

ALLOCATION TECHNICAL EXHIBIT  
MODIFICATION OF WQNS(FM)  
WAYNESVILLE, NORTH CAROLINA  
TO WOODFIN, NORTH CAROLINA

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This technical narrative and accompanying Figures have been prepared on behalf of station WQNS(FM), Facility ID No. No. 41008, Waynesville, North Carolina, in support of a minor change application to specify operations on channel 286A at Woodfin, North Carolina, in lieu of channel 285A at Waynesville, North Carolina.

As the requested change is mutually exclusive with the Station's current allotment, this modification is appropriately requested on a minor modification application. *See* 47 C.F.R. Sections 73.203(a), 73.3573(a)(i) and 73.3573(g).

**Summary of Merits**

- The community of Woodfin, North Carolina (2010 Census population 6,123 persons; 2000 Census population 3,162 persons, for a 10-year population change of +93.6%) would be provided with its first local aural transmission service.<sup>1</sup>
- The community of Waynesville, North Carolina (2010 Census population 9,869 persons; 2000 Census population 9,232 persons, for a 10-year population change of +6.9%) would continue to have local aural transmission service from WMXF(AM)(Facility ID No. 40979).
- The proposed channel 286A allotment site at Woodfin, North Carolina satisfies the Commission's allocations spacing rules for a fully spaced, full 6 kilowatt ("kW") Class A facility.<sup>2</sup>

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<sup>1</sup> As demonstrated in this Application's Section 307(b) Statement, Woodfin, North Carolina, clearly qualifies as a community deserving allotted service. Although this proposal would result in the first local aural transmission service assigned to Woodfin, based on the Commission's guidelines set forth in *Policies to Promote Rural Radio Service and to Streamline Allotment an Assignment Procedures*, Second Report and Order, First Order On Reconsideration, and Second Further Notice of Proposed Rule Making, 26 FCC Rcd 2556 (2011), *petitions for recon. pending*, the licensee is not seeking credit under Allotment Priority 3 for a first local aural transmission service. Instead, as demonstrated in this Application's Section 307(b) Statement, this proposal furthers the public interest pursuant to Allotment Priority 4.

- The 60 dBu service area associated with the proposed operation of WQNS(FM) on channel 286A at Woodfin, North Carolina, would encompass 243,577 persons, while the current 60 dBu service area encompasses 129,457 persons, for a net gain of 114,120 additional persons served within the WQNS(FM) 60 dBu service contour.
- The 60 dBu service area associated with the proposed operation of WQNS(FM) on channel 286A at Woodfin, North Carolina, would encompass 148,463 persons in the Asheville Urbanized Area (61% of the population of the Urbanized Area), while the current 60 dBu service area encompasses 64,184 persons in the Asheville Urbanized Area (26.4% of the population of the Urbanized Area), for a net gain of 84,279 additional persons served within the Asheville Urbanized Area by the WQNS(FM) 60 dBu service contour.
- The channel 285A at Waynesville, North Carolina 60 dBu loss area is well served by a number of radio services.<sup>3</sup>

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<sup>2</sup> The proposed allotment reference coordinates are 35° 42' 34.6" North, 82° 38' 08.2" West. See this Exhibit under the heading "Compliance With FCC Rules" for details on allocations considerations with respect to this site. Also see *Figure 1* accompanying this Exhibit for the allocations spacing study.

<sup>3</sup> See Figures 3 and 4.

**Table of Figures Accompanying this Exhibit**

Figure 1	WQNS(FM) Channel 286A Allocations Spacing Study at Allocations Site
Figure 2	WQNS(FM) Present and Proposed 60 dBu Service
Figure 3	Tabulation of Services to WQNS(FM) 60 dBu Loss Area
Figure 4	Map of Services to WQNS(FM) 60 dBu Loss Area
Figure 5	WQNS(FM) Present and Proposed 70 dBu Service
Figure 6	Table of Present and Proposed 70 dBu and 60 dBu Service to Asheville, North Carolina Urbanized Area
Figure 7	Map of Protected Service to Proposed Community of License
Figure 8	Table of Protected Service to Proposed Community of License

### **Communities**

Waynesville is located in Haywood County, North Carolina, within the Asheville Urbanized Area, and has a 2010 Census population of 9,869 persons. Its 2000 Census population was 9,232 persons; thus the 10-year population change is +6.9%. Waynesville would continue to be served by a local aural transmission service, specifically, AM station WMXF (Facility ID No. 40979).

