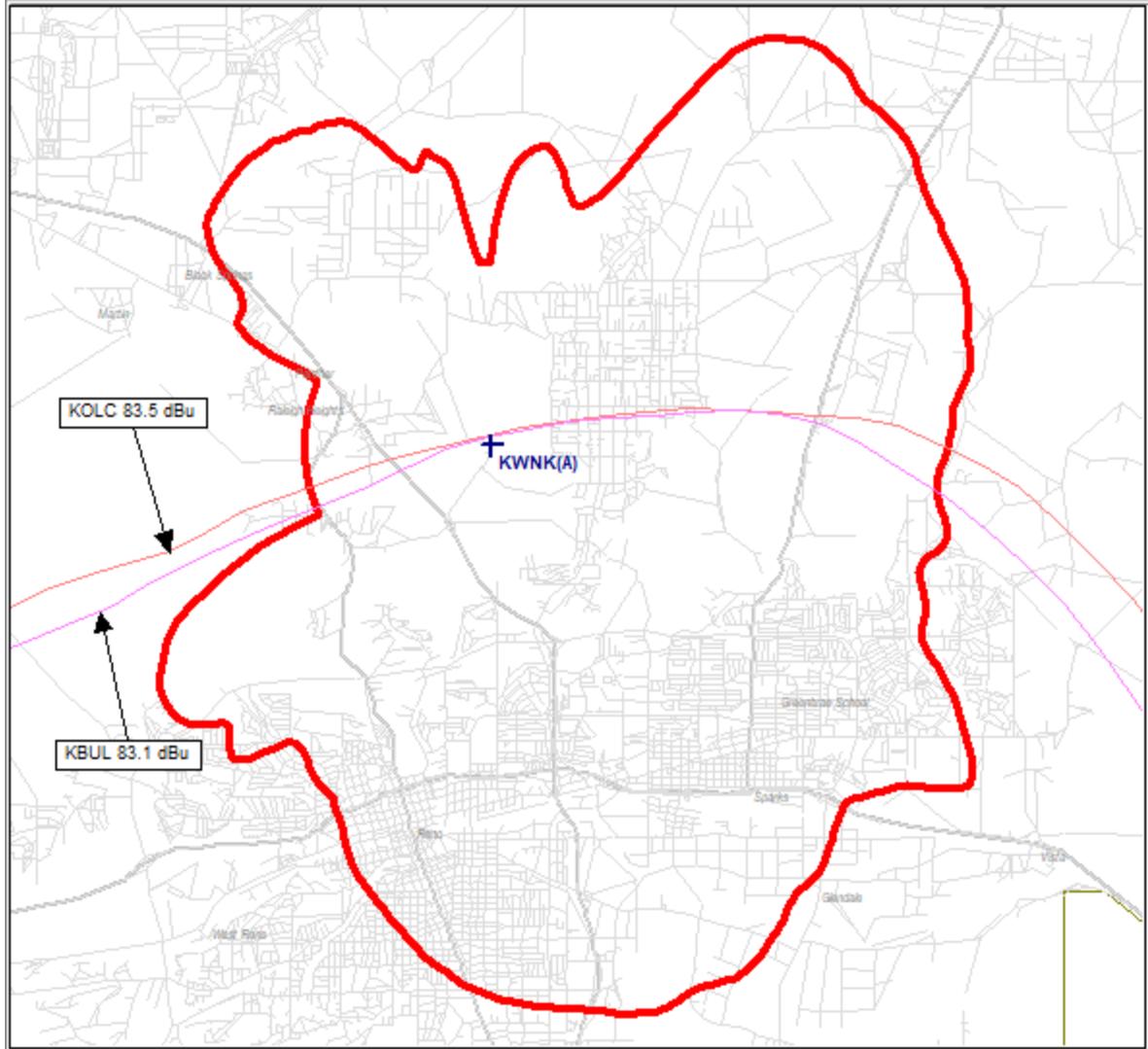




REC Broadcast Services  
11541 Riverton Wharf Rd.  
Mardela Springs, MD 21837  
844.REC.LPFM/202.621.2355  
recnet.com

Minor CP Modification for **KWNK-LP**  
**RENO, NV**  
**RENO BIKE PROJECT**  
**BMPL-20160203ABL**

### PROPOSED 60dBu F(50,50) SERVICE CONTOUR



RENO, NV – Channel 249L1 (97.7 MHz) ~ ERP 0.007 kW  
Elev: 1655 meters ~ RCAGL: 15 meters ~ RCAMSL: 1670 meters ~ HAAT: 110m (FCC30)  
Overall tower height: 56.4 meters – ASR: None  
NAD83 Latitude: 39° 35' 01.7" NL – Longitude: 119° 47' 58.7" WL  
NAD27 Latitude: 39° 35' 02.0" NL – Longitude: 119° 47' 55.0" WL

**CHANNEL REPORT FOR CURRENTLY AUTHORIZED SITE**

R E C NETWORKS  
CHANNEL REPORT

NAD27 LATITUDE: 39 - 35' 02.9" - LONGITUDE: 119 - 48' 05.2"  
CHANNEL: 249 - CLASS: LPFM(LP-100)

