

**W209AE**

**Western North Carolina Public Radio, Inc.**

**Cullowhee, North Carolina**

**Allocations Exhibit**

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## Declaration

I declare, under penalty of perjury, that I am a technical consultant to broadcasting and other communications systems, that I have over twenty-five years of experience in the engineering of broadcast and other communications systems, that I am familiar with the Federal Communications Commission's Rules found in the Code of Federal Regulations Title 47, that I am a Professional Engineer registered in North Carolina, that I have prepared or supervised the preparation of the attached Allocations Exhibit for Western North Carolina Public Radio, Inc., and that all of the facts therein, except for facts of which the Federal Communications Commission may take official notice, are true to the best of my knowledge and belief.



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## Narrative

This Exhibit supports an amendment application for a minor modification application for W209AE, Cullowhee, North Carolina, file number BPFT-20050801CDN. This application corrects ground elevation to conform with Antenna Structure Registration Number. The Center of Radiation Above Mean Sea Level is unchanged from the amendment of December 2005.

Figure 1 shows the 60 dBu F(50,50) contours for the licensed facilities of BLFT-19870507TB and the proposed modified facilities. As shown, the modification is minor.

### Allocations

An updated allocation table is included on page 5. Figure 1 shows licensed and proposed contours. All contours for existing and proposed facilities are calculated using height above average terrain calculated at one degree horizontal increments with terrain data extracted from the V-Soft Communications NED 03 terrain database. The NED 03 database is derived from the USGS National Elevation Data 30 meter terrain database. The USGS National Elevation Dataset has been developed by merging the highest-resolution, best-quality elevation data available across the United States into a seamless raster format. NED is the result of the maturation of the USGS effort to provide 1:24,000-scale Digital Elevation Model (DEM) data for the conterminous US and 1:63,360-scale DEM data for Alaska.

## Height Above Average Terrain

This height above average terrain, extracted digitally as described above, is tabulated below along with the distance to the 60 dBu F(50,50) contour. As shown, the maximum permissible ERP is 27 watts.

Bearing (deg)	Distance (km)	HAAT (m)
0.0	4.03	-37.5
30.0	4.03	-41.7
60.0	4.03	-286.0
90.0	4.03	-5.6
120.0	7.17	93.3
150.0	4.03	-96.4
180.0	4.03	-164.6
210.0	4.03	-207.0
240.0	4.03	-14.8
270.0	4.03	-69.3
300.0	6.34	73.3
330.0	7.03	89.8

