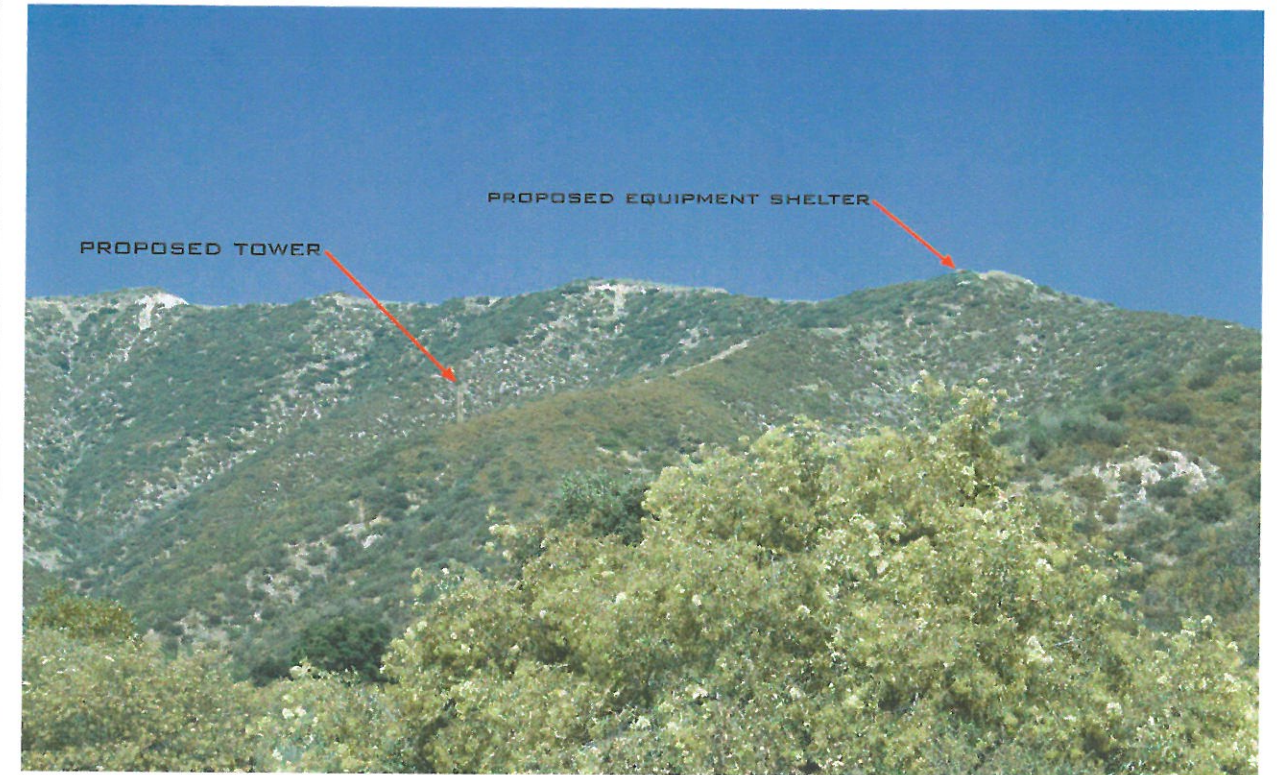


**Visual Study and Photosimulations**  
***FM Radio Broadcast Tower Facility***  
***Pisgah Peak Road***



***Conditional Use Permit***  
***and***  
***Major Variance – Fuel Modification Reduction***

**Land Use Services Department**  
**County of San Bernardino**

**Prepared 4-29-10 by:**

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## **1. Summary of Findings and Conclusions**

Photographs and photosimulations are used to evaluate potential visual impacts of the proposed 43-ft. tall unmanned, non combustible FM Radio Tower and 10 ft x 10 ft by 9 ft tall one-story equipment shelter ("Project") from within Wildwood Canyon State Park ("WCSP") and surrounding areas.

The tower location - in a "natural bowl" beneath surrounding ridgelines - minimizes the number of "sky-lit" views, where the tower would be seen against the sky. Most views will have the tower set against the hillside backdrop – which will be seen through the open lattice framework. These factors, combined with fact that vantages outside of WCSP are at least a mile or more away - reduce potential visual impact to a level of insignificance.

- ◆ Potential visibility of the Project is minimized by use of a 43-ft. lattice tower.
- ◆ Views from outside WCSP have been nearly eliminated.
- ◆ There will be no known distant sky-lit views from residential areas.
- ◆ The one-story equipment shelter is only nine ft tall and mitigation has been included that makes the appearance consistent and comparable to existing residential development on nearby ridgelines.

## **2. Methodology**

Photographs and photosimulations from a variety of vantages are used to evaluate potential visual impact on existing views – ten are presented herein. Generally accepted criteria for a visual analysis in a rural area are used for the evaluation [U.S. Department of Transportation Federal Highway Administration (FHWA); Pub. No. FHWA-HI-88-054], including

- ◆ Description of the Project,
- ◆ Existing environmental setting and open space- visual resources,
- ◆ Definition of evaluation criteria, and
- ◆ Mitigation Measures.

## **3. Existing Environmental Setting**

**Project Parcel and Surrounding Area:** The 38.12-ac Project Parcel is located in the foothills of the San Bernardino Mountains, northwest of the intersection of Wildwood Canyon and Oak Glen Roads in an unincorporated area of the County of San Bernardino. Oak Glen Rd. is a designated County Scenic Route located at distances greater than one mile (approx.) southeast of the Project Parcel, on the opposite side of a north-south trending ridgeline.

Elevation of the Parcel ranges from 3,800± ft above sea level near the western boundary of the site to 4,500± ft at the eastern boundary along Pisgah Peak Rd. [USGS Maps.] On-site topography is characterized by two east-west trending ridgelines that descend from the north-south ridge along the eastern boundary of the site toward WCSP in the west. Moderate to steep slopes are prevalent, covered by dense, mixed chaparral. [Biological Assessment Services, 6/19/2007; 4/19/10] Pisgah Peak Rd., a 12-ft wide (approx.) unpaved private road on a 60-ft wide easement enters and exits the Parcel in a small loop on the eastern boundary, and is primarily used by regional emergency service personnel on a very limited basis.

Surrounding lands are similar to the Parcel in topography and biotic resources. The western boundary is adjacent to San Bernardino National Forest land, the WCSP, and the City of

Yucaipa. Elevation in the surrounding area ranges from 3,000± ft near the entrance to WCSP to less than 5,500± ft at Pisgah Peak. [USGS maps]

**Wildwood Canyon State Park:** Scant public information is available regarding WCSP. Primary access is via the southwest corner from Canyon Rd. at approximately 3,000± ft, running north-south. The WCSP topography is dominated by rolling hills and valleys, gently sloping washes and steep slopes. [USGS] The primary viewshed from WCSP faces northeast toward Pisgah Peak. There are scattered trail markers and several unmarked trails – remnants of the prior ranch use, ranging from barely visible footpaths to dirt trails.

- ◆ WCSP has received no official designation as to the type of state park it will ultimately be - the State Park's website states "This property is new and may not be available for public use, pending necessary planning, facility development and staffing" (Ref. parks.ca.gov).
- ◆ The Friends of WCSP cite the history and Mission Statement of WCSP as follows – "WCSP was created through the efforts of Yucaipa residents to preserve the Birmingham and Porter Ranches; soon, facilities for the public to enjoy the land's splendor will be constructed including a museum and event center".

