

LANCASTER EDUCATIONAL BROADCAST SERVICE

Minor Modification for LPFM, KLQS-LP, Facility 195731

BNPL - 20131114BXI

KLQS-LP, permittee of a new LPFM station for the area of Lancaster, California, respectfully requests a minor modification to allow the station to be licensed by the expiration of the Construction Permit on 02/06/2017. Since being permitted, unexpected problems have arisen regarding channel displacement and transmitter site availability that necessitates the permittee to request modifications in order to license a viable facility.

Since being permitted, the facility has been short spaced to a new full-power construction permit for station KHHT as illustrated below in Figure 1. Additionally, K256BS was granted a new Construction Permit moving their community of license from North Edwards to Palmdale. The conflict has not only produced a short-spacing issue, but also both K256BS and KLQS-LP are permitted to serve the Lancaster-Palmdale community on the same channel, namely channel 256. Therefore the two facilities will interfere with each other with the more powerful K256BS dominating since it is located closer to Lancaster while KLQS-LP is distanced roughly 14 miles from central Lancaster. Moreover, KLQS-LP is limited to 2 watts ERP due to higher elevation. See Figure 1.

As a consequence, a displacement channel is requested per Section 73.870(a)(1) which allows such modifications if licensee/permittee can demonstrate reduced interference on any other open channel.

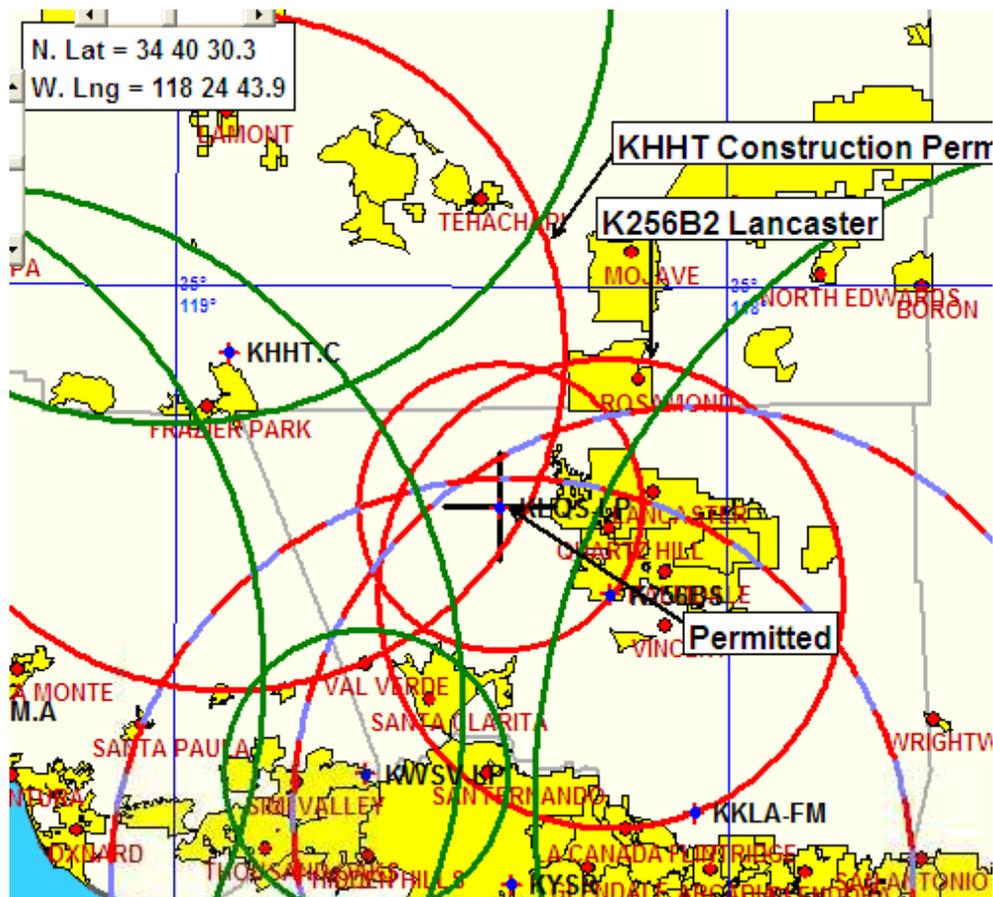


Figure 1: Current KLQS-LP CP: Spacing to KHHT and K256BS

Figure 2 (below) represents the co-channel interference with 2-watt KLQS-LP which is unable to service the population within the greater Lancaster area from the current site. (The stations are within 15 km of each other.)

