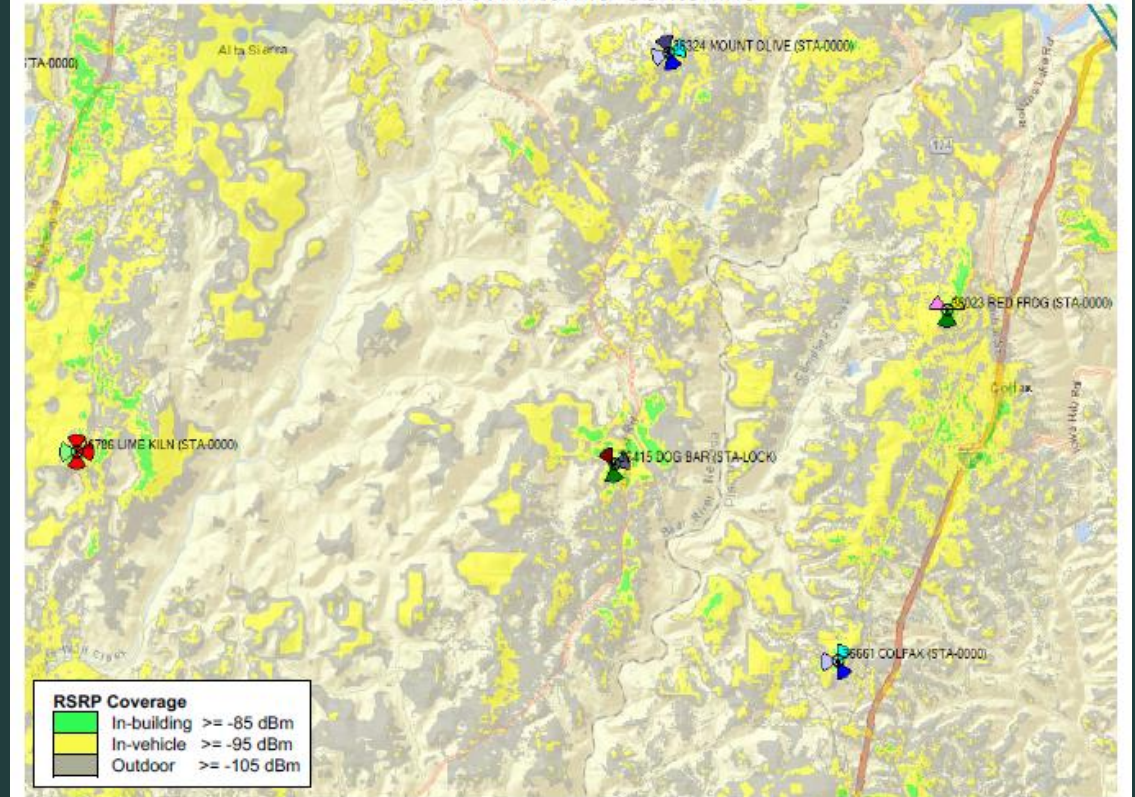