**San Bernardino National Forest:** The SBNF parcels were recently analyzed as part of the "Wildwood Land Exchange" Draft Environmental Assessment [August 2005]. The biologic resources of those parcels are similar to the Project Parcel.

- ◆ "No cultural resources, including Native American religious or cultural sites or archaeological sites, were found on the federal parcels. No wetlands or meadows were identified or mapped... There are no congressionally designated areas (e.g., wilderness, National Recreation Areas), inventoried road-less areas, or Research Natural Areas. There are no known occurrences of federally listed threatened and endangered plant or animal species located on any of the six federal parcels" [Draft EA, August 2005]

**City of Yucaipa:** Most of WCSP is located within the incorporated City. The City's General Plan identifies four current and future Multi-Purpose Trails within WCSP and on adjacent parcels outside the City or WCSP, including the Project Parcel. [Yucaipa, CA, Proposed Multi Use Trails and Bike Paths map]

- ◆ Trails marked on the City map do not correlate with actual WCSP trails.
- ◆ The trails are currently used by pedestrians, mountain bikers, and equestrians, as evidenced by the variety of tracks found on the trails. [Field visits, 5/22/08 and 6/24/08]

**Open Space/Trails:** There are no formal County trails recognized within the Oak Glen Community Plan ("OGCP") area. [OGCP, OG6.1.B] There are four Multi-Purpose Trails identified by the City of Yucaipa in the project area as described above. The proposed 37+-ac open space deed restriction fosters the goals of the OGCP:

- ◆ To expand WCSP, and
- ◆ Create a "linked system of both privately and publicly owned open space lands throughout the community while respecting the rights of those residing in the community." [OGCP, OG/OS2.4]

**Scenic Routes:** Oak Glen Rd. is designated a County Scenic Route. The designation "recognizes the value of protecting scenic resources for future generations and places restrictions on adjacent development including specific sign standards regarding sign placement

and dimensions, utility placement, architectural design, grading, landscaping characteristics and vegetation removal.” [OGCP, OG3.2. B]

- ◆ The Project Parcel and tower are not visible from Oak Glen Rd., because the tower is situated on the western slope of a north-south ridgeline and Oak Glen Rd. is on the eastern side of the same slope.
- ◆ The top of the proposed 43-ft tower is located 227 vertical ft below the ridgeline, and the proposed nine-ft tall equipment building is located 15 to 30-ft below the ridgeline on the western slope.
- ◆ The existing 200-ft tall KRQB radio tower is visible from Oak Glen Rd. for one mile from the intersection with Pisgah Peak Rd to Swedlow Trail.

#### **4. Mitigation Measures**

The following mitigation measures are included in the Project design and reduce the potential visual impact to a level of insignificance:

- Open Space: Offer deed restriction of 99% of the 38.12-ac parcel for open space. The Project will occupy less than 1% of the parcel.
- Passive Use: Promote a passive land use which is compatible with the Open Space designation and less impact than residential and alternative energy uses even though active residential uses and 80 ft tall ancillary alternative energy uses are by-right on the Parcel.
- Utilities: Underground all utility lines in an existing utility right-of-way from existing service along Pisgah Peak Rd. to the proposed Project, approx. 6,700 linear ft.
- Landscaping: Install non-irrigated, drought-resistant landscaping, approved by the County Arborist and County Fire Department, along the fence around the equipment building area.
- Slope Cut/Fill: Utilize pier foundations for the tower and shelter to eliminate cutting the slope to create flat pads for the foundations.
- Tower Location: Locate tower > 200 vertical ft below a ridgeline to minimize sky-lit views.
- Tower Color: Utilize non-metallic, weathered gray materials for the tower and antenna.
- No Tower Lighting/Stripes: Eliminate lighting and red/white stripes on the tower – not required by FAA or FCC guidelines.
- Tower Design: Limit tower and antenna height to a maximum of 43-ft. AGL. Utilize open-lattice structure to allow visibility of hillside and ridge background, to minimize visual impact and enable the tower to blend with the landscape.
- Tower Access: Allow only pedestrian access to the tower by maintenance personnel. No access road will be cut from Pisgah Peak Rd to the tower.
- Fencing: Install a 6-ft tall wrought-iron fence with apache points around the tower and equipment building, painted a neutral color that blends with the natural background of the surrounding topography, and do not use chain link fence.
- Fuel Modification: Reduce fuel modification to a 30-ft radius around the proposed equipment building and fuel clearance to a 10-ft radius around the building, per County Fire Department recommendations. No fuel modification is required around the unmanned, non combustible tower base.

- **Equipment Shelter Color and Material:** Utilize cooler and material that causes the Shelter to be consistent in appearance with surrounding residential structures on adjacent ridges and that presents as a neutral color that blends with surrounding topography.
- **Grading:** Minimize grading to < 25 cubic yds.
- **No Collocation:** Reduce potential for collocation and additional visual impact by limiting the tower height to 43-ft. AGL.
- **Emergency Services:** Provide space at the facility for radio and antenna equipment by emergency service agencies, such as Fire, Police, or State Parks if requested.

## 5. Visual Impact Assessment

<b>Visual Impact = Visual Resource Change + Viewer Response</b>	
Visual Impact	The degree of change in visual resources and viewer response to those resources caused by development and operations.
Visual Resource Change	The degree of change in visual resources caused by development and operations, assessed without regard to viewer response, and measured with visual elements (form, line, color, texture) visual character (dominance scale diversity, continuity), and visual quality (vividness, intactness, unity).
Viewer Response	Measures include exposure, sensitivity, cultural significance, and local values.

### Visual Resource Change

**Visual Elements.** The primary visual elements are the tower and equipment building. The basic geometric shape of the structures has low-to-moderate compatibility with the texture of the hillside, but will be softened by the proposed landscaping, color, material, and open-lattice design.

- ◆ The shape and natural line of the ridge as viewed from many WCSP vantages and the surrounding area will remain unaltered – due to the relatively low height of the tower (43 ft.) and siting 227 vertical ft. below the ridgeline, in a “natural bowl” that minimizes visual impact from surrounding areas.
- ◆ The open lattice design and color/material minimizes changes in color and texture between the hillside background and the facility.

**Visual Character.** The visual impact of the tower will be least compatible with the existing landscape when viewed against the sky.

- ◆ Within WCSP, the tower may be viewed at distances ranging from a few feet to > one mile.
- ◆ The nearest actual or marked trail is a minimum of 1,000 ft away.
- ◆ Partial sky views of the tower may increase when viewed from shorter distances, however, the tower will be partially or fully obscured from view from large areas of WCSP.

- ◆ The tower and building will not dominate the visual landscape as viewed against the 1,500-ft elevation gain of the hillside from trails in WCSP, due to the position of the tower 227 vertical ft below the ridgeline.
- ◆ The scale of improvements is compatible with the existing landscape when viewed from the nearest trails, 1,000 to 1,200 ft away at their nearest points (approx.).

Visual Quality. Moderate vividness, predominantly landform; low landcover: i.e. no water, low-contrast vegetation, no manmade development. High level of intactness due to minimal manmade structures. Project visibility is mitigated in order to minimize visual impact.

#### **Viewer Experiences**

Exposure: Motorists traveling eastbound on Wildwood Canyon Road will have momentary partial views of the Project. The primary exposure will be for users of WCSP, which include hikers, equestrians, and mountain bikers.