Woodfin is located in Buncombe County, North Carolina, within the Asheville Urbanized Area, and has a 2010 Census population of 6,123 persons. Its 2000 Census population was 3,162 persons; thus the 10-year population change is +93.6%. Currently, Woodfin has no local FM or AM aural transmission service.

### **Compliance with FCC Rules**

The attached *Figure 1* is a tabulation of required separations pertinent to use of channel 286A at Woodfin, North Carolina. The allotment reference site complies with the Commission's minimum distance separations contained in Section 73.207 of the FCC's rules to all existing, authorized and proposed stations and allotments as a full 6 kW Class A allotment, except for WQNS(FM)'s existing channel 285A operation at Waynesville, North Carolina, for which this proposal is a mutually exclusive substitute.

Operation from the channel 286A reference site would provide the requisite community grade (70 dBu) signal to all of Woodfin. *Figure 5* is a map which depicts the community grade coverage (70 dBu) contour based on maximum class A facilities (ERP 6 kW/HAAT 100 meters) if constructed at the proposed allotment site. As shown, all (100%) of Woodfin is located within the predicted 70 dBu community grade contour.

### **Proposed 60 dBu Area**

There would be 235,593 persons residing within the proposed WQNS(FM) 60 dBu contour as calculated from the proposed allotment reference site and based on maximum Class A facilities; the area within WQNS(FM)'s proposed 60 dBu contour would be 2,516 square kilometers.

### **Proposed 70 dBu Area**

There would be 112,472 persons residing within the proposed WQNS(FM)'s 70 dBu contour as calculated from the proposed allotment reference site and based on maximum Class A facilities; the area within WQNS(FM)'s proposed 70 dBu contour would be 814 square kilometers.

### **60 dBu Gain and Loss Areas**

There are currently 129,457 persons residing within the WQNS(FM) 60 dBu contour. Under the proposal here, there would be 235,593 persons residing within the proposed WQNS(FM) 60 dBu contour; 79,507 persons currently residing within the WQNS(FM) 60 dBu contour would continue to receive service under this proposal; 49,950 persons would lose service; and 156,086 persons would gain new 60 dBu service as a result of the proposed operation at Woodfin, for a net aggregate gain of 106,136 persons. See *Figure 2*.

The 60 dBu loss area related to the proposed modification of WQNS(FM) to channel 286A at Woodfin is well served by many aural services. See *Figures 3 and 4*.

### **Urbanized Area Considerations**

Both Waynesville and Woodfin are located within the Asheville, North Carolina Urbanized Area.

As measured by either the 70 dBu or the 60 dBu service area, the proposal results in increased service to the Asheville, North Carolina Urbanized Area. Specifically, the proposed channel 286A 70 dBu contour would encompass 68,841 persons living within the Asheville, North Carolina Urbanized Area, which constitutes 28.3% of the population of that Urbanized Area. In contrast, the present channel 285A 70 dBu contour

encompasses 27,350 persons living within the Asheville, North Carolina Urbanized Area, which constitutes 11.2% of the population of that Urbanized Area.

Moreover, the proposed channel 286A 70 dBu contour would encompass 125.5 sq. km within the Asheville, North Carolina Urbanized Area, which constitutes 23.3% of the area of that Urbanized Area. In contrast, the present channel 285A 70 dBu contour encompasses 79.4 sq. km within the Asheville, North Carolina Urbanized Area, which constitutes 14.8% of the area of that Urbanized Area.