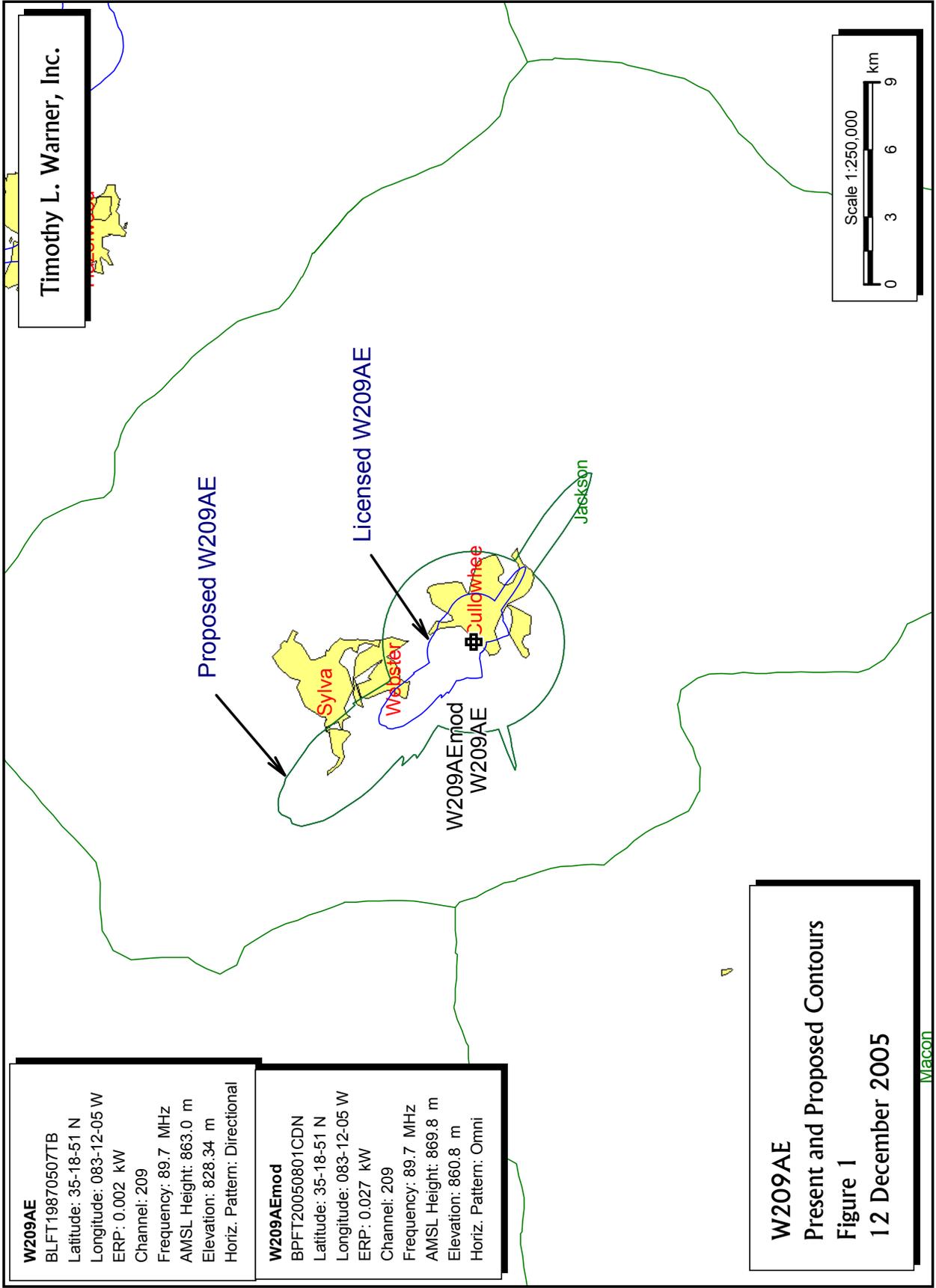
## Channel 6 Television

This application is a minor modification of a facility which was licensed prior to June 1, 1991. As such, predicted interference protection is not required under §74.1205(d). WNCPRI will comply with the provisions of §74.1203 with respect to actual interference.

