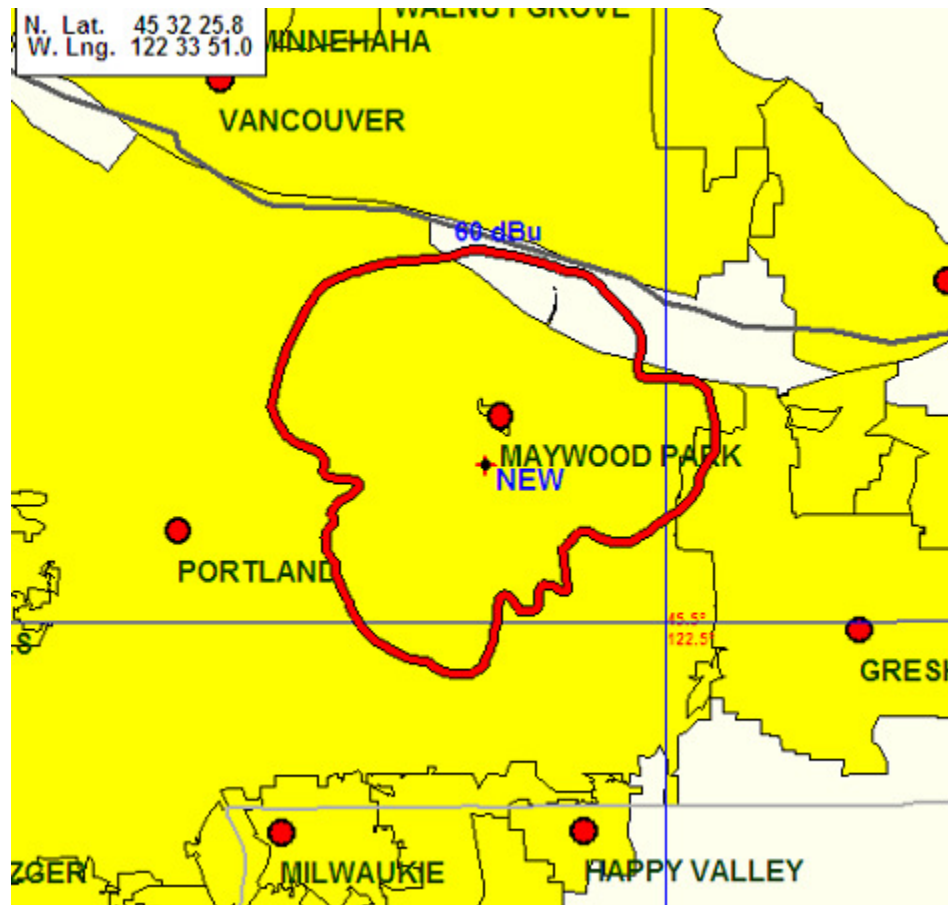


**PROPOSED MINOR AMENDMENT TO PENDING LPFM FACILITY  
PORTLAND, OREGON FOR CASCADE COMMUNITY RADIO**

**File No. BNPL-20131114BUM - Fac. ID No. 196380**

NAD 83	45-32-25.9N 122-33-54.9 W
NAD 27	45-32-25.8 N 122 33 51.0 W
ASRN	1036952
GROUND	157.9
AGL	12.2
AMSL	75.2 m
HAAT	86
WATTS	11
CHANNEL	268

**PROPOSED FCC 60 DBU**



## PROPOSED SPACING

Cascade Community Radio

REFERENCE		DISPLAY DATES
45 32 25.8 N.	CLASS = L1 Int = L1	DATA 11-17-
	14	
122 33 51.0 W.	Current Spacings to 2nd Adj.	SEARCH 12-18-
	14	
----- Channel 268 - 101.5 MHz -----		
--		