As to the proposed 286A 60 dBu contour, that would encompass 148,463 persons living within the Asheville, North Carolina Urbanized Area, which constitutes 61% of the population of that Urbanized Area. In contrast, the present channel 285A 60 dBu contour encompasses 64,184 persons living within the Asheville, North Carolina Urbanized Area, which constitutes 26.4% of the population of that Urbanized Area.

Moreover, the proposed channel 286A 60 dBu contour would encompass 295.7 sq. km within the Asheville, North Carolina Urbanized Area, which constitutes 54.8% of the area of that Urbanized Area. In contrast, the present channel 285A 60 dBu contour encompasses 164.7 sq. km within the Asheville, North Carolina Urbanized Area, which constitutes 30.5% of the area of that Urbanized Area.

Figure 6 provides of chart of these service improvements to the Asheville, North Carolina Urbanized Area.

### **Coverage Contours**

The FM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.313, except that, in accordance with current FCC practice, uniform terrain was assumed in all directions. The AM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.182.

### **Population and Area**

The population within the relevant FM service contour (1 mV/m or 60 dBu; 3.16 mV/m or 70 dBu) was calculated using a computer program that utilizes U.S. Census database of "population centroids." The program adds the populations of those U.S. Census designated areas whose centroid lies within each service area.

### **Protected Service to Proposed Community of License**

Woodfin, North Carolina, the proposed community of license, currently receives protected aural service from 28 radio stations, as shown in *Figures 7 and 8* (counting those stations which provide protected service to at least 80 percent of the area of the community of license).

### **Conclusion**

WQNS(FM) can be modified from operation on channel 285A at Waynesville, North Carolina, to operation on channel 286A at Woodfin, North Carolina, in compliance with all applicable Commission rules. Service to the public and in particular, service to the Asheville, North Carolina Urbanized Area would be improved. No service would be lost in any underserved area,<sup>4</sup> and no new underserved areas would be created as a result of this proposal. Therefore, the licensee requests the issuance of a construction permit for the minor modification of WQNS(FM) to specify operations on channel 286A at Woodfin, North Carolina.

Respectfully submitted,

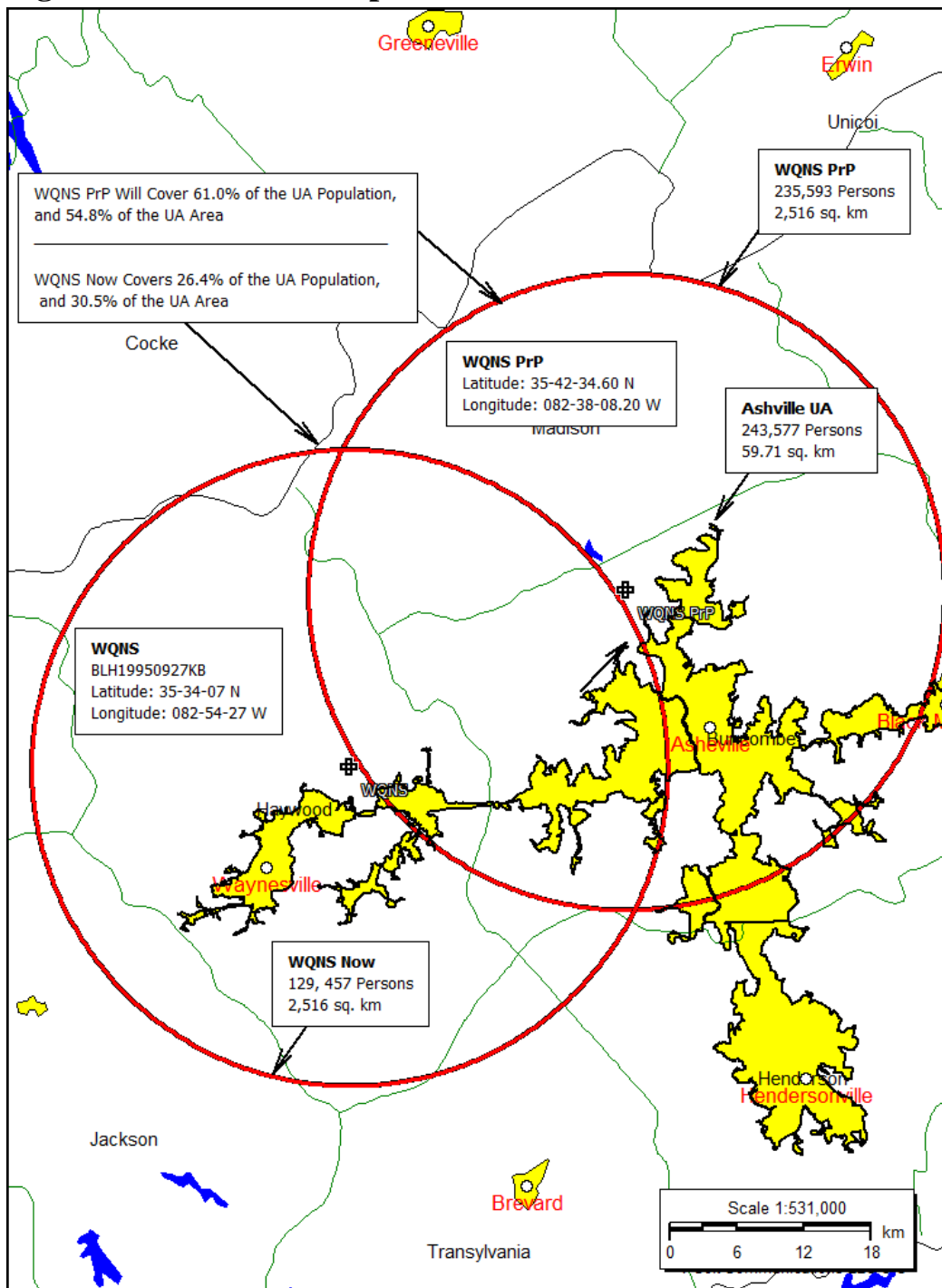
Troy G. Langham  
FCC Engineering Supervisor  
August 7, 2012