- ◆ Due to the limited nature of WCSP activities, potential viewers are primarily in motion on existing marked trails, which generally run east-west from the main road toward the Pisgah Peak Rd. ridgeline.
- ◆ Views of the Project will be limited to WCSP users facing east from the trails.

#### **Visual Impact**

Topographic conditions within WCSP indicate that views toward the Project would be limited to WCSP users in non-continuous, hillside-background views, only when facing east. There would be isolated areas where the tower would be seen in a sky lit view.

- ◆ Due to varied terrain, the tower would not be seen in a consistent panoramic view – but, rather, there would be isolated views that would provide for a lessened level of visual impact.
- ◆ Proposed mitigation measures soften and reduce potential impacts to a level of insignificance.

### **6. Photographs and Photosimulations**

Photographs and photosimulations are provided to assist County Staff with review of the FM Radio Tower facility. Figure 1 depicts the 10 vantage points used to document visual implications.

- ◆ An “inner ring” illustrates views from within WCSP.
- ◆ An “outer ring” shows potential views from an area outside WCSP – including from nearby roadways and more distant locations.
- ◆ Most views of the 43 ft tall tower will not be sky lit – and will have a visual backdrop of hillside terrain and vegetation because the 43-ft. tower is located in a “bowl” – located below the surrounding ridges.
- ◆ The tower and building will be nearly undetectable from most locations - five photosimulations are presented - four from within WCSP (SP-1, SP-3, SP-4 and SP-5) and one from Poplar Ave., in a residential subdivision 1.9 miles to the west of the proposed 43 ft tall unmanned, non combustible tower (POP-1).

The photosimulations show that:

- ◆ The tower will be minimally visible from sensitive vantages, and
- ◆ There will be no unmitigated significant impact on the views from the WCSP trails or from residential areas typified by Poplar Ave.

**List of View Locations**

Label	View Description	Distance from Tower	Finding
*SP-1	View to northeast from southeast corner of Project parcel	900 ft.	43 ft tall tower visible below ridge, equipment shelter near ridge top.
SP-2	View to southeast from northwest corner of Project parcel.	700-ft	43 ft tall tower /shelter not visible due to ridge obstruction.
*SP-3	Southeast view from unmarked footpath in WCSP.	1,800-ft	43 ft tall tower visible below ridge, equipment shelter near ridge top.
*SP-4	View east from WCSP trail.	3,600-ft	43 ft tall tower visible below ridge, equipment shelter near ridge top.
*SP-5	View east from WCSP Main Road (Pisgah Peak Rd.)	3,000-ft	43 ft tall tower visible below ridge, equipment shelter near ridge top.
OGR-1	View from Oak Glen Rd. facing west.	5,700-ft	43 ft tall tower and shelter not visible due to ridge obstruction.
OGR-2	View northwest from Oak Glen Rd. at Wildwood Canyon Rd.	7,700-ft	43 ft tall tower and shelter not visible due to ridge obstruction.
WCR-1	North view from Wildwood Canyon Rd. at Morningside Dr.	7,200-ft	43 ft tall tower and shelter not visible due to ridge obstruction.
WCR-2	Northeast view from Wildwood Canyon Rd. at WCSP.	9,000-ft	43 ft tall tower and shelter not visible due to ridge obstruction.
*POP-1	View from Poplar Ave., just west of Mesa Verde Dr.	10,032 ft.	43 ft tall tower is visible, but not sky-lit – virtually undetectable at this distance.

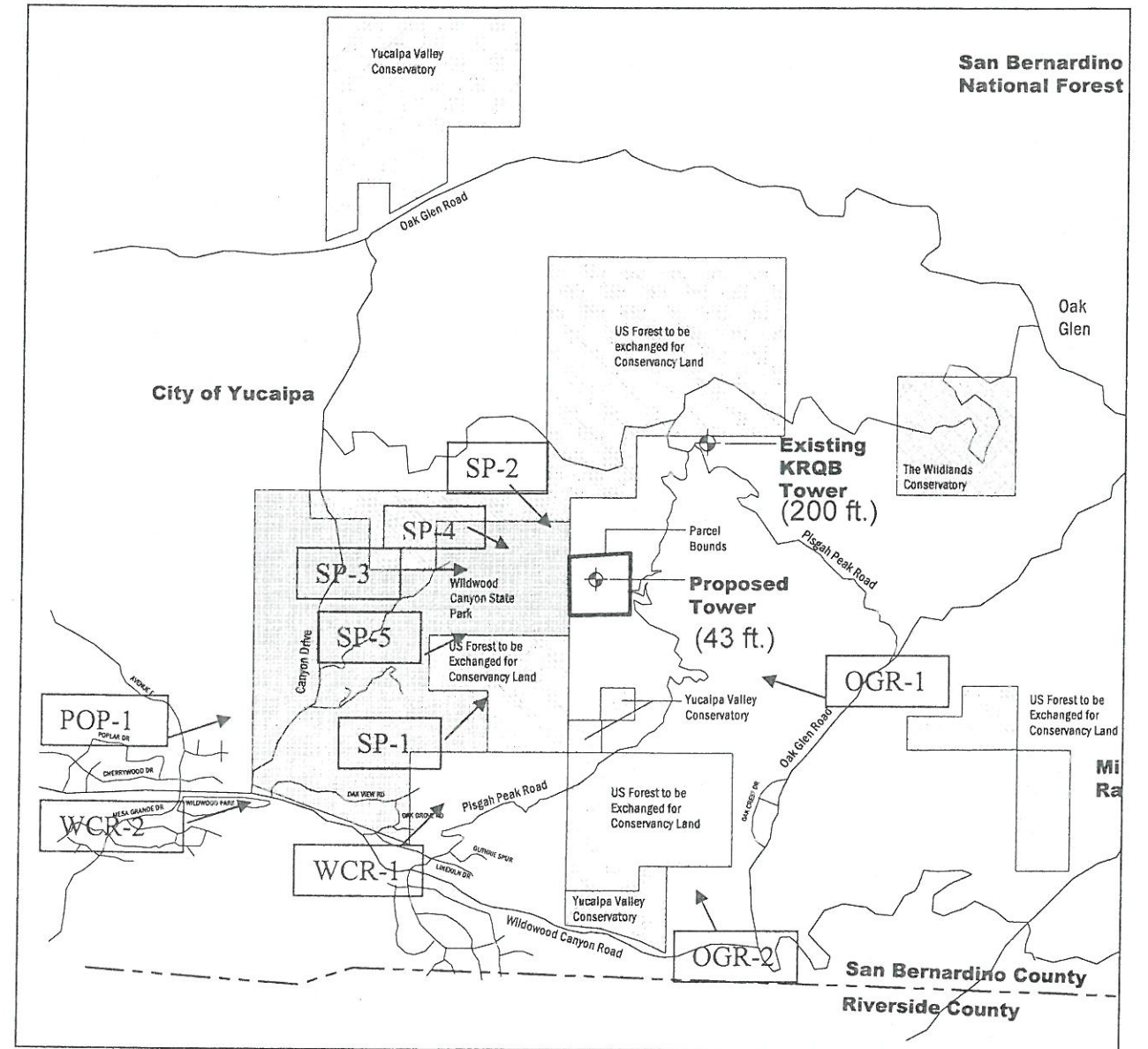
**Notes**

\*Denotes photosimulation from this vantage.