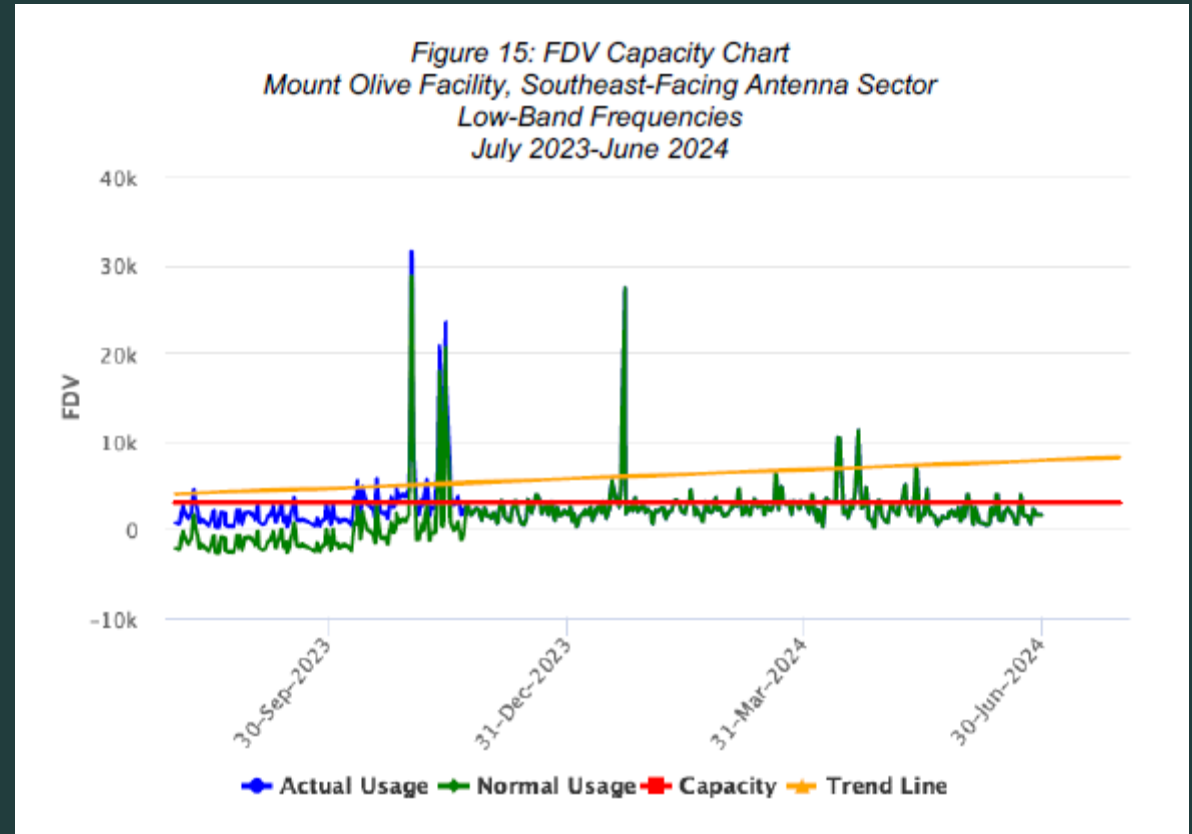