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<sup>4</sup> Defined as an area receiving service from less than five aural broadcast services. In the case of this proposal, the 60 dBu loss areas will continue to receive 60 dBu service from multiple sources, local and distant. *See Figures 3 and 4.*

WQNS Allocation Location Spacing Study 8-7-12								
Clear Channel Broadcasting Licenses, Inc.								
REFERENCE							DISPLAY DATES	
35 42 34.6 N.	CLASS = A						DATA 08-07-12	
82 38 08.2 W.	Current Spacings to 3rd Adj.						SEARCH 08-07-12	
----- Channel 286 - 105.1 MHz -----								
Call	Channel	Location		Azi	Dist	FCC	Margin	
WQNS	LIC 285A	Waynesville	NC	237.5	29.17	71.5	-42.3	
WNGA.C	CP 286C3	Clermont	GA	223.2	145.83	141.5	4.3	
One Step Application								
WNOW-FM	LIC 287C1	Gaffney	SC	105.9	136.85	132.5	4.4	
WNGA	RSV-A 286C3	Clermont	GA	219.6	164.08	141.5	22.6	
One Step Application								
WKOS	LIC-D 285A	Kingsport	TN	10.0	95.15	71.5	23.7	
WTUK	LIC-N 286A	Harlan	KY	336.0	145.20	114.5	30.7	
WNGA	LIC 286A	Helen	GA	223.2	145.83	114.5	31.3	
WLNU	LIC-N 284A	White Pine	TN	318.5	75.50	30.5	45.0	
WCCP-FM	LIC 285A	Clemson	SC	183.2	119.18	71.5	47.7	
WSEV-FM	LIC 288A	Gatlinburg	TN	269.8	84.18	30.5	53.7	
WHLC	LIC 283A	Highlands	NC	214.8	87.55	30.5	57.1	
WMUU-FM	LIC 233C	Greenville	SC	166.5	87.63	28.5	59.1	
WGOG.C	CP -N 288A	Powdersville	SC	171.1	97.63	30.5	67.1	
One Step Application								
WGOG.C	CP -N 288A	Walhalla	SC	202.2	101.88	30.5	71.4	
One Step Application								
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RSV-R = reserved - needs protection, RSV-A = allocation								
All separation margins include rounding								