## Allocation Table

REFERENCE	CH# 209D - 89.7 MHz, Pwr= 0.027 kW, HAAT=-55.3M, COR= 870 M										DISPLAY DATES
35 18 51 N.	Average Protected F(50-50)= 4.0 km										DATA 08-30-06
83 12 05 W.	Ave. F(50-10) 40 dBu= 12.9 54 dBu= 5.7 80 dBu= 1.6 100 dBu= .4										SEARCH 08-31-06
CH	CALL	TYPE	AZI.	DIST	LAT.	Pwr(kW)	COR(M)	PRO(km)	*IN*	*OUT*	
CITY	STATE	STATE	<--	FILE #	LNG.	HAAT(M)	INT(km)	LICENSEE	(Overlap	in km)	
209D	W209AE	CN	0.0	0.00	35 18 51	0.027	863	4.0		-16.91*<	
Cullowhee, Etc. NC 0.0 BLFT19870507TB 83 12 05 -44 12.9 Western North Carolina Pub											
TRANSLATOR FOR WCQSFM, ASHEVILLE, NC.											
This is the facility proposed for modification											
209D	W209AE	LIC DCN	0.0	0.00	35 18 51	0.001	863	2.0		-14.86*<	
Cullowhee, Etc. NC 0.0 BLFT19870507TB 83 12 05 -44 6.1 Western North Carolina Pub											
TRANSLATOR FOR WCQSFM, ASHEVILLE, NC.											
209D	W209AE	APP C	0.0	0.00	35 18 51	0.027	879	4.0		-16.91*<	
Cullowhee, Etc. NC 0.0 BPFT20050801CDN 83 12 05 -28 12.9 Western North Carolina Pub											
209D	W209AD	LIC DCN	43.3	38.82	35 34 05	0.009	1383	12.9		13.07	
Clyde, Etc. NC 223.4 BLFT19861020TO 82 54 26 566 47.6 Western North Carolina Pub											
TRANSLATOR FOR WCQSFM, ASHEVILLE, NC.											
209D	W209AD	CP C	43.3	38.82	35 34 05	0.010	1388	13.3		12.59	
Clyde, Etc. NC 223.4 BPFT20050801AZZ 82 54 26 571 49.2 Western North Carolina Pub											
209D	W209AD	LIC CN	43.3	38.82	35 34 05	0.010	1388	13.3		12.59	
Clyde, Etc. NC 223.4 BLFT19861020TO 82 54 26 571 49.2 Western North Carolina Pub											
TRANSLATOR FOR WCQSFM, ASHEVILLE, NC.											
211C	WEPR	LIC CN	119.8	83.15	34 56 26	85.000	669	74.6		8.23	
Greenville SC 300.2 BLEED19870508KA 82 24 38 352 10.5 South Carolina Educational											
209A	WTXR	LIC DCX	190.7	80.72	34 35 57	0.181	387	6.5		61.30	
Toccoa Falls GA 10.6 BLEED20010125ABQ 83 21 55 12 21.8 Toccoa Falls College											
209A	WTXR.C	CP DCX	190.7	80.72	34 35 57	0.181	387	6.5		61.30	
Toccoa Falls GA 10.6 BMPED20060323AAS 83 21 55 12 21.8 Toccoa Falls College											
207C1	WLFJFM	LIC DEN	119.8	83.02	34 56 26	18.544	643	57.6		25.07	
Greenville SC 300.3 BLEED19830512AP 82 24 44 326 6.3 Radio Training Network, In											
210A	WTFH	LIC C	217.5	79.07	34 44 55	0.015	842	3.5		69.85	
Helen GA 37.2 BLEED20010111AAE 83 43 43 -151 4.9 Toccoa Falls College											
206C2	WYLV	LIC HX	319.1	101.78	36 00 13	1.600	763	43.3		58.09	
Alcoa TN 138.6 BLEED20030227ADH 83 56 34 477 2.6 Foothills Broadcasting, In											
208C	WETSFM	LIC CN	37.3	157.16	36 26 02	66.000	1318	91.8		59.66	
Johnson City TN 218.0 BLEED19820212AA 82 08 08 714 135.3 East Tennessee State University											
209C1	WDYN	LIC CN	265.9	193.13	35 10 17	100.000	655	82.2		98.02	
Chattanooga TN 84.7 BLEED19920318KC 85 18 58 433 185.6 Tennessee Temple University											
06Z2C	WATETV	LI HY	319.1	101.78	36 00 13	100.000	858	126.2	135.0R	-33.2M	
Knoxville TN 138.6 BMLECT20041203AEH 83 56 34 548 7.4 WATE, G.p.											

Terrain database is NED 03 SEC  
 ERP and HAAT on direct-line with reference station.  
 Incoming contour overlap is ignored.  
 "\*"affixed to 'IN' or 'Out' values = site inside protected contour.  
 "<" = Contour Overlap



**W209AE**  
 BLFT19870507TB  
 Latitude: 35-18-51 N  
 Longitude: 083-12-05 W  
 ERP: 0.002 kW  
 Channel: 209  
 Frequency: 89.7 MHz  
 AMSL Height: 863.0 m  
 Elevation: 828.34 m  
 Horiz. Pattern: Directional

**W209AEmod**  
 BPFT20050801CDN  
 Latitude: 35-18-51 N  
 Longitude: 083-12-05 W  
 ERP: 0.027 kW  
 Channel: 209  
 Frequency: 89.7 MHz  
 AMSL Height: 869.8 m  
 Elevation: 860.8 m  
 Horiz. Pattern: Omni

**W209AE**  
 Present and Proposed Contours  
 Figure 1  
 12 December 2005