Figure 7: Mid-Band Coverage with Proposed Facility 120-foot Antenna Centerline



# Capacity

By comparing the trend line of average usage (orange line) with the maximum capacity (red line), Figure 15 demonstrates that the Mount Olive facility southeast-facing antenna sector reached capacity exhaustion in the low-band frequencies over one year ago.





The other surrounding towers of Colfax and Red Frog are also above capacity.

Figure 16: FDV Capacity Chart  
Red Frog Facility, Northwest-Facing Antenna Sector  
Mid-Band Frequencies  
July 2023-June 2024

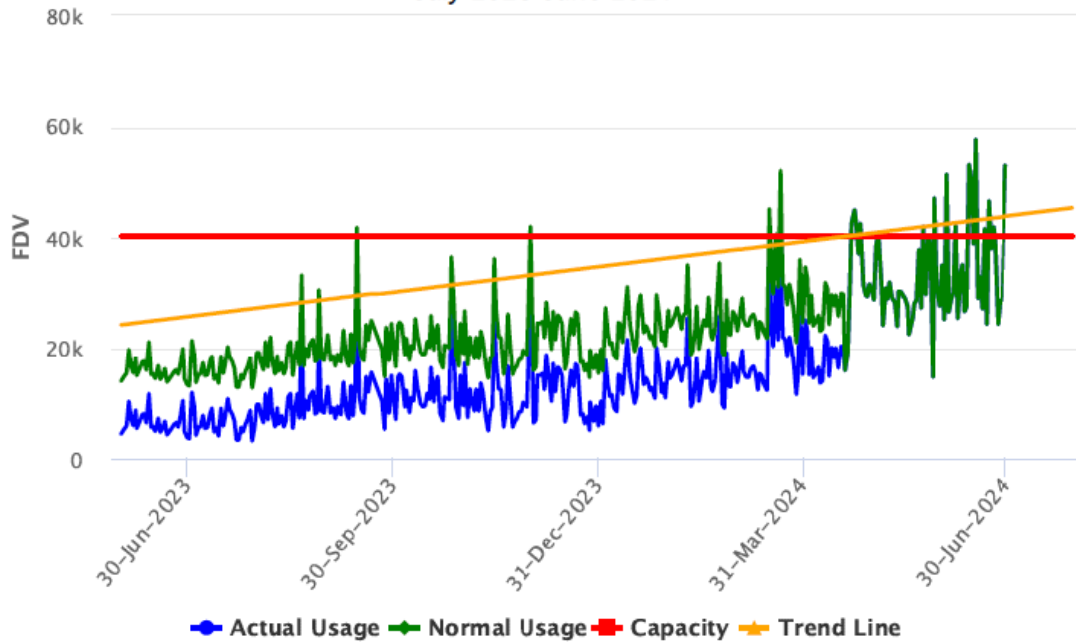
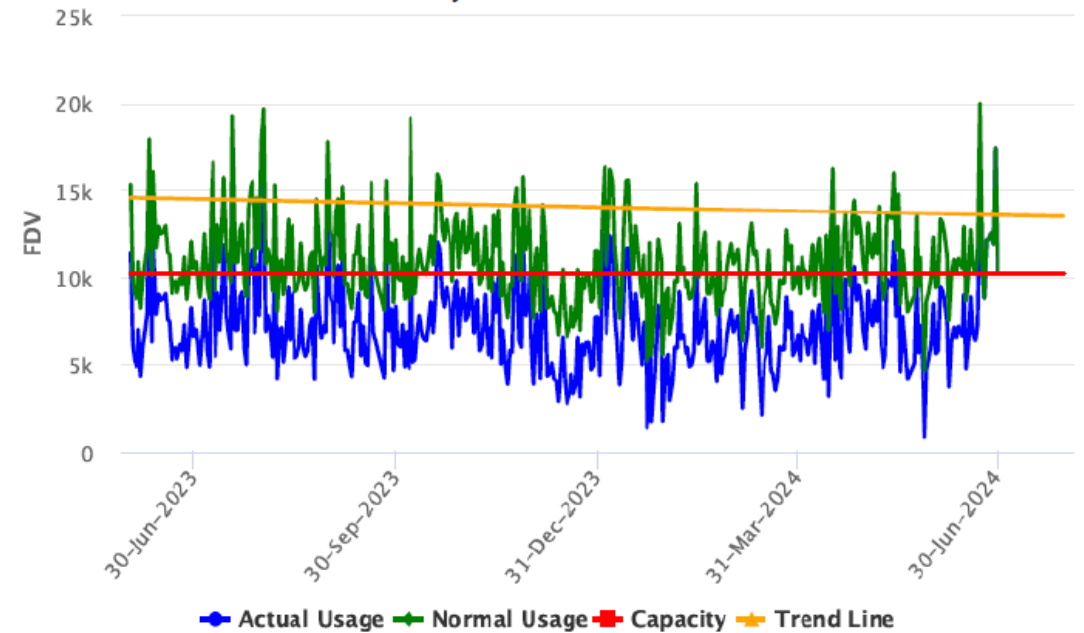


Figure 17: FDV Capacity Chart  
Colfax Facility, Northwest-Facing Antenna Sector  
Low-Band Frequencies  
July 2023-June 2024



# Aesthetics

To demonstrate the height of the tower, a GPS-locked drone was set to hover at exactly 129 feet in the location of the proposed monopine. The photo simulations show the top of the monopine at the same height the drone is hovering.

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Grass Valley, CA 95949  
verizon Fuze ID 16989172

Photograph of the actual drone used.

Flight controller screen during all site photography, showing the view looking out FROM the drone.

Drone locked in place.

This number shows the height above the ground that the drone is flying.