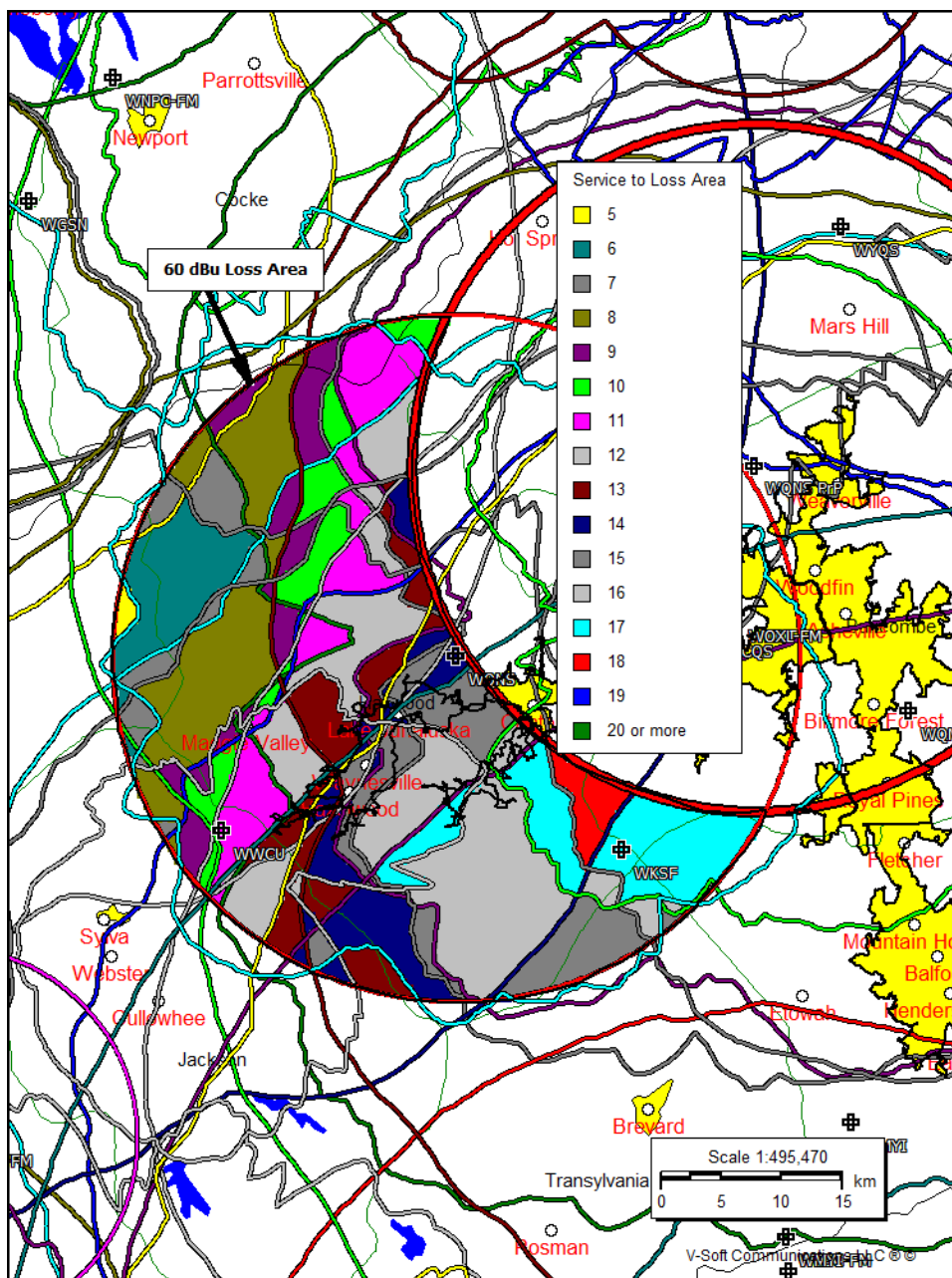


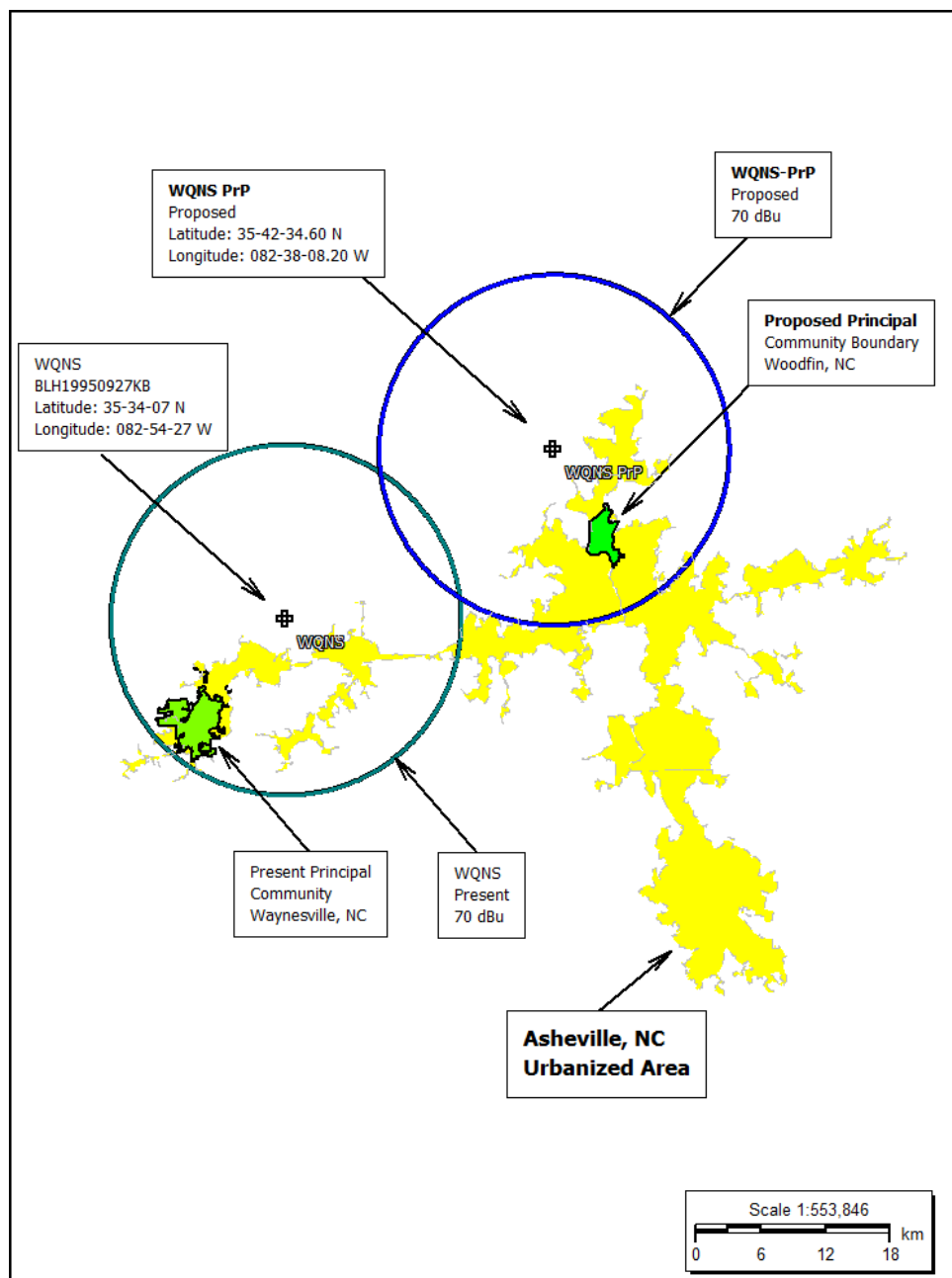
**Figure 2 Present and Proposed 60 dBu Service**