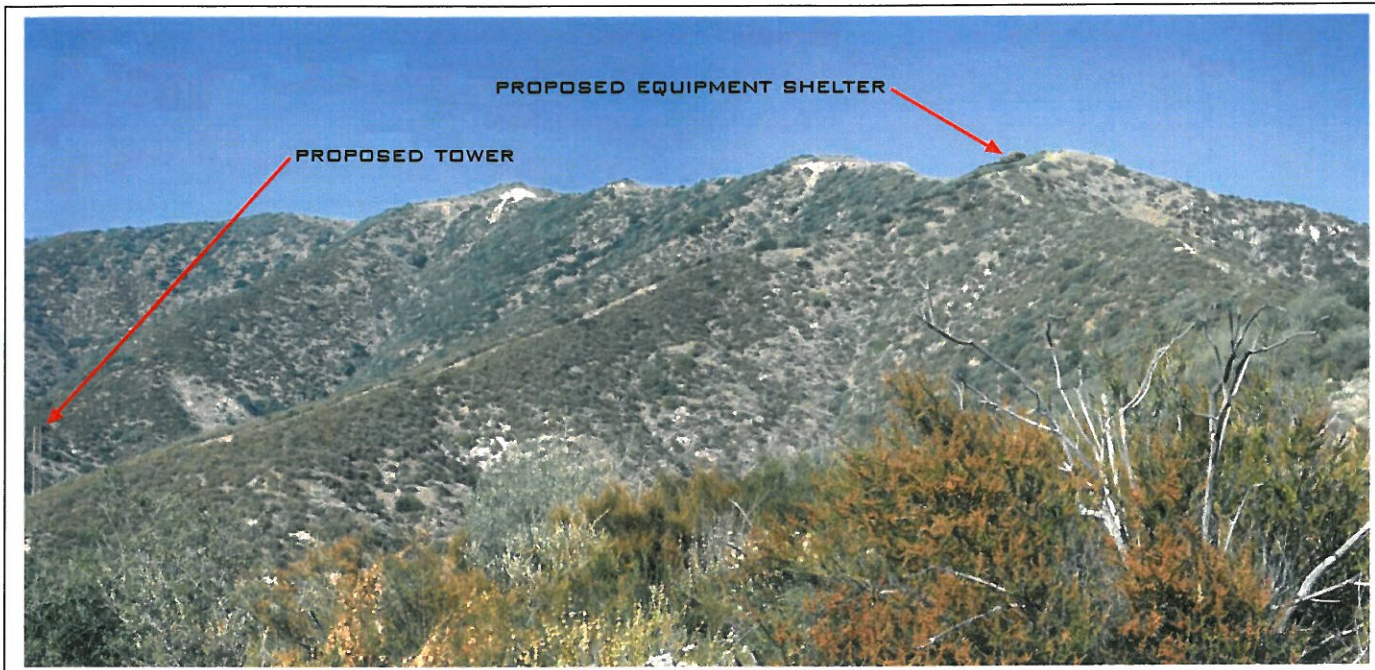
All distances are approximate.

SP = State Park; OGR = Oak Glen Rd; WCR – Wildwood Cyn Rd; POP = Poplar St

**Figure 1 – View Vantage Location Map**  
Lazer Broadcasting, Inc.  
Pisgah Peak Rd.

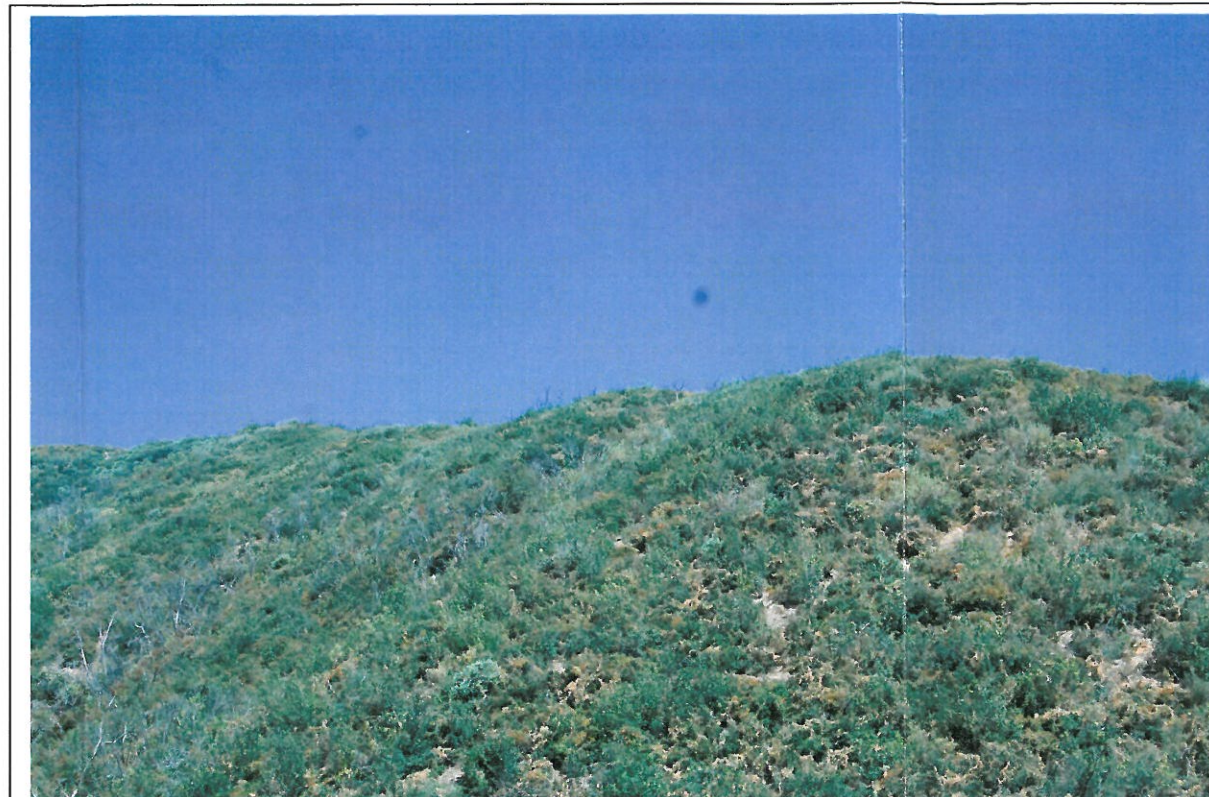






VIEW SP-1: Looking northeast from adjacent State Park -

- 43 ft tower is visible in natural bowl 227 vertical ft. below ridgeline
- One story 100 sq ft equipment shelter located near road at top of ridge