Call	Channel	Location	Azi	Dist	FCC	Margin
-----						
KXL-FM	LIC	266C	Portland	OR	258.4	13.46 92.5 -79.0
KINK	LIC-N	270C	Portland	OR	258.5	13.46 92.5 -79.0
1640517	APP	268L1	Portland	OR	344.8	1.23 23.5 -22.3
NEW	CP	268L1	Portland	OR	236.1	24.31 23.5 0.8
KDOA	CP -Z	268C3	The Dalles	OR	91.4	92.10 77.5 14.6
K268BN	LIC-D	268D	Eufaula/longview	WA	342.2	72.86 38.5 34.4
KFLY	LIC	268C0	Corvallis	OR	209.3	158.72 121.5 37.2

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

### NOTES:

- \* SEE SECOND ADJACENT WAIVER REQUEST BELOW
- \*\* MX'D APPLICATION

## SECOND ADJACENT WAIVER REQUEST

Using U/D methodology, the proposed relocation will provide zero-population interference overlap areas with both second-adjacent channels:

Call	COL	Chan
KINK	PORTLAND OR	270
KXL	PORTLAND OR	268

KINK: At the proposed location signal strength of KINK is 99.2 dBu (see Map, next page). Interference will occur when the interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 139.2 dBu contour. The distance to this contour, using free space method, is:

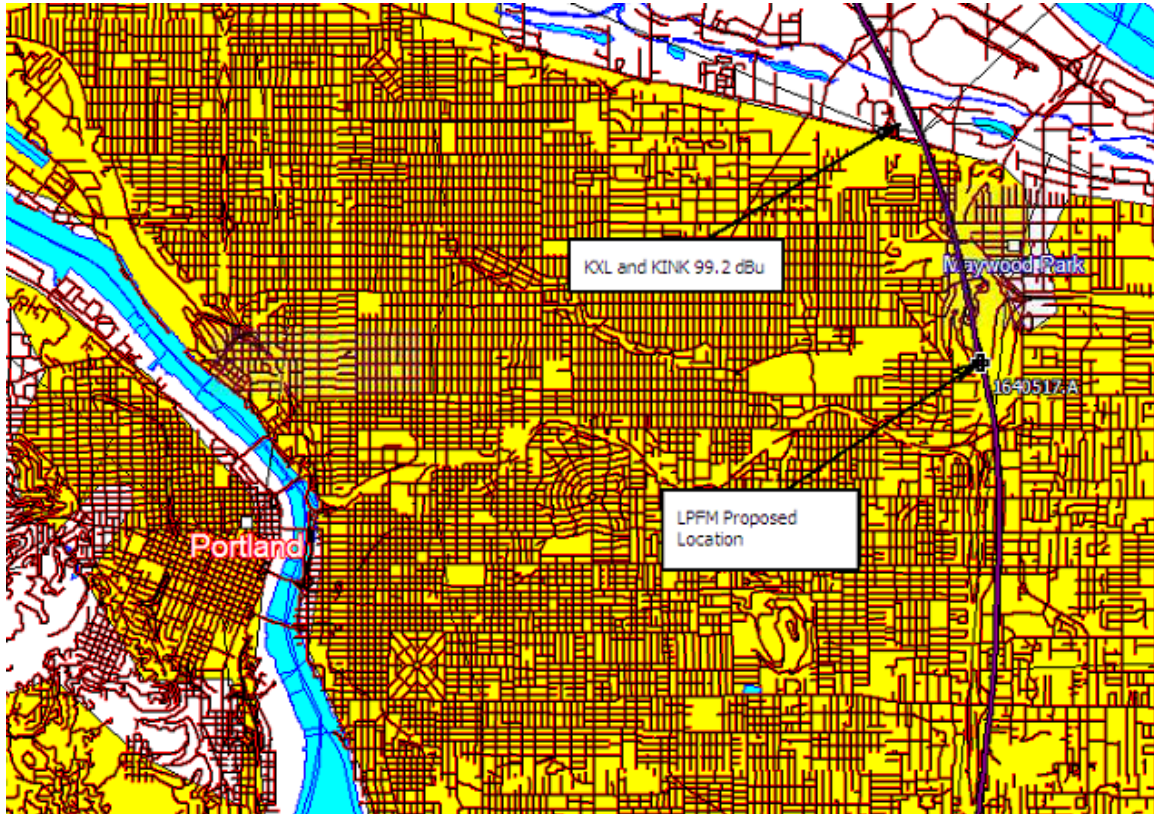
$D = (7.01 * P^{1/2}) / E$ , where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

D = 2.5 meters.