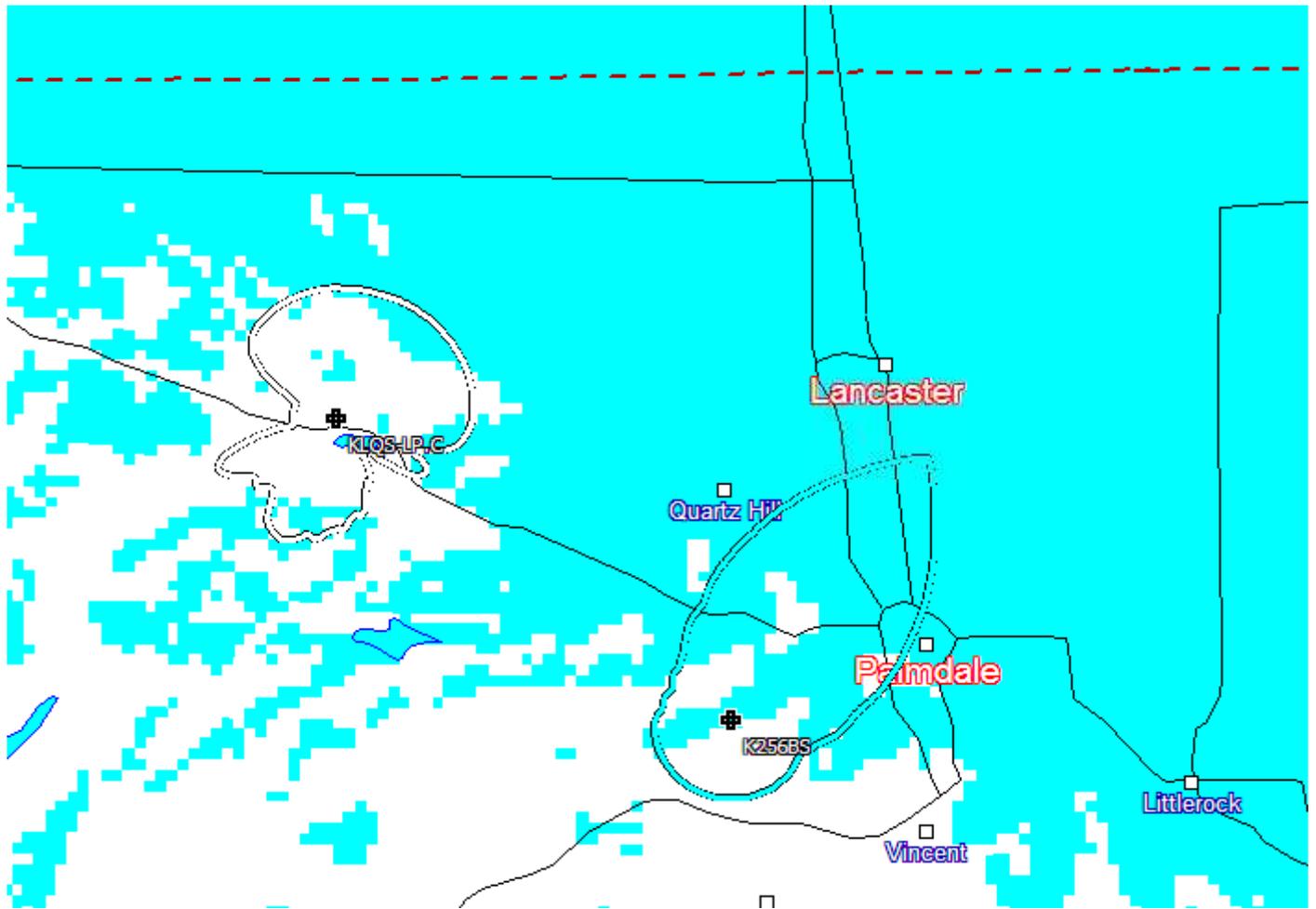


Figure 2: Interference from K256BS on co-channel to KLQS-LP in the Lancaster, CA area.

At the current location, there is no suitable channel available that allows for substantial population coverage.

The problems the KLQS-LP permittee has at the current proposed site are as follows:

- (A) Suitable power is not available to run the facility at the chosen site.
- (B) The area is mountainous necessitating the transmitter be placed on a mountain top. The available mountain-top sites are either too high in terms of HAAT to facilitate a LPFM facility, or only allow 1 to 2 watts ERP, which cannot overcome the incoming interference of the crowded Los Angeles County FM band. Figure 9 below shows the areas in which these peaks are located within the yellow circle.
- (C) At the current location, KLQS-LP is unable to service the population within the greater Lancaster area. The remaining service area is very sparsely populated.

(D) KLQS-LP, in seeking a new tower location, looked in all directions for a viable site:

(1) To the WEST is an area of no power, sites, or significant population within the Los Angeles National Forest (See Figure 9)

(2) To the NORTH is an unpopulated or sparsely populated area within the Mohave Desert.

(3) To the EAST is an area of significant population in Lancaster, CA. Looking at possibilities for channel relocation to accommodate a move towards Lancaster, one channel was found--92.7 FM. Relocation channel availability is seen in Figure 3.