VIEW SP-2: Looking southwest from northwest corner of Project parcel -

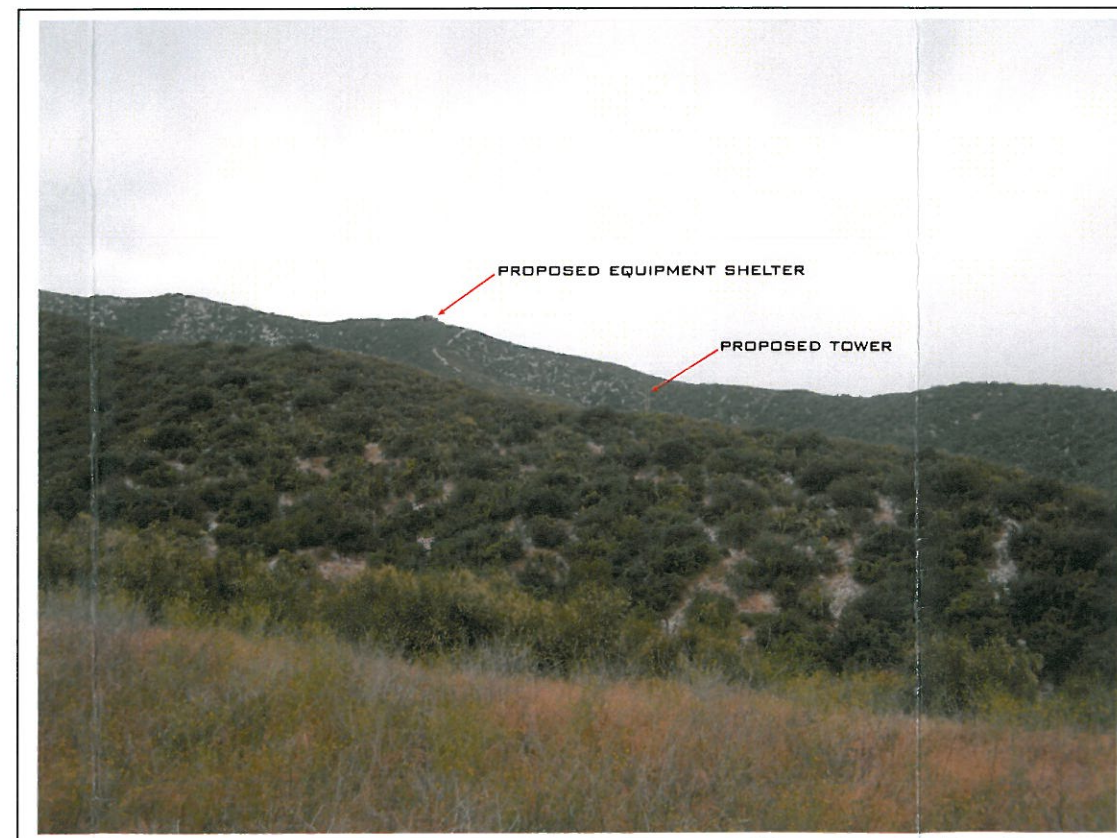
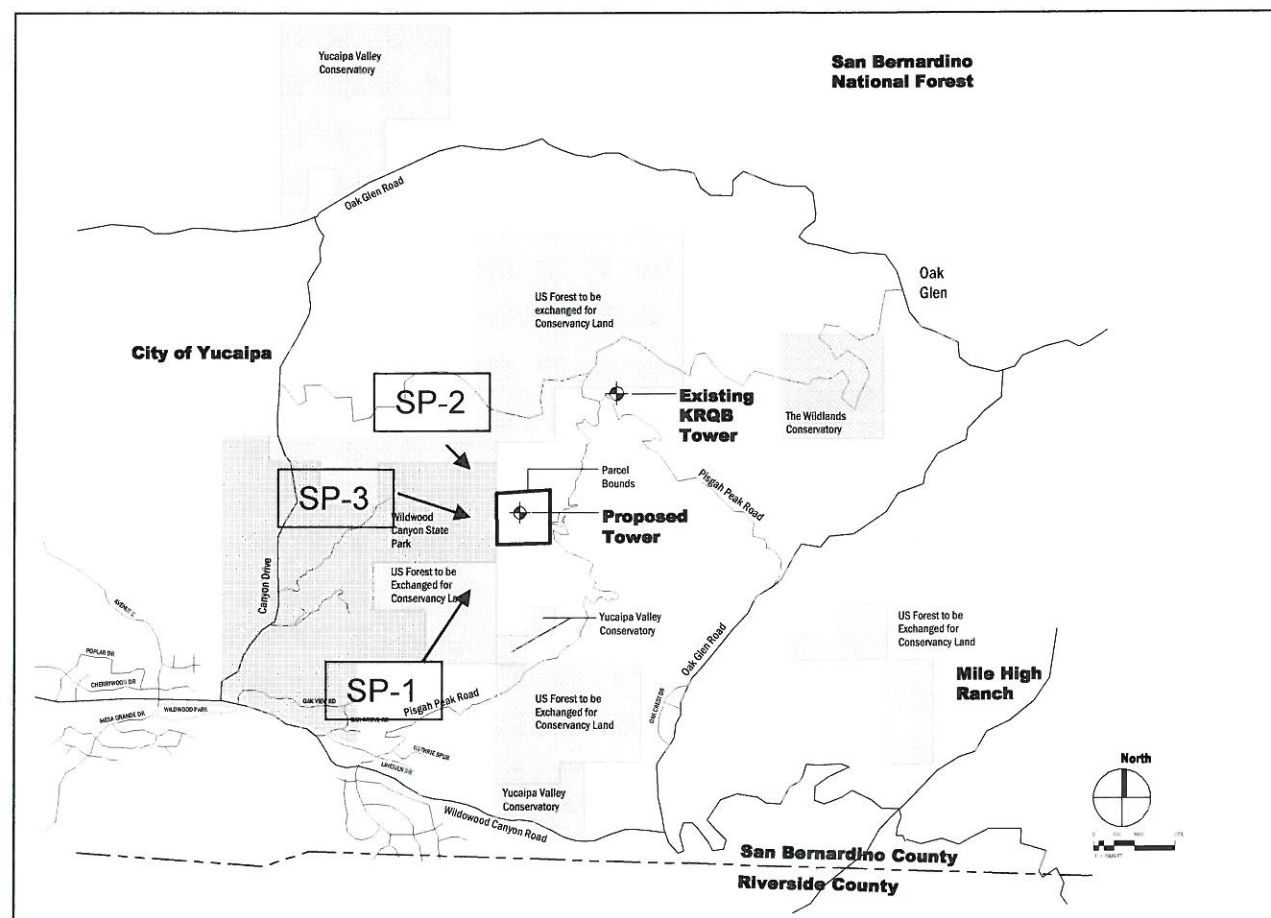
- 43 ft tall tower is obscured from view due to ridge in foreground
- One story 100 sq ft equipment shelter cannot be seen because of natural topography

## Visual Study and Photosimulations

FM Radio Broadcast 43 ft tower Facility – Pisgah Peak Road

Conditional Use Permit and Major Variance – Fuel Mod Reduction

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VIEW SP-3: Looking southeast from adjacent State Park