KXL: At the proposed location signal strength of KRTN is 99.2 dBu (see Map, next page). Interference will occur when the interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 139.2 dBu contour. The distance to this contour, using free space method, is:

D = 2.5 meters

The antenna is proposed to be 12.2 meters above ground. The antenna's interference radius is 2.5 meters. That means the interference area resides 9.7 meters above ground, far above populated area at a fenced-off tower site.

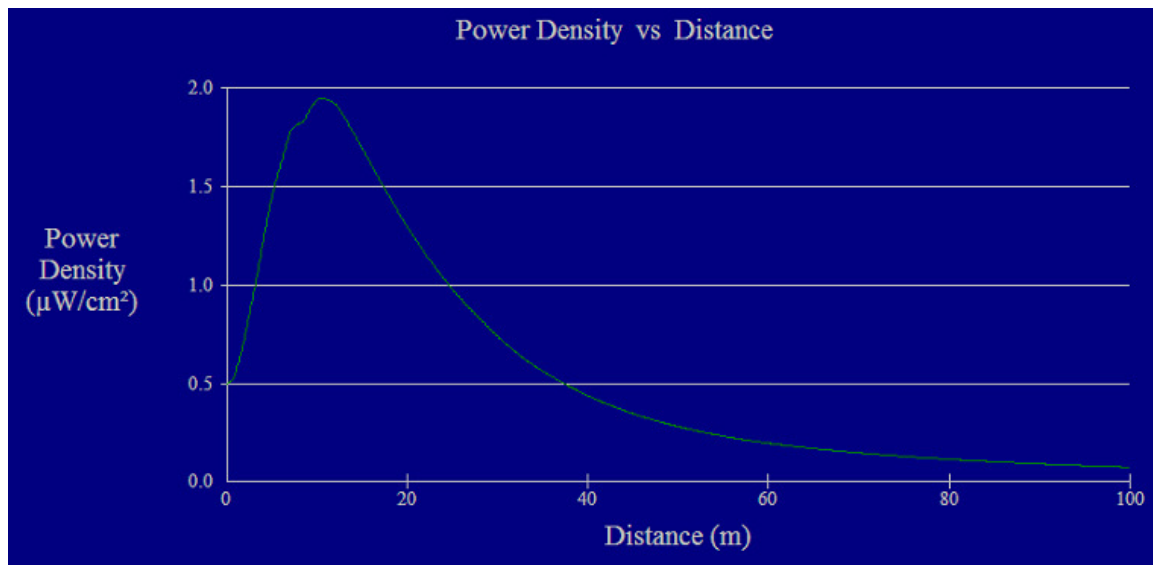


KXL/KINK Field Strength at proposed transmitter site.

## NON-IONIZING ELECTROMAGNETIC RADIATION (NEIR) ANALYSIS

The Effective Radiated Power for proposed will be 11 watts, mounted on a tower at 12.2 m AGL. The OET program *FM Model* for Windows, Version 2.10 Beta was used to determine the maximum predicted RF exposure. The settings used were:

Antenna: Jampro Double V  
Vertical ERP (W): 11  
Horizontal ERP (W): 11  
Antenna Height (m): 12.2  
Number of Elements: 1



For these settings, the maximum predicted RF exposure for a human standing on the ground would be less than  $2 \mu\text{W}/\text{cm}^2$  at 10.4 m. This represents less than 2% of the FCC Maximum Permissible Exposure (MPE) of  $200 \mu\text{W}/\text{cm}^2$  for uncontrolled environments. 47 CFR 1.1307(b)(3) exempts applicants from preparing an Environmental Assessment when the predicted exposure levels when the predicted exposure levels would be less than 5% of the FCC limits.

The antenna site is surrounded by fence and will have a no climbing with a warning sign to potential climbers. Facility is on private property. If work on tower is required facility will be temporarily powered down.