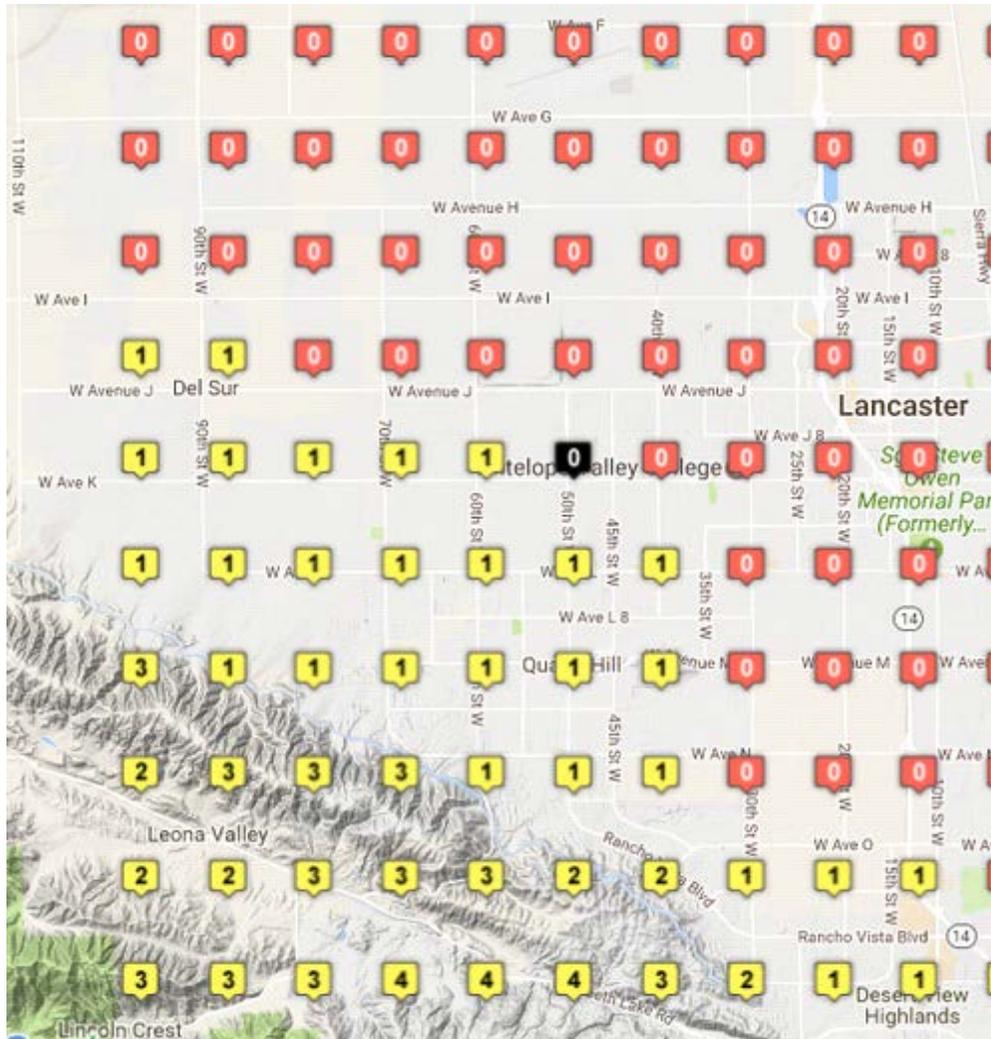


Figure 3: Number of channels available for relocation at each point. None are available in Lancaster itself.

The problem with relocating to 92.7FM is the incoming interference experienced from KYZA Adelanto, CA. Figure 4 shows levels even exceeding 60 dBu at the current site. Moving to the EAST, an area of mainly desert would be covered (Figure 5). Furthermore, viewing the incoming inference at this site from KYZA, no sizable population could be served (Figure 6).

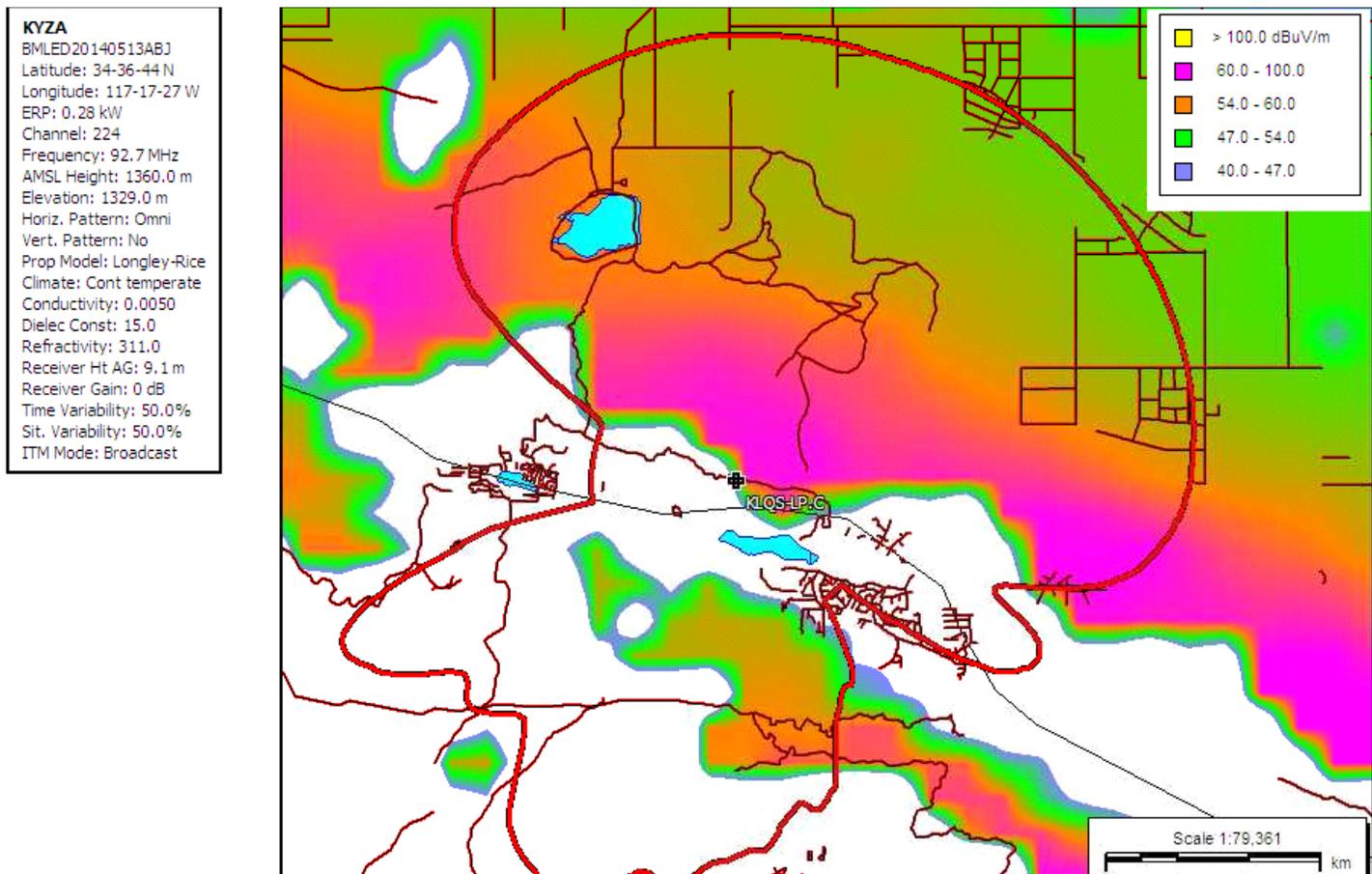


Figure 4: Incoming signal strength from KYZA at the current site. Levels exceeding 60 dBu exist from KYZA.