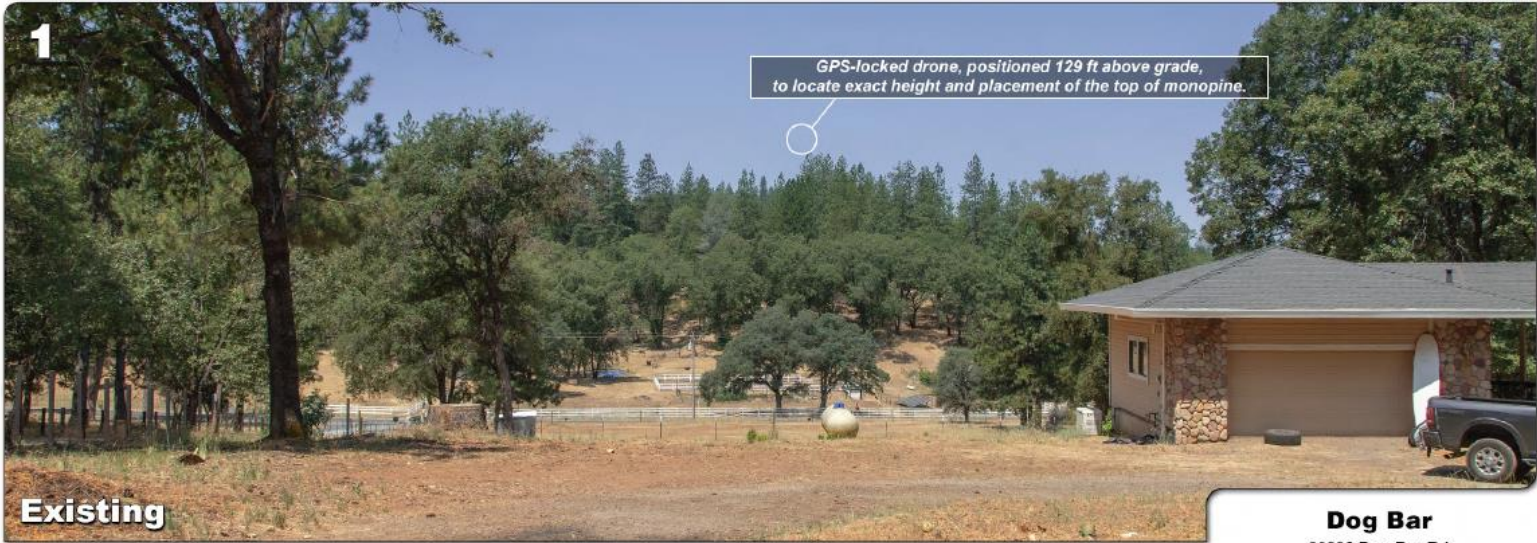
0.0mph 4.7mph  
H 129ft D 9.1ft

Storage 01:33:05 RES 4K 60 EV 0.0 AUTO

N Mode In flight 15:33 RC 26

1x AF 08:06





GPS-locked drone, positioned 129 ft above grade, to locate exact height and placement of the top of monopine.

**Existing**

Photosimulation of the view looking west from the Phalen residence, camera viewpoint is 1200 ft from the site.

**Dog Bar**  
20896 Dog Bar Rd  
Grass Valley, CA 95949  
**verizon** Fuze ID 16989172



Proposed monopine

**Proposed**



2

GPS-locked drone, positioned 129 ft above grade, to locate exact height and placement of the top of monopine.



Existing

Photomontage of the view looking west-southwest from the main picture-window view at the Roush residence, 1880 ft away.

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**verizon** Fuze ID 16989172