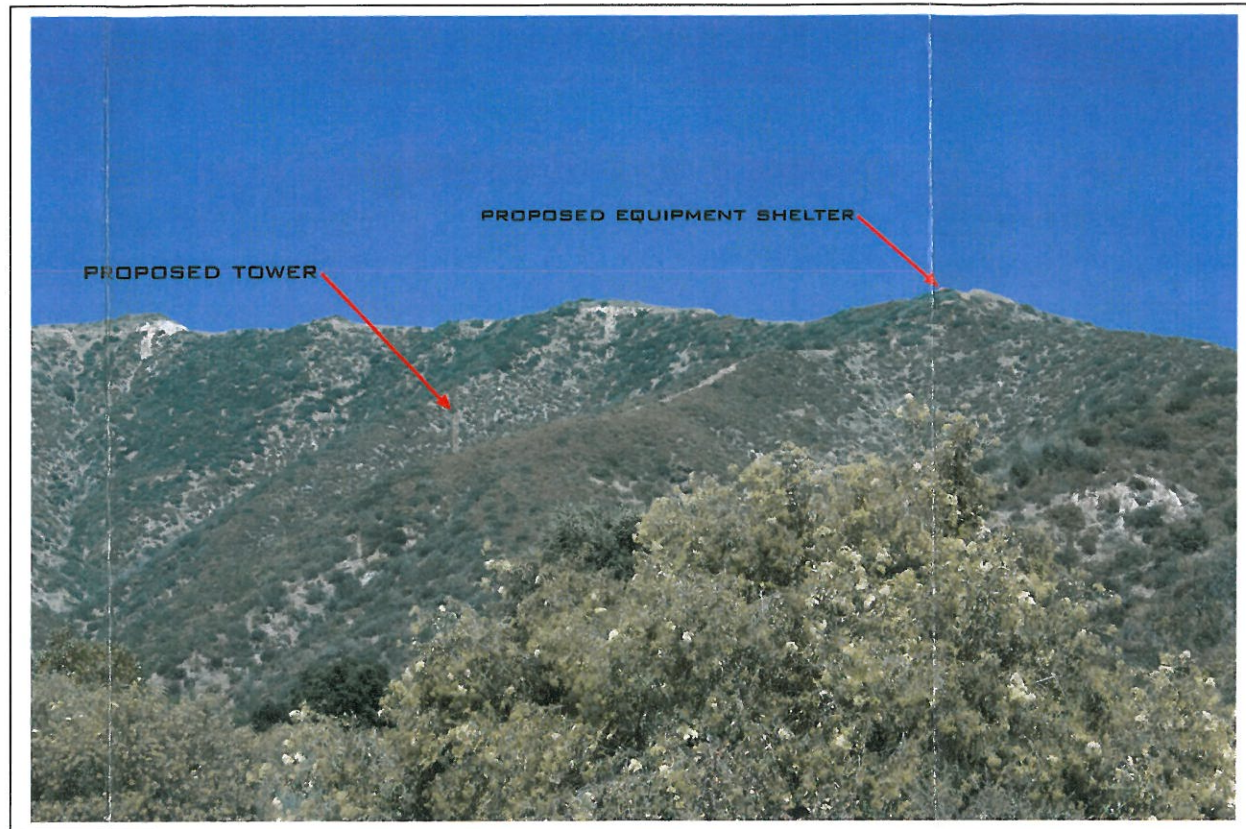
- 43 ft tall tower is visible below ridgeline against vegetated slope
- One story 100 sq ft equipment shelter is sited at top of ridge, near existing road

**Visual Study and  
Photosimulations**

**FM Radio Broadcast 43  
ft tower Facility –  
Pisgah Peak Road**

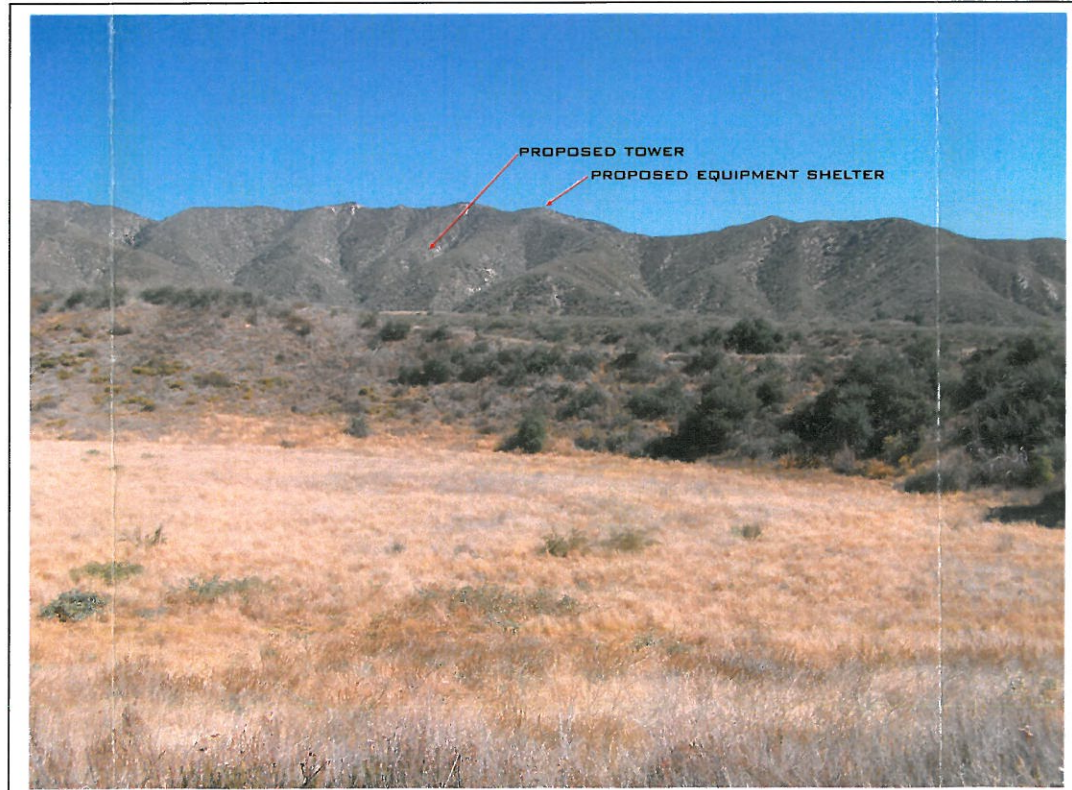
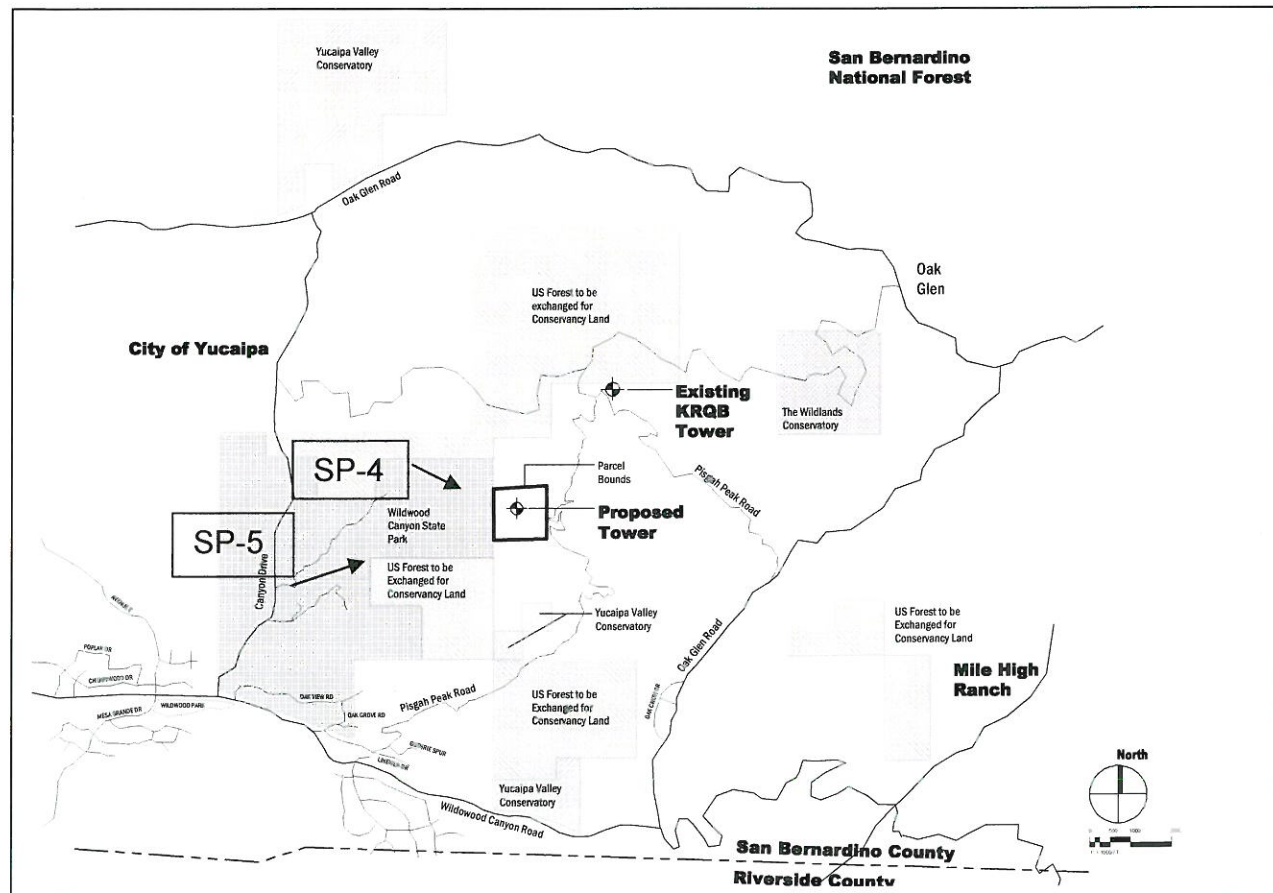
**Conditional Use Permit  
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Fuel Mod Reduction**