Figure 5: Hypothetical 60 dBu coverage area to the east primarily covering sparsely populated desert area.

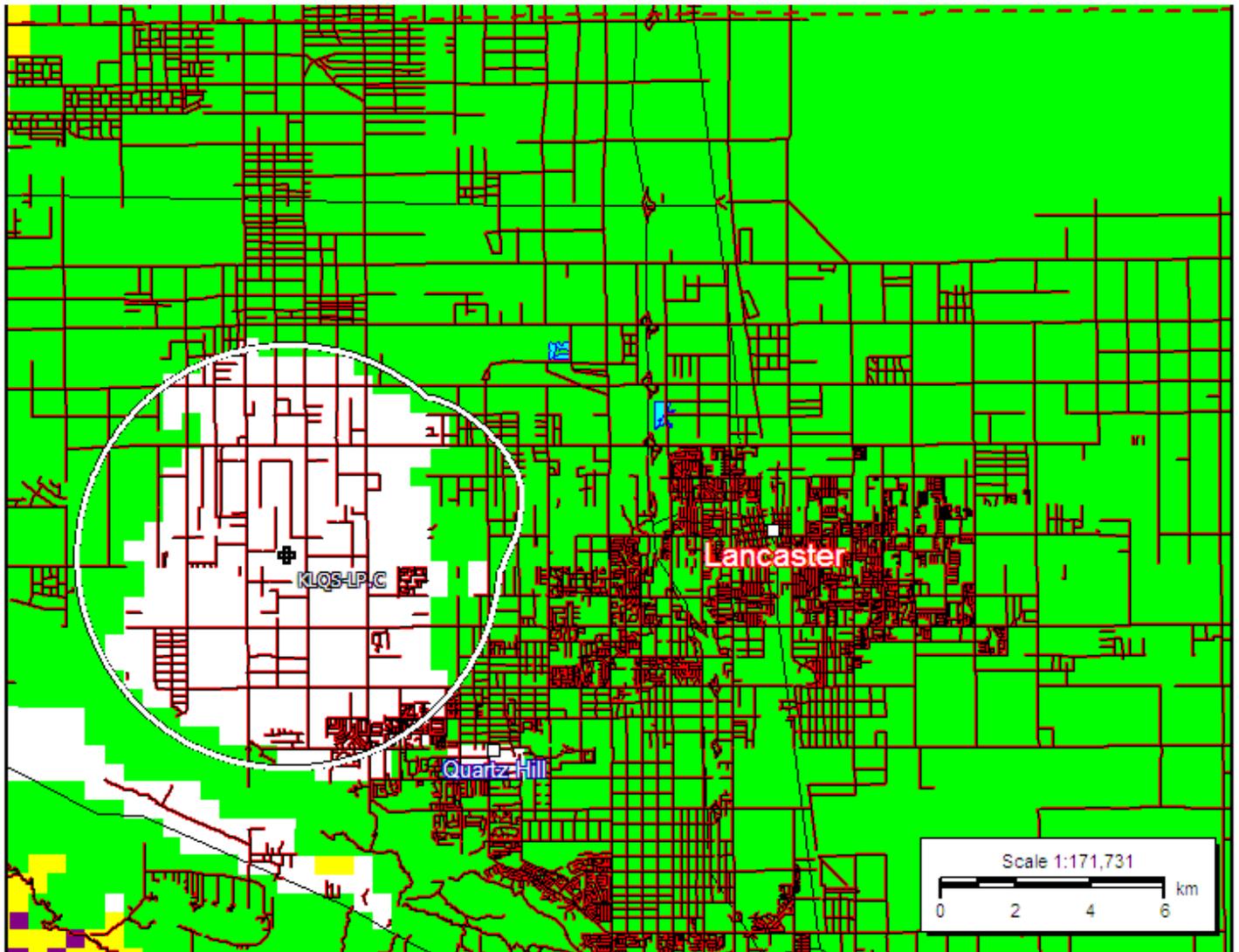


Figure 6: Desert coverage area within 60 dBu contour shown above with incoming interference from KYZA in light green.

Hypothetically, if we wanted to move towards the EAST, the following structures have been found that currently facilitate communications:

LA County Public Works 12m
 Antelope Valley High School 12 m
 TCW 12m
 Westside School District 10.6 m
 TCW 15 m

American tower 54 m
 SBA 18 m

See Figure 7 with antenna/tower locations.

The first group of structures described above are all too low. A higher 30 meter tower is needed to provide enough power to overcome incoming interference. It is also our understanding space cannot be leased on these towers in any case.

The American tower site is suitable, but issues exist with use of this facility:

(a) Even if we wanted to move to the only tower capable of providing 30 meters of height that is available (American Tower Site), incoming interference is not negotiable. Most of the proposed 60 dBu coverage area is impacted by incoming interference (Figure 8).

(b) Not enough time exists for structural and frequency studies, and signing a contract with American Tower.