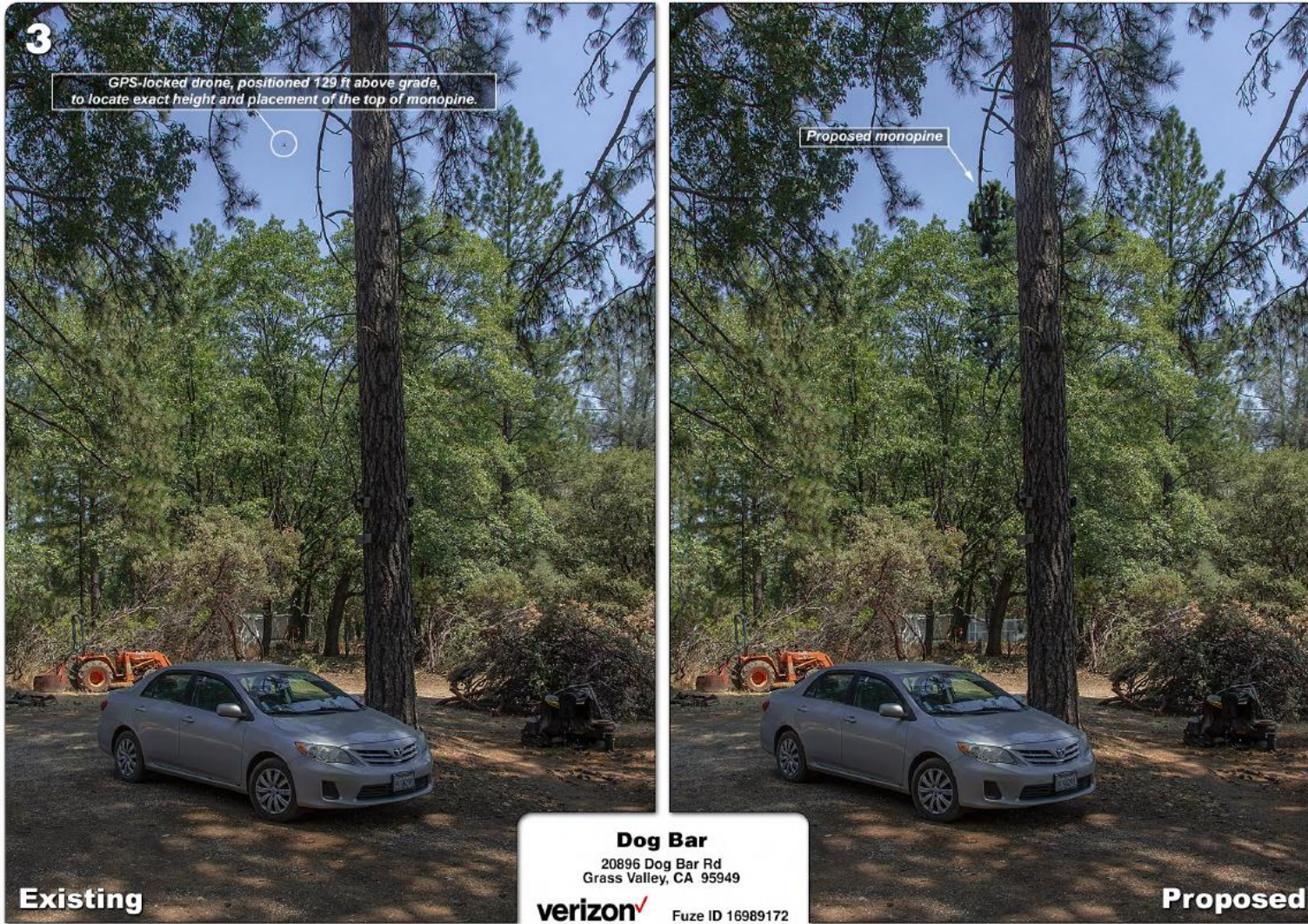
Proposed monopine



Proposed



Photosimulation of the view looking northeast from the nearest neighbor to the site, camera viewpoint is 250 ft from the proposed monopine.



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4

GPS-locked drone, positioned 129 ft above grade, to locate exact height and placement of the top of monopine.



**Existing**

Photosimulation of the view looking south from the nearest point along Feather Way, 525 ft from the site.

**Dog Bar**

20896 Dog Bar Rd  
Grass Valley, CA 95949



Fuze ID 16989172



**Proposed**



5

GPS-locked drone, positioned 129 ft above grade, to locate exact height and placement of the top of monopine.

Existing

Photosimulation of the view looking northwest from the mailboxes on Amber Street at Dog Bar Road, 750 ft from the site.

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Grass Valley, CA 95949

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Proposed monopine

Proposed

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Existing

Photosimulation of the view looking west from the nearest point along Dog Bar Rd, directly in front of the landowner's house.

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**verizon** Fuze ID 16989172



Proposed

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Photograph of the view looking north-northwest along northbound Dog Bar Rd, 1750 ft from the site. Monopine is not visible.

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Grass Valley, CA 95949

**verizon** Fuze ID 16989172





Photograph of the view looking north-northwest along northbound Dog Bar Rd, 1500 ft from the site. Monopine is not visible.

