



## Refuge Media Group (RMG)

### Exhibit 15 Contour Overlap Requirements (47 C.F.R. § 73.509)

(Duluth, MN Proposal)

8/6/2007

Channel: 208 (89.5 MHz)  
 Antenna: Directional Vertically Polarized  
 MERP: 0.000 kW (H); 100 kW (V)  
 HAAT: 154 m

North Lat: 46° 47' 21"  
 West Lon: 92° 07' 9"  
 FIN: 49348  
 RCAMSL: 463 m

#### Distance to the following Contours:

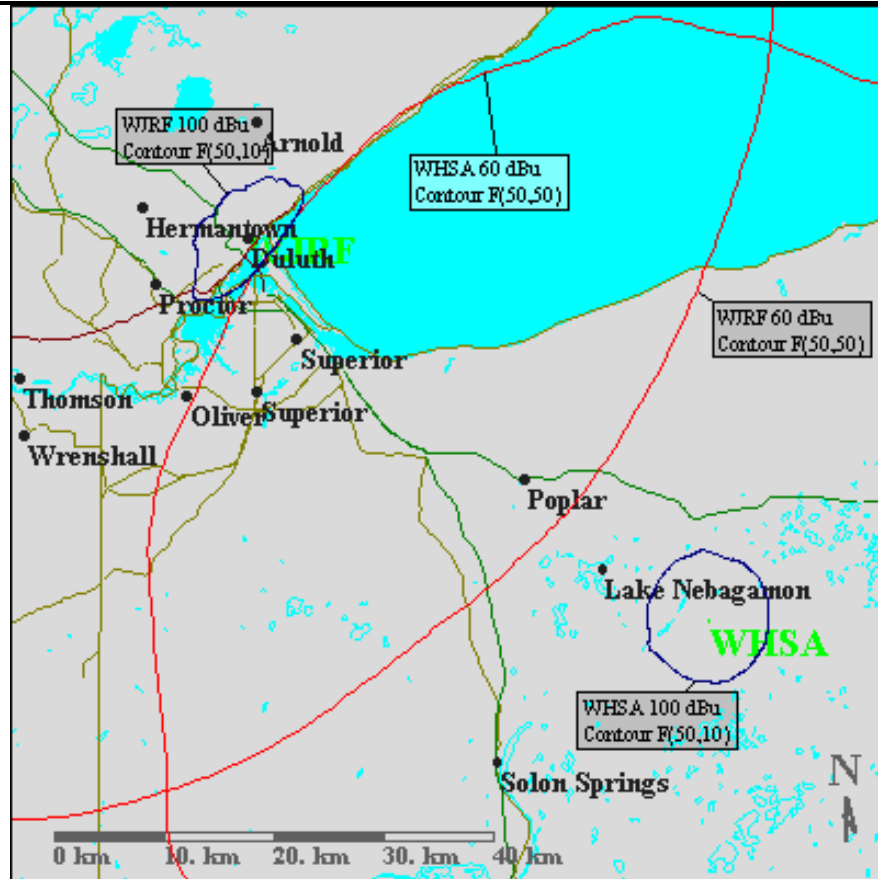
60 dBu F(50,50): 59.0 km      40 dBu F(50,10): 155.5 km      54 dBu F(50,10): 88.6 km      100 dBu F(50,10): 7.2 km

Call FacilityID	Channel	Class Service	Frequency ERP	Status HAAT	City Dist(km)	State Dist(mi)	Country Azimuth	File Number Licensee/Permittee	Docket Reg Dist:
<a href="#">WOJB</a> <a href="#">36197</a>	205	C1 FM	88.9 MHz	LIC	RESERVE	WI	US	bled-19820428AH	-
Dist to 60	dBu F(50,50)	Contour:	59.0 km		66.2 km				51.8 km
<a href="#">KCMP</a> <a href="#">62162</a>	207	C1 FM	89.3 MHz	LIC	NORTHFIELD	MN	US	bled-19911203KB	-
Dist to 60	dBu F(50,50)	Contour:	66.9 km		155.5 km				89.5 km
<a href="#">KOPJ</a> 100. kW	207	C1 FM	89.3 MHz	LIC	SEBEKA	MN	US	BMPED-20041013ACS	- <a href="#">82639</a>
Dist to 60	dBu F(50,50)	Contour:	57.5 km		146.1 km				49.4 km
<a href="#">WCLQ</a> <a href="#">11060</a>	208	C1 FM	89.5 MHz	LIC	WAUSAU	WI	US	bled-20040225ABB	-
Dist to 60	dBu F(50,50)	Contour:	61.4 km		216.9 km				64.3 km
<a href="#">KPCS</a> <a href="#">93446</a>	209	C2 FM	89.7 MHz	CP	PRINCETON	MN	US	BPED-19990518MB	-
Dist to 60	dBu F(50,50)	Contour:	27.2 km		115.8 km				56.8 km
<a href="#">WLSN</a> <a href="#">92302</a>	209	C3 FM	89.7 MHz	LIC	GRAND MARAIS	MN	US	BPED-19981204MB	-
Dist to 60	dBu F(50,50)	Contour:	38.4 km		127.0 km				45.7 km
<a href="#">WWSA</a> <a href="#">63089</a>	210	C2 FM	89.9 MHz	LIC	BRULE	WI	US	bled-1040	-
Dist to 60	dBu F(50,50)	Contour:	3.2 km		55.5 km				0.0 km*
<a href="#">KADU</a> <a href="#">32377</a>	211	A FM	90.1 MHz	LIC	HIBBING	MN	US	BPED-20040817AAT	-
Dist to 60	dBu F(50,50)	Contour:	20.9 km		28.1 km				65.5 km

\*See Maps Below

Please note: The directional pattern in this instant application represents maximum levels to avoid prohibited overlap with station WWSA. RMG will be working with the antenna manufacturer to get the actual pattern data. Once this data is complete, RMG will submit this information to the Commission.

## Maps Showing Lack of Contour Overlap w/WHSA



Close Up showing no Prohibited overlap