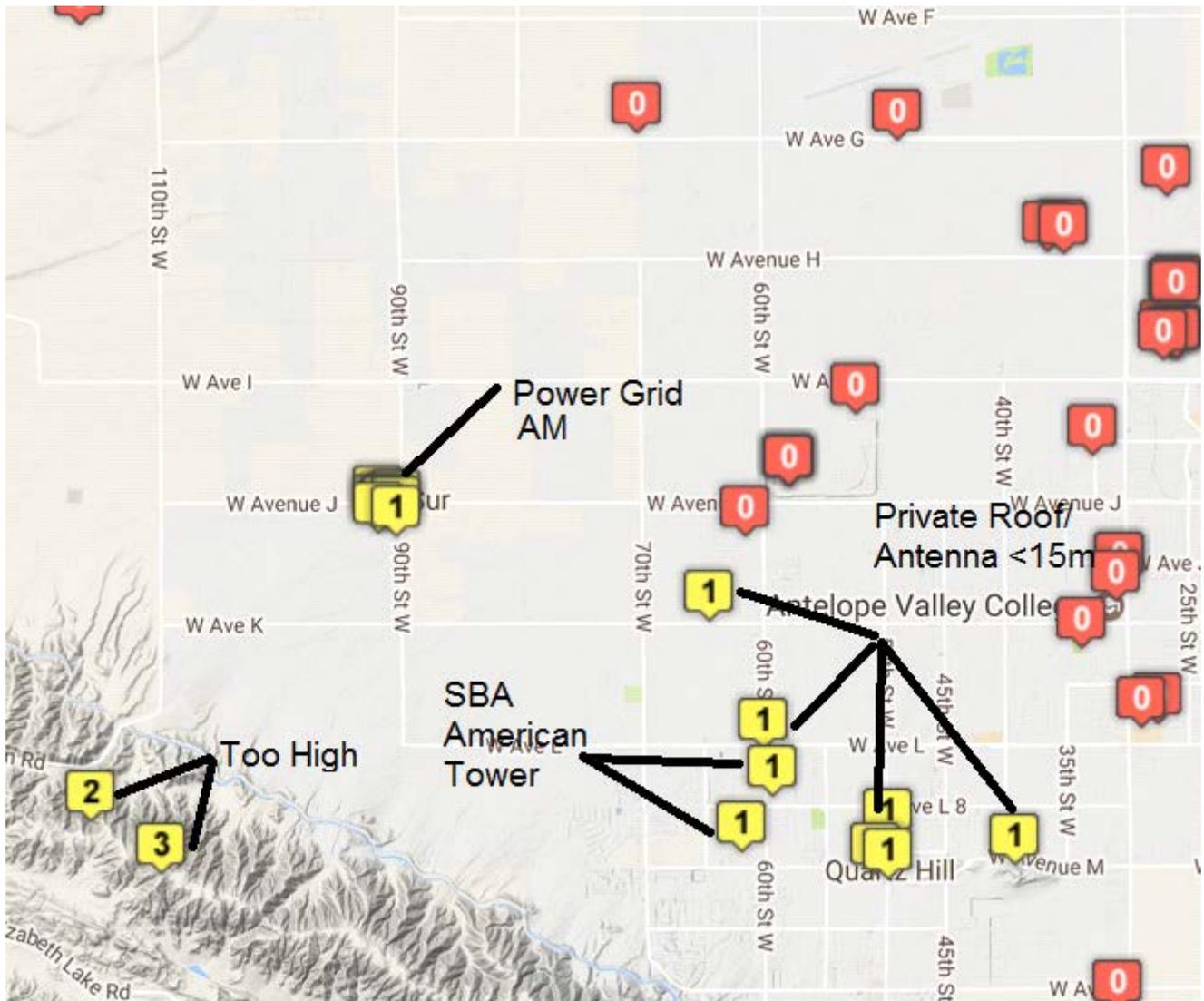


Figure 7: Co-location areas (Tower/Antenna) queried from database regardless of availability (Yellow).