**Figure 3. Tabulation of Services to Loss Area**

WNPC-FM	WLFA	WYQS	WTPT	WGSN
WOLI-FM	WNCC-FM	WMXK	WNCW	WTBI-FM
WXIS	WWCU	WSPA-FM	WIVK-FM	WOXL-FM
WROO	WIKQ	WMUU-FM	WAEZ	WFQS
WGOG	WNRX	WFBC-FM	WWST	WCQS
WCVP-FM	WQNQ	WESC-FM	WMYI	WZTH
WPFT	WHLC	WEPR	WLFJ-FM	
WSEV-FM	WQNS	WMIT	WMYI	
WRBN	WJBZ-FM	WKSF	WTMT	

Service Count	Area	Pop	Housing Units	Area Sq KM
-----	-----	-----	-----	-----
1	Service	0	0	0
2	Service	0	0	0
3	Service	0	0	0
4	Service	0	0	0
5	Service	0	0	9.2
6	Service	80	41	92
7	Service	2	8	67.39
8	Service	949	991	180.68
9	Service	537	558	92.59
10	Service	1,118	1,024	59.15
11	Service	2,832	2,239	65.83
12	Service	3,930	3,297	88.8
13	Service	4,612	3,710	96.05
14	Or more	23,114	12,677	586.49

**Figure 4. Map of Services to Loss Area**

**Figure 5. Present and Proposed 70 dBu Service**

**Figure 6. Table of Present and Proposed 70 dBu and 60 dBu Service to Asheville, North Carolina Urbanized Area**

**70 dBu ("Flat Earth")**

<b>Present</b>		<b>Proposed</b>	
Population Within Urbanized Area (and Percentage of Urbanized Area)	Area (Square Kilometers) Within Urbanized Area (and Percentage of Urbanized Area)	Population Within Urbanized Area (and Percentage of Urbanized Area)	Area (Square Kilometers) Within Urbanized Area (and Percentage of Urbanized Area)
<b>27,350 (11.2%)</b>	<b>79.4 (14.8%)</b>	<b>68,841 (28.3%)</b>	<b>125.5 (23.3%)</b>

**60 dBu ("Flat Earth")**

<b>Present</b>		<b>Proposed</b>	
Population Within Urbanized Area (and Percentage of Urbanized Area)	Area (Square Kilometers) Within Urbanized Area (and Percentage of Urbanized Area)	Population Within Urbanized Area (and Percentage of Urbanized Area)	Area (Square Kilometers) Within Urbanized Area (and Percentage of Urbanized Area)
<b>64,184 (26.4%)</b>	<b>164.7 (30.5%)</b>	<b>148,463 (61%)</b>	<b>295.7 (54.8%)</b>



**Figure 8. Table of Protected Service to Proposed Community of License**

<b>Call Sign</b>	<b>Facility_id</b>	<b>City</b>
WMUU-FM	73296	GREENVILLE
WKSF	2947	OLD FORT
WTPT	4677	FOREST CITY
WCQS	71923	ASHEVILLE
WMYI	59818	HENDERSONVILLE
WOXL-FM	37242	BILTMORE FOREST
WLFA	2922	ASHEVILLE
WESC-FM	4679	GREENVILLE
WSPA-FM	66400	SPARTANBURG
WMIT	5970	BLACK MOUNTAIN
WNCW	29262	SPINDALE
WMYI	59818	HENDERSONVILLE
WTMT	72070	WEAVERVILLE
WFBC-FM	34390	GREENVILLE
WQNQ	71341	FLETCHER
WQUT	67673	JOHNSON CITY
WLFJ	4678	GREENVILLE
WFGW	5972	BLACK MOUNTAIN
WPEK	41565	FAIRVIEW
WSKY	56521	ASHEVILLE
WZGM	40654	BLACK MOUNTAIN
WKJV	2921	ASHEVILLE
WYSE	51155	CANTON
WHBK	61264	MARSHALL
WGCR	2198	PISGAH FOREST
WWNC	2946	ASHEVILLE
WISE	68835	ASHEVILLE