**Dog Bar**  
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Grass Valley, CA 95949

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8



**Existing and Proposed (no visible change)**

Photograph of the view looking northwest along northbound Dog Bar Rd, 1200 ft from the site. Monopine is not visible.

**Dog Bar**  
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Grass Valley, CA 95949

verizon Fuze ID 16989172

9





Photograph of the view looking south-southwest along southbound Dog Bar Rd, 2000 ft from the site. Monopine is not visible.

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Grass Valley, CA 95949

verizon Fuze ID 16989172

10



Location of the proposed monopine,  
not visible in this view because of  
tall trees obstructing the view.

Existing and Proposed (no visible change)



11



GPS-locked drone, positioned 129 ft above grade, to locate exact height and placement of the top of monopine.

**Existing**

Photosimulation of the view looking southwest along Dog Bar Road, through a gap in the trees, 1100 ft from the site.

**Dog Bar**  
 20896 Dog Bar Rd  
 Grass Valley, CA 95949

**verizon** ✓ Fuze ID 16989172



Proposed monopine

**Proposed**





12

GPS-locked drone, positioned 129 ft above grade, to locate exact height and placement of the top of monopine.

Existing

Photomontage of the view looking due south along Dog Bar Road, approaching Feather Way, 950 ft from the site.

**Dog Bar**

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Grass Valley, CA 95949

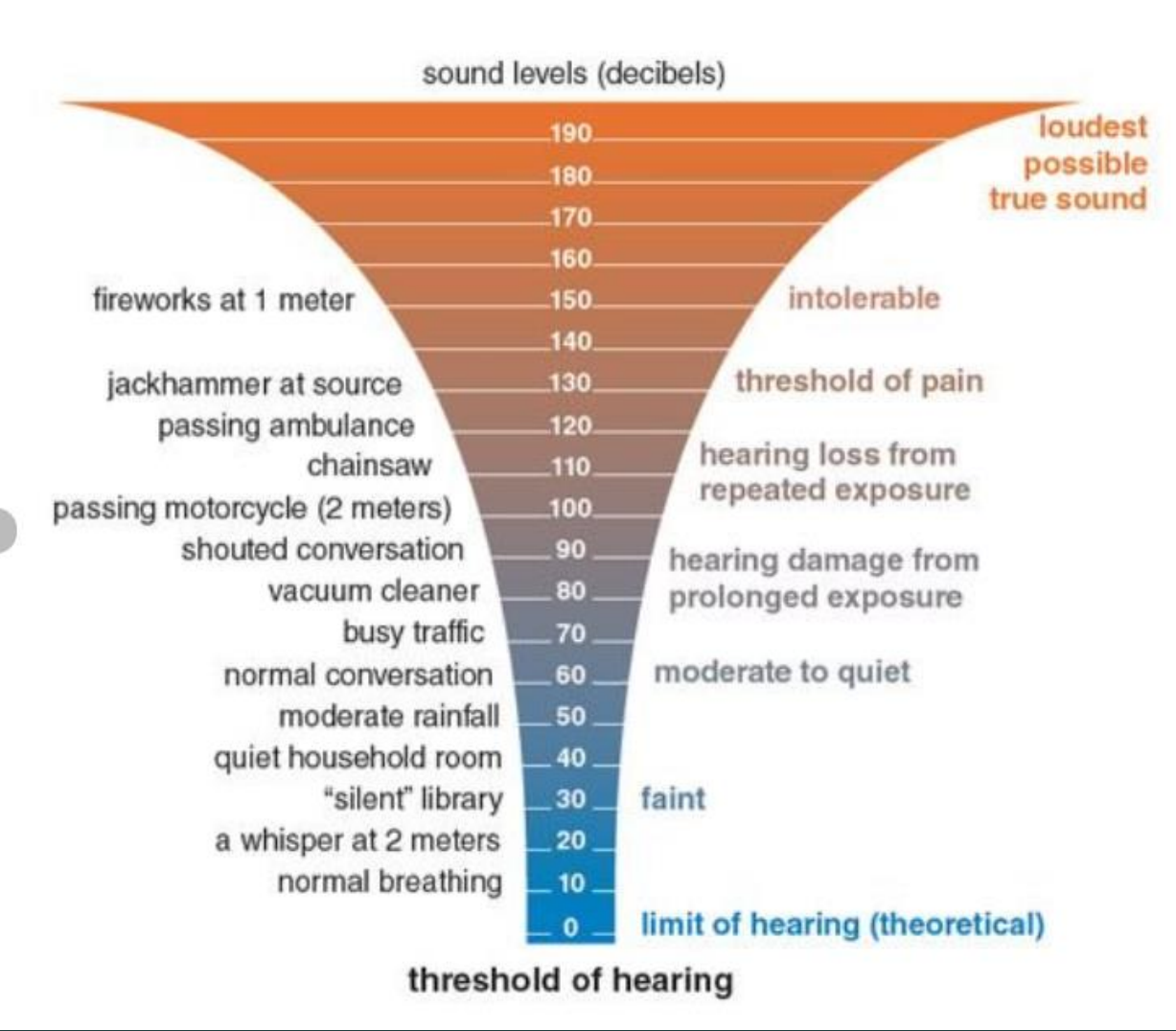


Fuze ID 16989172



Proposed

Proposed monopine





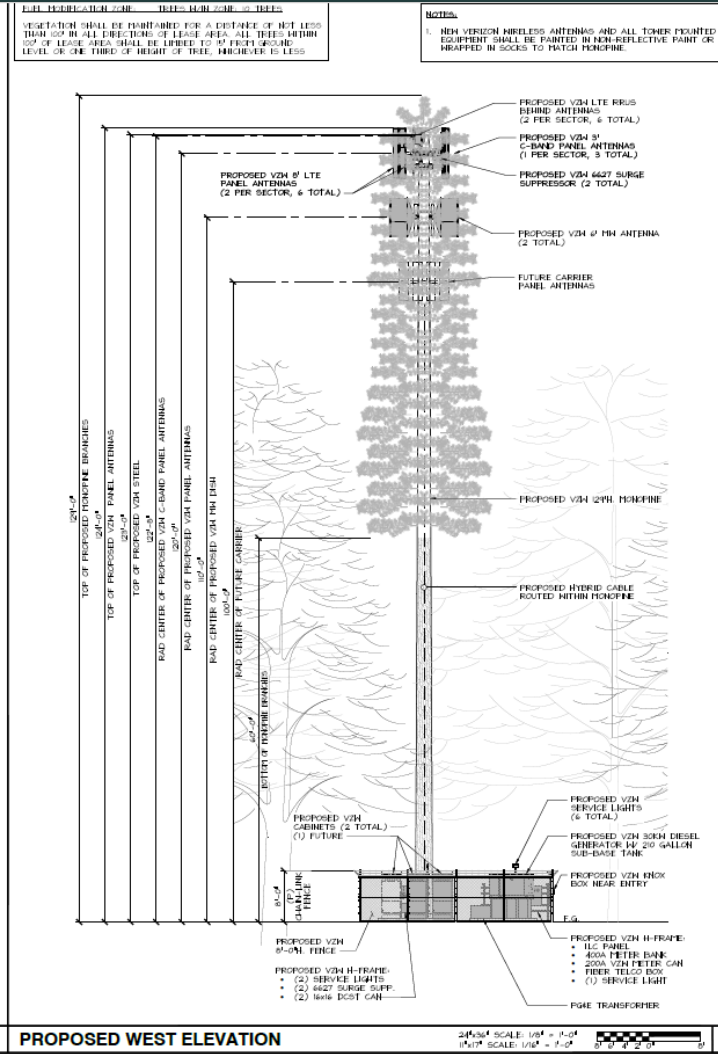
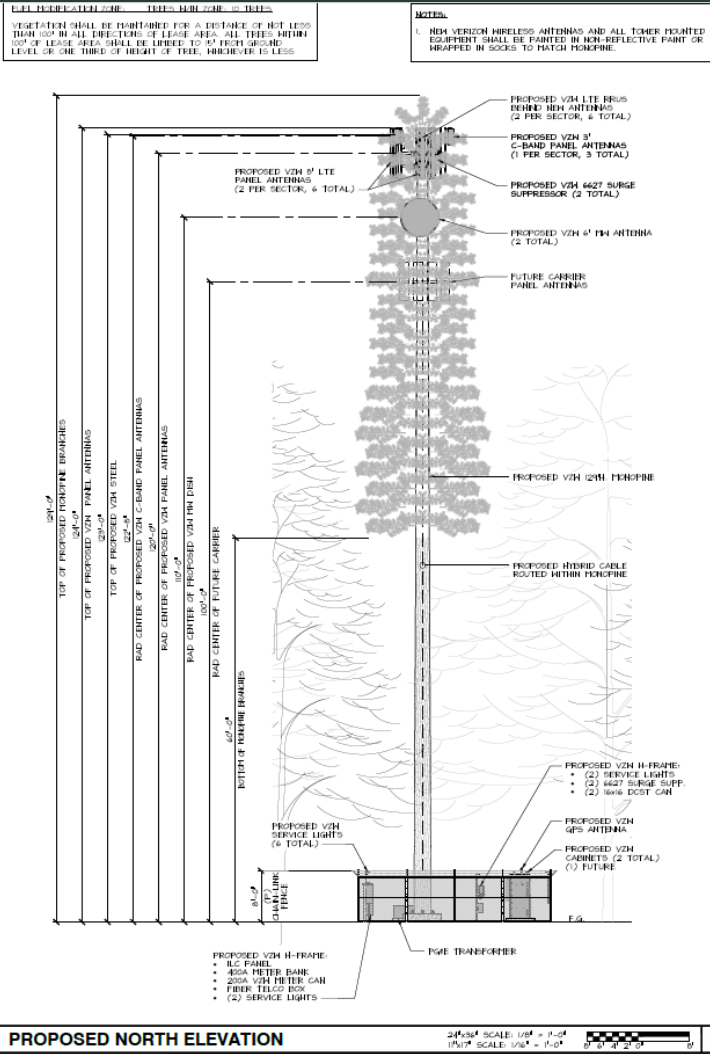
### 4.3 Statement of Compliance