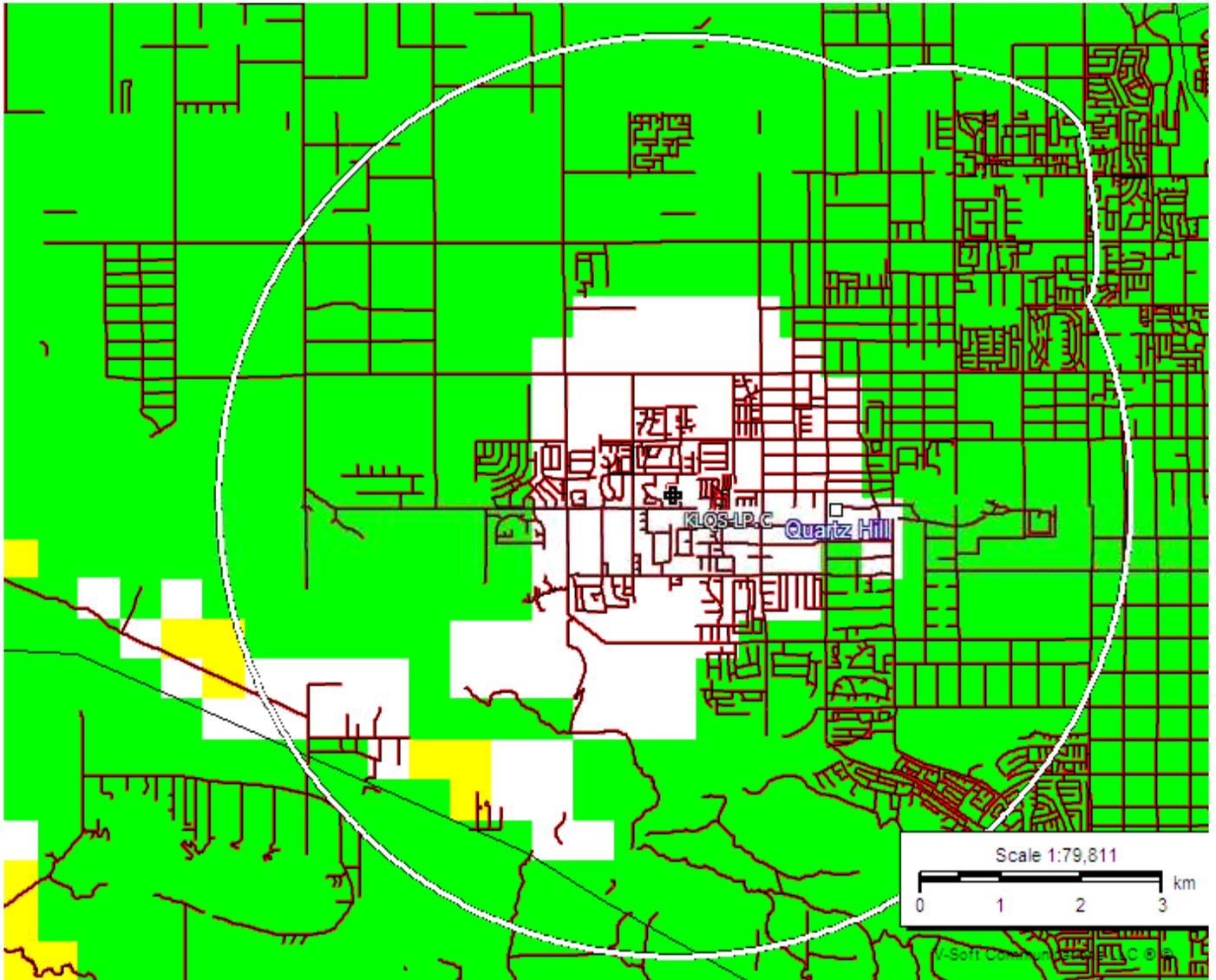


Figure 8: Incoming interference (light green) from KYZA at the American Tower site.

To sum up, relocating to the EAST is not viable due to lack of available channels, unavailability of suitable towers, sparse population covered, and significant incoming interference.

(4) Relocation to the SOUTH is the most viable option. Many relocation channels exist in this direction (Figure 3). However, the Los Angeles National Forest (shown in Green in Figure 9) is an area where it is difficult or impossible to obtain permission for new construction.

Therefore, the permittee proposes moving to the nearest viable location beyond the National Forest which is approximately 12.7 miles to the south (See Figure 9 below).

In a similar case, a LPFM permittee in Castaic, CA, BMPL-20140623AAG, was granted a waiver to move a substantial distance across the Los Angeles National Forest to the nearest location offering a viable site.

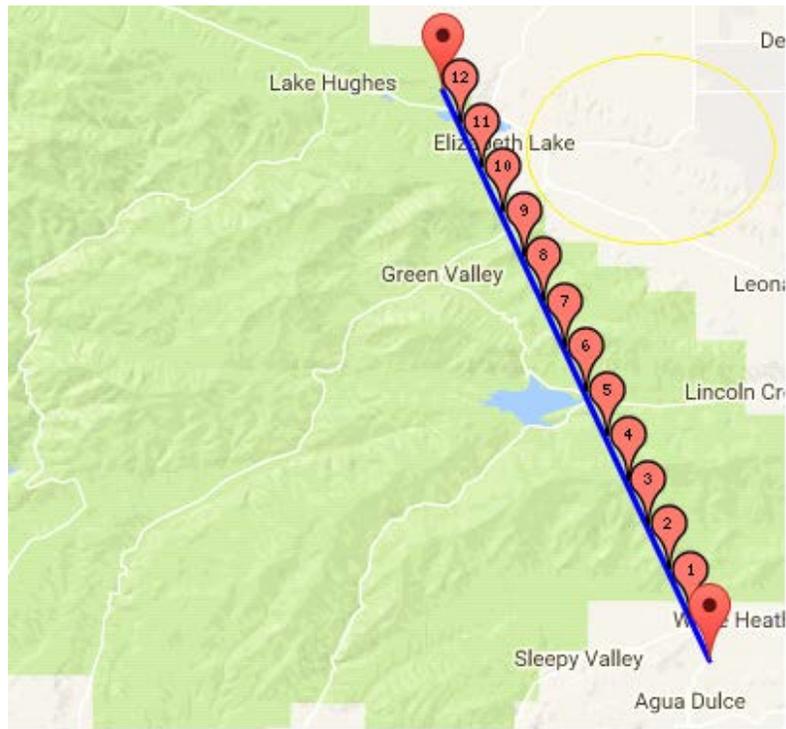


Figure 9: Relocation vector, across National Forest land.