CHAN	FREQ	CALL	LOCATION	CLS	DIST	REQ	CLEAR	BEAR
247	97.3	KOLC : AMERICOM LIMITED PARTNERSHIP	CARSON CITY	NV C	37.1	93.0	-55.9	167.8
249	97.7	KHHZ : DEER CREEK BROADCASTING, LLC	GRIDLEY	CA B1	130.0	87.0	43.0	266.5
249	97.7	KWNK-LP : RENO BIKE PROJECT : Currently authorized facility.	RENO	NV L1	0.0	24.0	-24.0	253.8
249	97.7	K249ES : RENO MEDIA GROUP, L.P. : Rounded to 37 km.	CARSON CITY	NV D8	37.1	39.0	-1.9	167.8
249	97.7	NEW : AMERICOM LIMITED PARTNERSHIP : Rounded to 0 km.	RENO	NV D7	0.2	39.0	-38.8	96.4
251	98.1	KBUL-FM : RADIO LICENSE HOLDING CBC, LLC	CARSON CITY	NV C	37.1	93.0	-55.9	166.7

**CHANNEL REPORT FOR PROPOSED SITE**

R E C NETWORKS  
CHANNEL REPORT

NAD27 LATITUDE: 39 - 35' 02.0" - LONGITUDE: 119 - 47' 55.0"  
CHANNEL: 249 - CLASS: LPFM(LP-100)

CHAN	FREQ	CALL	LOCATION	CLS	DIST	REQ	CLEAR	BEAR
247	97.3	KOLC : AMERICOM LIMITED PARTNERSHIP	CARSON CITY	NV C	37.1	93.0	-55.9	168.2
249	97.7	KHHZ : DEER CREEK BROADCASTING, LLC	GRIDLEY	CA B1	130.2	87.0	43.2	266.5
249	97.7	KWNK-LP : RENO BIKE PROJECT : Currently authorized facility.	RENO	NV L1	0.2	24.0	-23.8	276.4
249	97.7	K249ES : RENO MEDIA GROUP, L.P. : Rounded to 37 km.	CARSON CITY	NV D8	37.1	39.0	-1.9	168.2
249	97.7	NEW : AMERICOM LIMITED PARTNERSHIP : Rounded to 0 km.	RENO	NV D7	0.0	39.0	-39.0	324.2
251	98.1	KBUL-FM : RADIO LICENSE HOLDING CBC, LLC	CARSON CITY	NV C	37.1	93.0	-55.9	167.0

Site: KWNK(A)  
 Coordinates: 39-35-02.0 N, 119-47-55.0 W  
 Freq: 97.70000 MHz  
 ERP: 7.00 W

Bearing	ERP W	HAAT	DH	Distance	Lat	Lon
0	7.00	34	550	3.06	39.611379	-119.798611
5	7.00	71	900	4.50	39.624168	-119.794036
10	7.00	83	760	4.85	39.626878	-119.788770
15	7.00	68	530	4.40	39.622135	-119.785307
20	7.00	58	420	4.06	39.618197	-119.782401
25	7.00	82	550	4.82	39.623205	-119.774810
30	7.00	175	440	7.00	39.638426	-119.757720
35	7.00	224	660	7.93	39.642284	-119.745503
40	7.00	237	650	8.17	39.640147	-119.737295
45	7.00	230	860	8.04	39.634982	-119.732246
50	7.00	233	980	8.09	39.630659	-119.726209
55	7.00	229	940	8.02	39.625226	-119.721923
60	7.00	219	730	7.84	39.619109	-119.719362
65	7.00	216	720	7.78	39.613444	-119.716265
70	7.00	217	910	7.80	39.607855	-119.713041
75	7.00	210	880	7.67	39.601717	-119.712114
80	7.00	205	730	7.58	39.595692	-119.711523
85	7.00	186	450	7.22	39.589519	-119.714698
90	7.00	180	310	7.10	39.583862	-119.715703
95	7.00	173	500	6.97	39.578403	-119.717630
100	7.00	184	510	7.18	39.572650	-119.716114
105	7.00	174	540	6.98	39.567607	-119.719900
110	7.00	184	420	7.18	39.561781	-119.719906
115	7.00	196	550	7.41	39.555710	-119.720298
120	7.00	249	570	8.38	39.546179	-119.713970
125	7.00	296	490	9.15	39.536628	-119.711149
130	7.00	252	610	8.43	39.535123	-119.723289
135	7.00	226	490	7.96	39.533228	-119.732946
140	7.00	240	550	8.22	39.527232	-119.736990
145	7.00	259	570	8.55	39.520868	-119.741416
150	7.00	281	600	8.92	39.514399	-119.746612
155	7.00	304	660	9.27	39.508316	-119.752939
160	7.00	302	630	9.24	39.505781	-119.761766
165	7.00	310	620	9.36	39.502613	-119.770387
170	7.00	296	590	9.15	39.502797	-119.780079
175	7.00	285	320	8.98	39.503411	-119.789486
180	7.00	272	290	8.77	39.504984	-119.798611
185	7.00	251	750	8.41	39.508500	-119.807160
190	7.00	223	940	7.91	39.513834	-119.814623
195	7.00	194	1060	7.37	39.519868	-119.820849
200	7.00	159	1110	6.69	39.527311	-119.825309
205	7.00	130	1170	6.07	39.534440	-119.828509
210	7.00	116	910	5.77	39.538942	-119.832259
215	7.00	121	760	5.88	39.540599	-119.837914
220	7.00	143	980	6.35	39.540102	-119.846247
225	7.00	140	770	6.29	39.543888	-119.850472
230	7.00	152	540	6.55	39.546020	-119.857119
235	7.00	141	530	6.31	39.551323	-119.858906
240	7.00	112	530	5.67	39.558365	-119.855927
245	7.00	64	660	4.27	39.567640	-119.843797
250	7.00	-9	550	2.90	39.574957	-119.830443
255	7.00	-127	420	2.90	39.577129	-119.831333
260	7.00	-236	300	2.90	39.579353	-119.831974
265	7.00	-311	510	2.90	39.581611	-119.832361
270	7.00	-314	830	2.90	39.583887	-119.832491
275	7.00	-305	690	2.90	39.586162	-119.832363
280	7.00	-248	800	2.90	39.588421	-119.831978
285	7.00	-129	550	2.90	39.590645	-119.831340
290	7.00	0	430	2.90	39.592818	-119.830452
295	7.00	64	590	4.27	39.600125	-119.843818
300	7.00	70	340	4.46	39.603963	-119.843752
305	7.00	97	190	5.27	39.611058	-119.848993
310	7.00	115	310	5.75	39.617101	-119.850006
315	7.00	120	280	5.85	39.621113	-119.846946
320	7.00	124	440	5.94	39.624797	-119.843183
325	7.00	123	770	5.92	39.627480	-119.838244
330	7.00	117	720	5.79	39.629003	-119.832431
335	7.00	113	430	5.70	39.630329	-119.826729
340	7.00	92	380	5.12	39.627147	-119.819053
345	7.00	73	370	4.55	39.623464	-119.812378
350	7.00	75	250	4.62	39.624779	-119.807971
355	7.00	36	390	3.16	39.612170	-119.801823