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Bernardino**



VIEW SP-4: Looking east from WCSP trail –

- 43 ft tall tower is visible below ridgeline, with mountain terrain as background
- One story 100 sq ft equipment shelter is located at right, at top of ridgeline



VIEW SP-5: Looking east from Pisgah Peak Rd.-

- 43 ft tall tower is visible below ridgeline with vegetated slope background
- One story 100 sq ft equipment shelter is seen at right



VIEW OGR-1: View northwest from Oak Glen Rd. — a designated Scenic Corridor

- 43 ft tall tower and equipment shelter are not visible from Oak Glen Rd
- KRQB Tower is visible from Oak Glen Rd



VIEW OGR-2: Looking north at intersection of Oak Glen Rd. & Wildwood Canyon Rd.

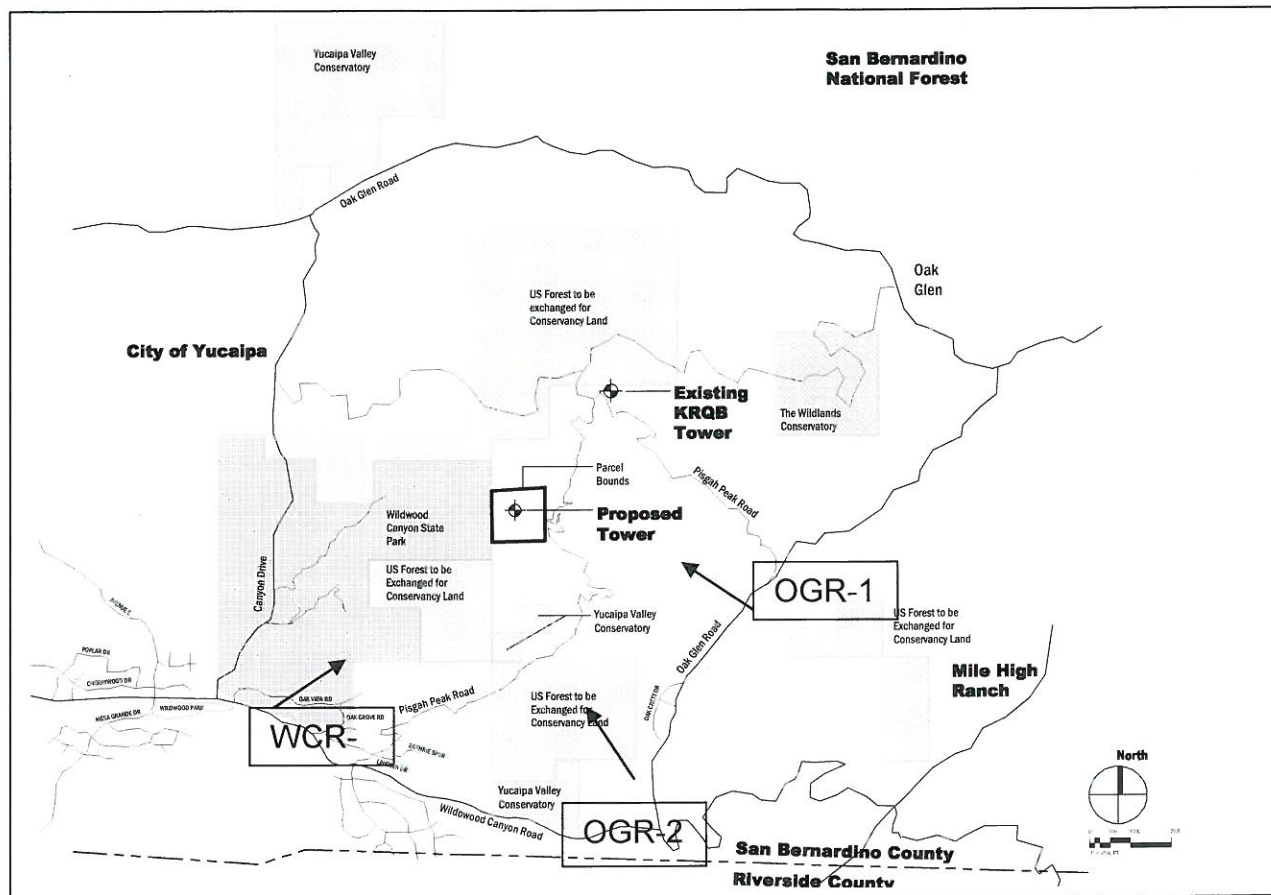
- 43 ft tall tower is not visible from this vantage
- One story 100 sq ft equipment shelter cannot be seen

## Visual Study and Photosimulations

FM Radio Broadcast 43 ft tower Facility – Pisgah Peak Road

Conditional Use Permit and Major Variance – Fuel Mod Reduction

Land Use Services Dept. – County of San Bernardino



VIEW WCR-1: Looking north from Wildwood Canyon Rd. & Morningside Dr. —

- 43 ft tall tower and equipment shelter are not visible
- Existing power lines are seen along roadway and are an established visual intrusion