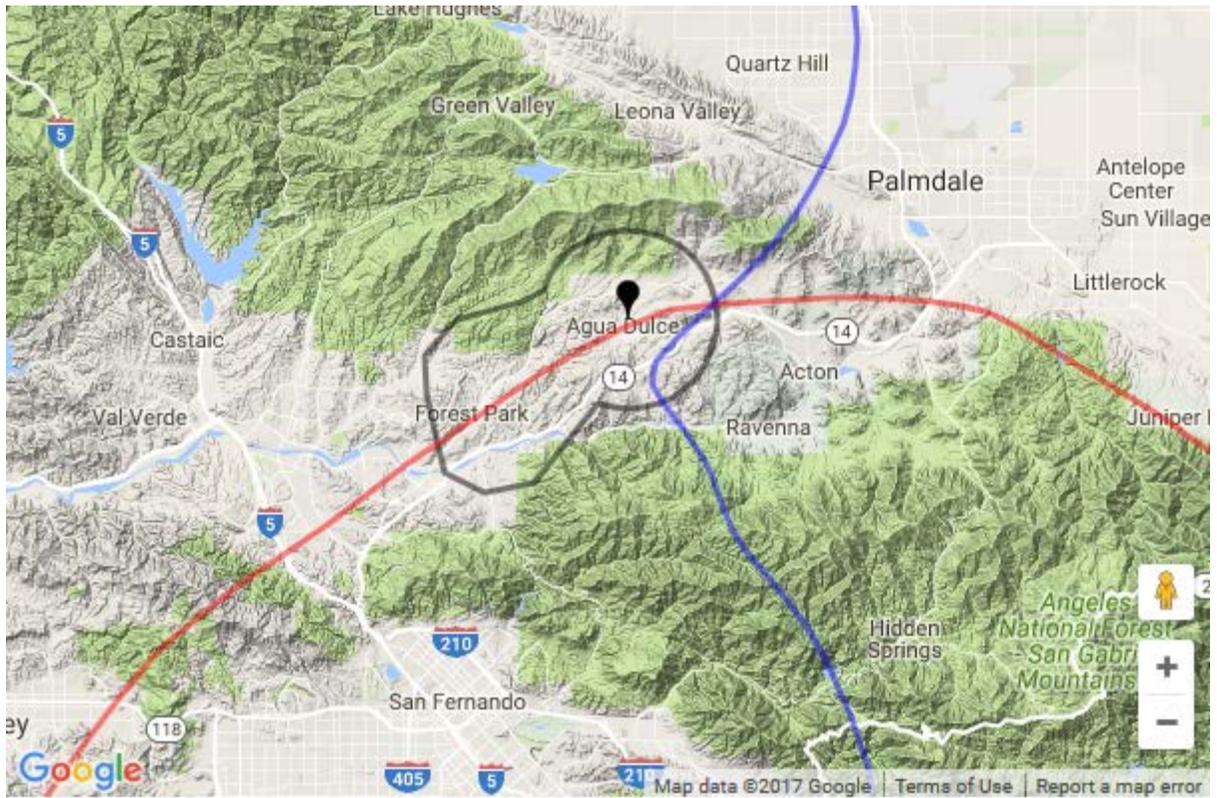
Waiver Request

Permittee respectfully requests a waiver to move a distance greater than 5.6 km due to the very limited amount of relocation sites within the mountainous Los Angeles National Forest.

Channel Displacement Request

Permittee respectfully requests channel relocation to channel 244 where there is less interference.

The proposed site lies 91.3 km away from co-channel KWIZ Santa Ana at the edge of its 40 dBu contour behind a high mountain range, and 69 km away from co-channel KLJR-FM (280 watts ERP) Santa Paula near the edge of its 40 dBu contour. The proposed channel is expected to have considerably less incoming interference. Refer to Figure 10.



Call Sign	Community	Chan Class	Dist	Min Req'd	ERP	Effective HAAT	Max Interf. Contour	Est. Field Strength
KWIZ	SANTA ANA CA	244A	91.3	67	6	128.0	40	39.900
KLJR-FM	SANTA PAULA CA	244A	68.8	67	0.28	344.6	40	41.800

Figure 10: Estimated co-channel interference contours from KWIZ and KLJR-FM relative to Proposed.

Coordinates/Elevation/Channel

Nad83 Lat: 34 30 30.0 N Long: 118 19 7.1 W
 Nad27 Lat: 34 30 30.0 N Long: 118 19 03.8 W
 Elevation 799.2 m (Ground) + 10 m = 809.2 m
 Channel 244

Spacing

Lancaster Educational Broadcast Service

REFERENCE
34 30 30.0 N.
118 19 03.8 W.

CLASS = L1 Int = L1
Current Spacing to 2nd Adj.

DISPLAY DATES
DATA 04-08-16
SEARCH 01-20-17

----- Channel 244 - 96.7 MHz -----

Call	Channel	Location	Azi	Dist	FCC	Margin
* KXOL-FM	LIC-Z 242B	Los Angeles	CA 171.0	35.00	66.5	-31.5
* KAMP-FM	LIC-D 246B	Los Angeles	CA 143.5	38.85	66.5	-27.7
KLJR-FM	LIC 244A	Santa Paula	CA 253.1	69.27	66.5	2.8
K242CR	CP -D 242D	Palmdale	CA 79.6	16.92	13.5	3.4
NEW	CP 244L1	North Hollywood	CA 180.4	32.66	23.5	9.2
KFXM-LP	LIC 244L1	Lancaster	CA 20.8	37.89	23.5	14.4
KPSL-FM	LIC 243B	Bakersfield	CA 334.6	120.28	96.5	23.8
KWIZ	LIC-D 244A	Santa Ana	CA 148.4	91.95	66.5	25.5
KCAL-FM	LIC 244A	Redlands	CA 109.8	100.98	66.5	34.5

Reference station has protected zone issue: Mexico
All separation margins include rounding