**WAIVER OF §73.807(a) REQUEST**  
**SHORT-SPACED SECOND ADJACENT CHANNEL**

KRBP-LP  
Reno, Nevada  
Channel 249L1 (97.7 MHz)

The proposed modification is second-adjacent channel short-spaced to full-power stations KOLC, Carson City, Nevada (Facility ID # 53706) and KBUL-FM, Carson City, Nevada (Facility ID # 11245).

KOLC operates on Channel 247C with 87 kW at 637 meters height above average terrain using a non-directional antenna. KOLC places an 83.5 dBu service contour at the proposed LPFM location. KBUL-FM operations on Channel 251C with 74 kW at 699 meters above average terrain using a non-directional antenna. KBUL-FM places an 83.1 dBu service contour at the proposed LPFM location. When short spaced to multiple stations, the station with the weaker field strength is the one that is further examined. In this case, KBUL-FM.

Using the U/D method<sup>1</sup>, the proposed LPFM station is predicted to produce an undesired interference overlap in respect to KBUL-FM to the proposed LPFM station's 123.1 dBu interference contour ("overlap zone"). At 7 watts ERP, the overlap zone extends to 13 meters from the radiation center.

As the proposed facility is specifying operation with a radiation center of 15 meters above ground level, the 123.1 dBu interference contour of the LPFM station will not reach the ground. The 123.5 dBu interference contour needed to protect KOLC is completely encompassed by the 123.1 dBu interference contour needed to protect KBUL-FM. Furthermore, the proposed site is at a mountaintop communications site and there are no nearby tall buildings or other occupied spaces nearby that the 123.1 dBu interference contour can penetrate.

Based on these findings, the proposed modified LPFM station will not create any interference to listeners or potential listeners of KOLC and KBUL-FM. Reno Bike Project is requesting a waiver of §73.807(a) in respect to second-adjacent channel short-spaced stations KOLC and KBUL-FM, both in Carson City, Nevada.

Prepared by  
Michelle Bradley  
REC Broadcast Services  
September 5, 2017

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<sup>1</sup> - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).



## Antenna Height Above Average Terrain Calculations -- Results

### Input Data

Latitude 39° 35' 2" North  
Longitude 119° 47' 55" West (NAD 27)

These coordinates convert to NAD 83 coordinates of  
39° 35' 01.68", North, 119° 47' 58.69" West (NAD 83).

Height of antenna radiation center above mean sea level: **1670 meters AMSL**

Number of Evenly Spaced Radials = **8** 0° is referenced to True North

### Results

**Calculated HAAT = 110 meters**

Antenna Height Above Average Terrain calculated  
using FCC 30 second terrain database (continental USA only)

#### Individual "Radial HAAT" Values, in meters

0°	34.4 m
45°	230.0 m
90°	178.4 m
135°	225.0 m
180°	272.5 m
225°	134.9 m
270°	-318.6 m
315°	121.4 m