Based on the above results, analysis and recommendation(s), it is the undersigned's professional opinion that Verizon's site is compliant with the FCC's RF Safety Guidelines.

### 4.4 Engineer Certification

This report has been prepared by or under the direction of the following Registered Professional Engineer: Darang Tech, holding California registration number 16000. I have reviewed this report and believe it to be both true and accurate to the best of my knowledge.





**verizon**  
2770 SHADELANDS DRIVE  
BUILDING 11  
WALNUT CREEK, CA 94598

**SEQUOIA**  
DIVERSIFIED SERVICES, INC.  
1 SPECTRUM BLVD DRIVE, SUITE 100  
LAKE FOREST, CA 92650-2285

**ALLSTATES**  
ENGINEERING & SURVEYING  
23475 BIRCHER DRIVE  
LAKE FOREST, CA 92650

PROJECT ID: DOG BAR  
DRAWN BY: RC  
CHECKED BY: 95

REV	DATE	DESCRIPTION	LS
0	04/22/2024	ISS CIP FOR SUBMITTAL	96
1	05/15/2024	REV CIP FOR REVIEW	15

**DOG BAR WOODLINE**  
20896 DOG BAR RD  
GRASS VALLEY, CA 95949

SHEET TITLE  
ELEVATIONS

SHEET NUMBER  
A-5



# Agency/Public Comments

- A member of the public expressed concerns about the perceived health risks of cellular towers, aesthetic impacts, and noise from the standby generator.
- Northern Sierra AQMD asked that the contact information in a Condition be changed and asked for a condition stating that disturbance must still adhere to NSAQMD rule #226. Therefore, Condition D.3 is proposed to require a note on future building plans.
- The Central Valley Regional Water Quality Control Board provided a generic letter that includes comments that are not applicable to the project.



# Environmental Review

- The Planning Department prepared a draft Initial Study and a proposed Mitigated Negative Declaration (IS/MND) for the proposed project (Attachment 2). The Initial Study was available for a public review period of 31-days (spanning **May 7, 2024 to June 6, 2024 at 5:00 p.m.**).
- Based on the technical information submitted with this application, review of pertinent policy and regulatory documents, and consultation with appropriate local, state, and federal agencies, all of the potential impacts that were identified have been mitigated below levels of significance.