* Waiver Request, Second Adjacent

Spacing Map

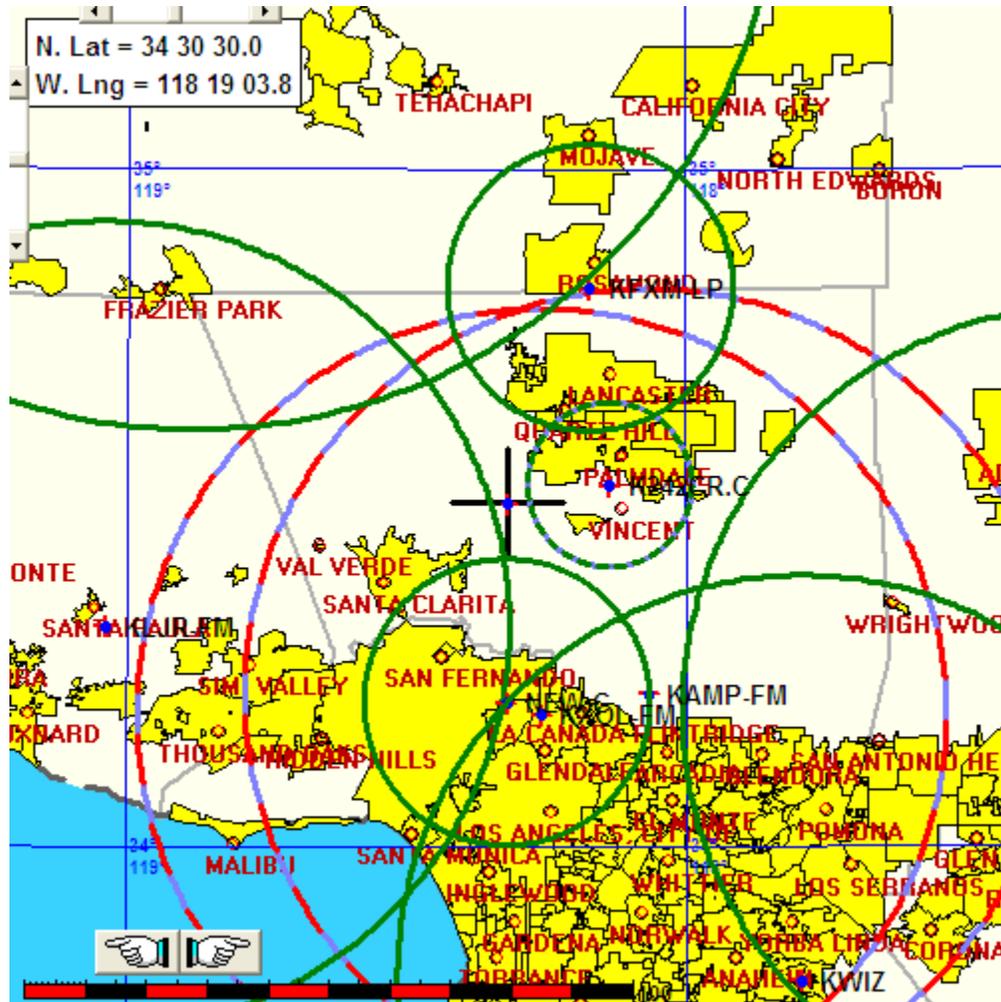


Figure 11: Spacing Map

Second Adjacent Waiver Request: Proposed resides short-spaced to second adjacent channels KXOL and KAMP. U/D analysis was undertaken; it was found that Proposed lies outside of the 54 dBu protected contours of KXOL and KAMP (and the 60 dBu of K242CR), providing no interference within all three protected contours. See Figure 12.

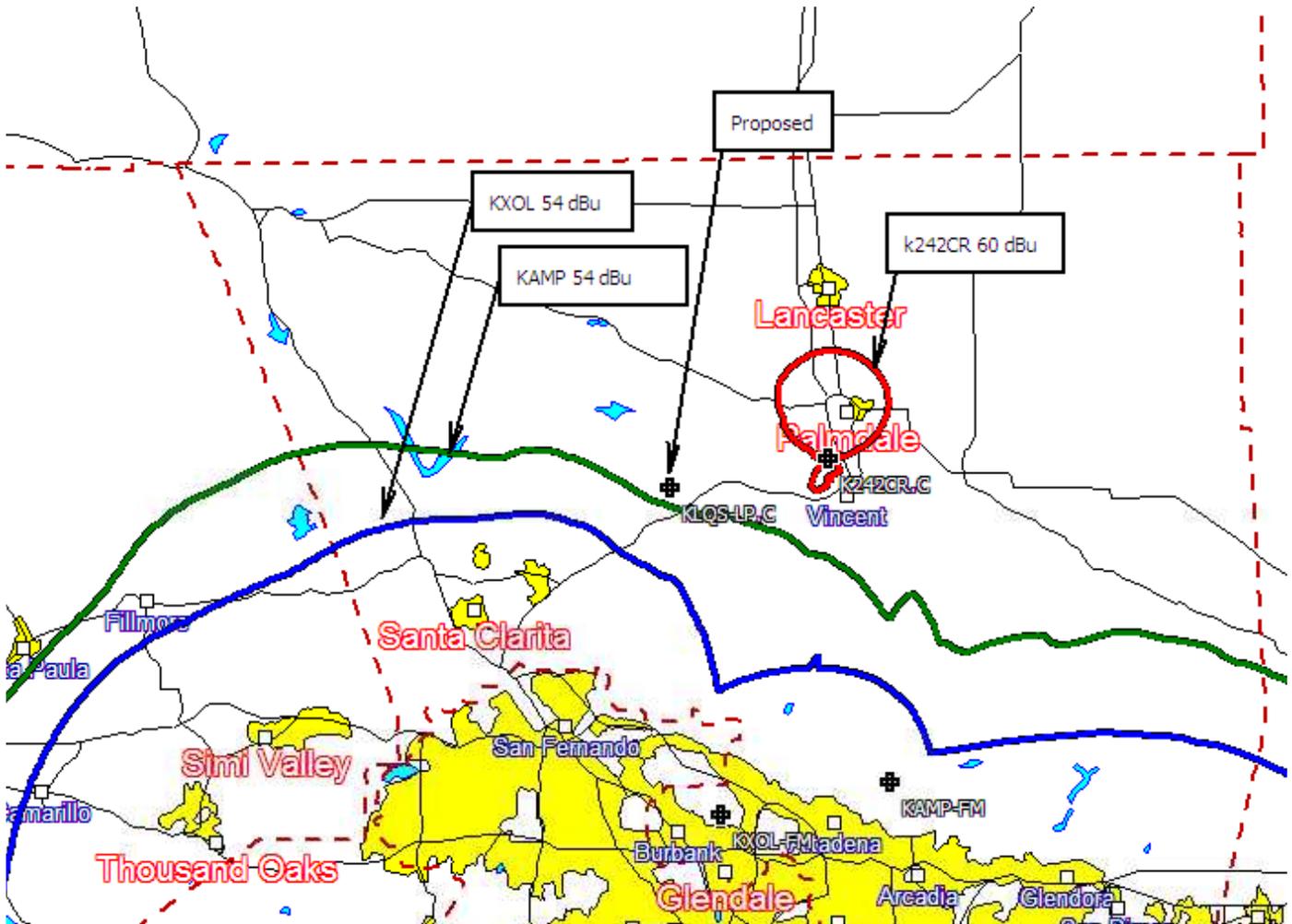


Figure 12: Protected Channel Spacing.