## Visual Study and Photosimulations

FM Radio Broadcast 43 ft tower Facility – Pisgah Peak Road

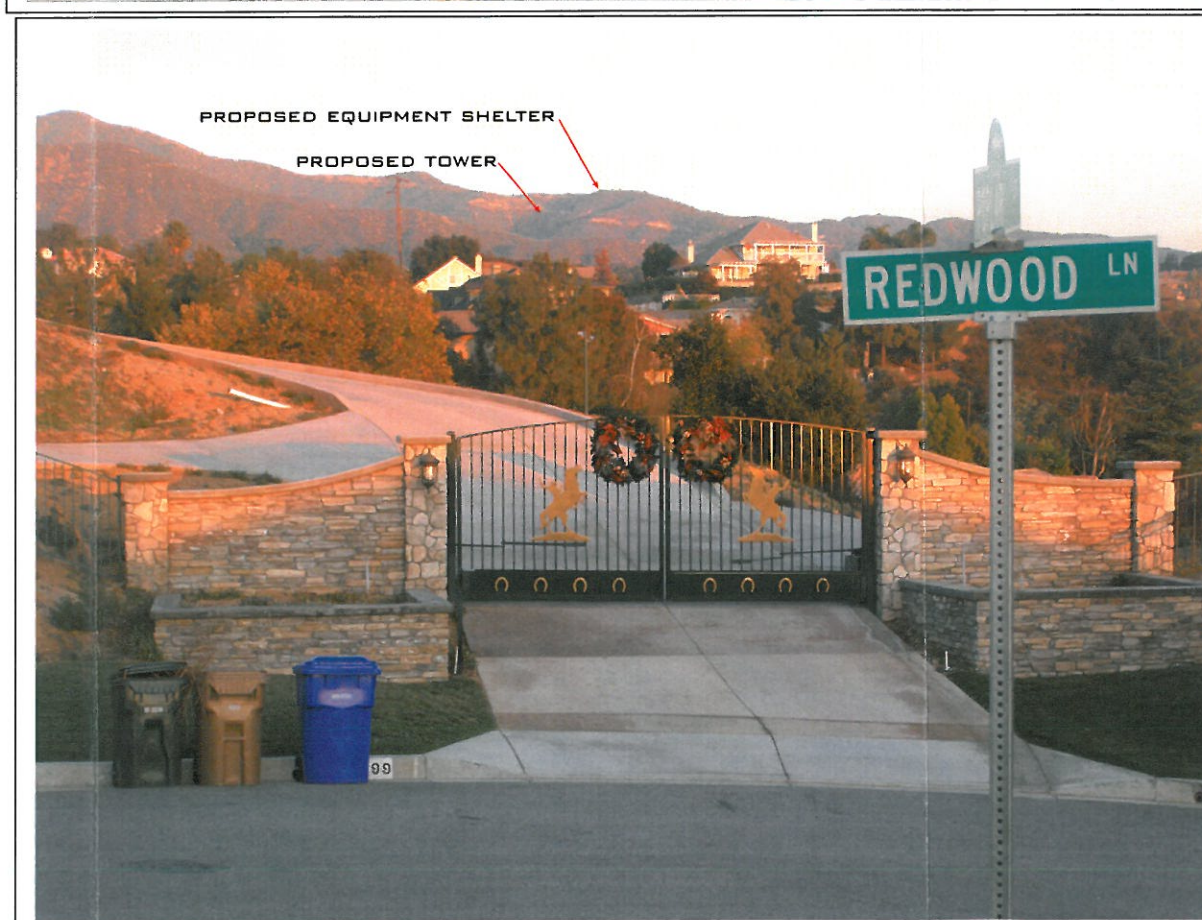
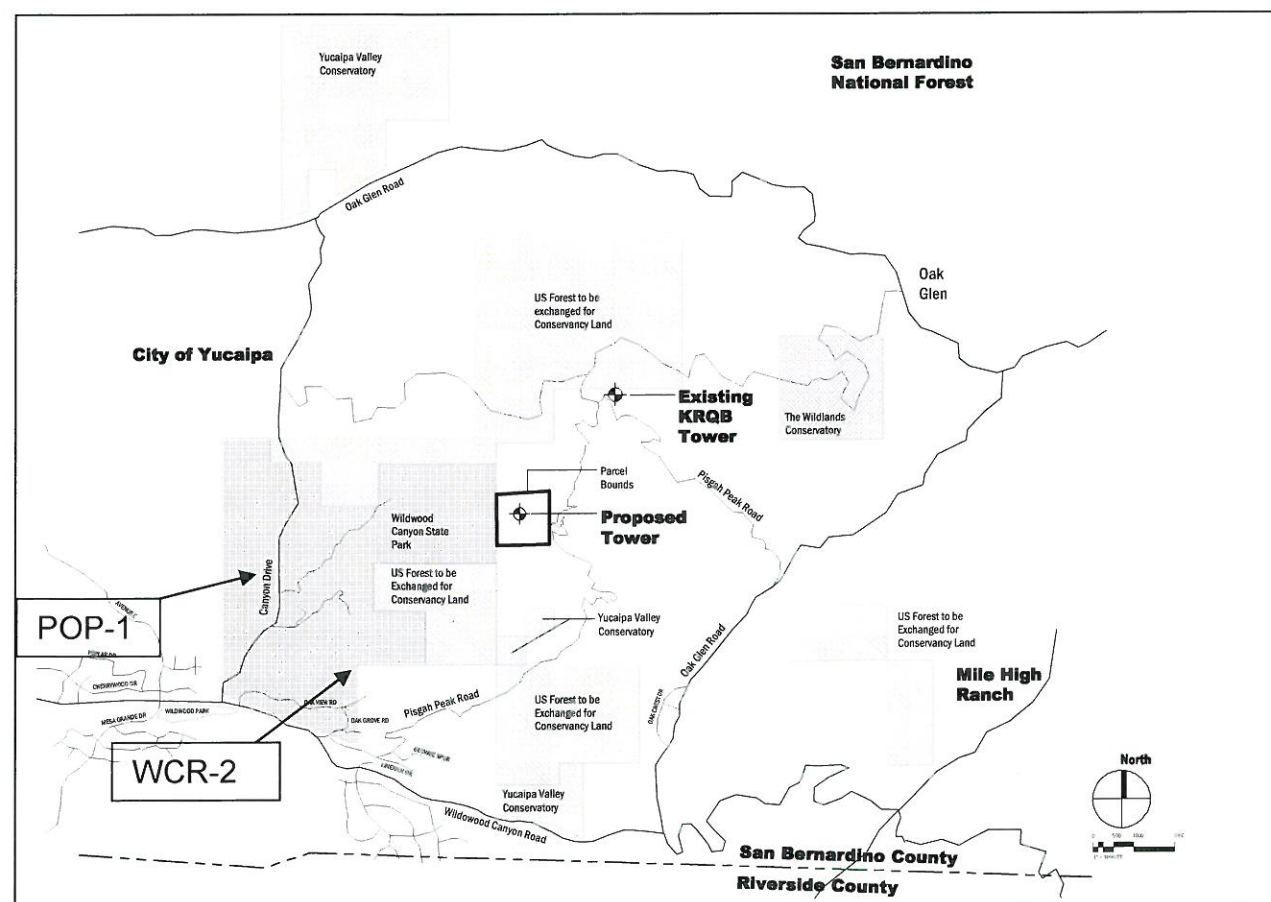
Conditional Use Permit and Major Variance – Fuel Mod Reduction

Land Use Services Dept. – County of San Bernardino



VIEW WCR-2: Northeast view from Wildwood Canyon Rd.

- Wildwood Canyon State Park is along left side of road
- 43 ft tall tower and one story 100 sq ft equipment shelter are not visible



VIEW POP-1: Looking east from Poplar Ave.

- Vantage is from residential area just west of Mesa Verde Rd.
- 43 ft tall tower and one story 100 sq ft equipment shelter have minimal visibility from this or any other improved residential locations