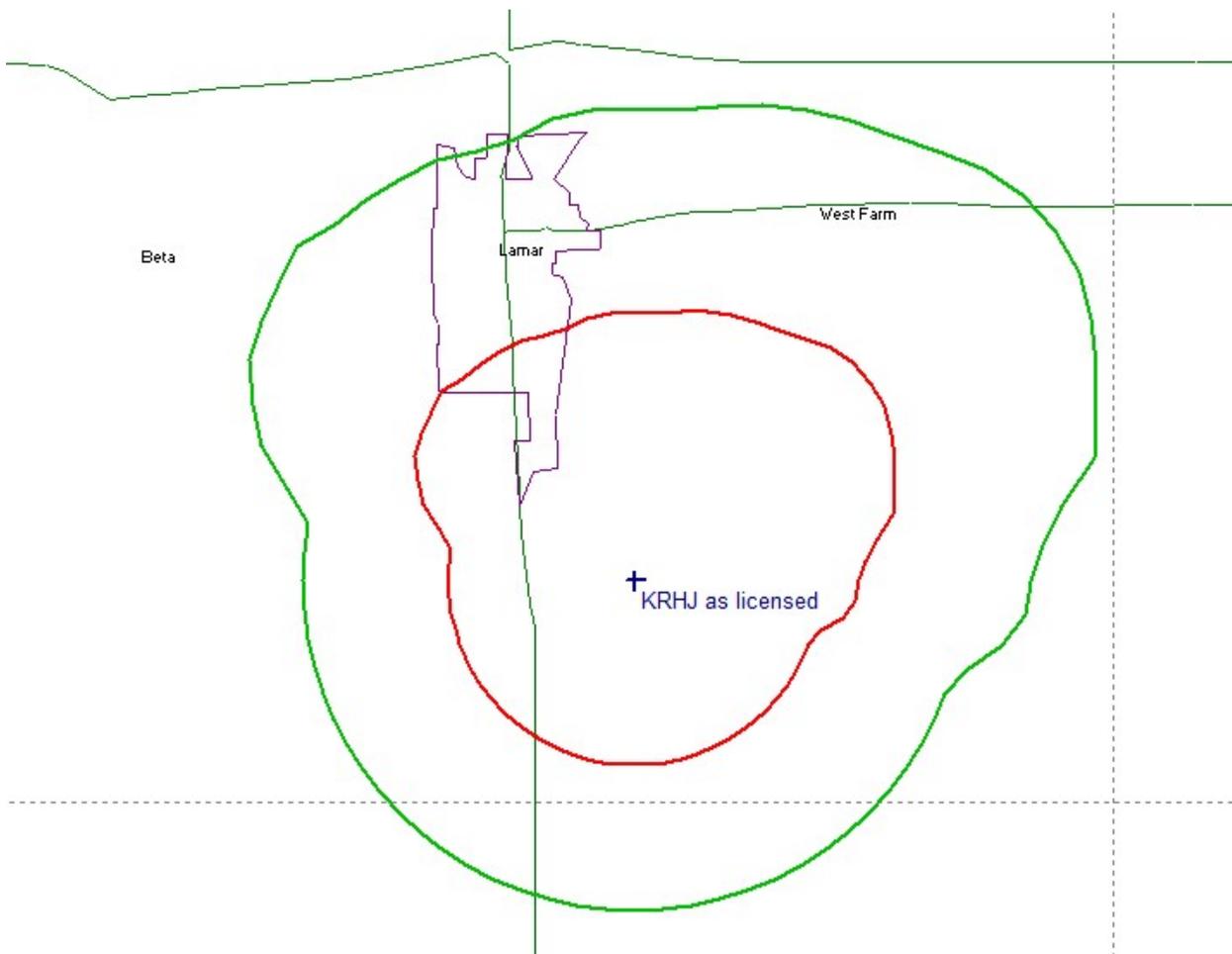


**APPLICATION FOR CONSTRUCTION PERMIT  
RADIO STATIO KRHJ (FM)  
LAMAR, COLORADO  
CHANNEL 202A**

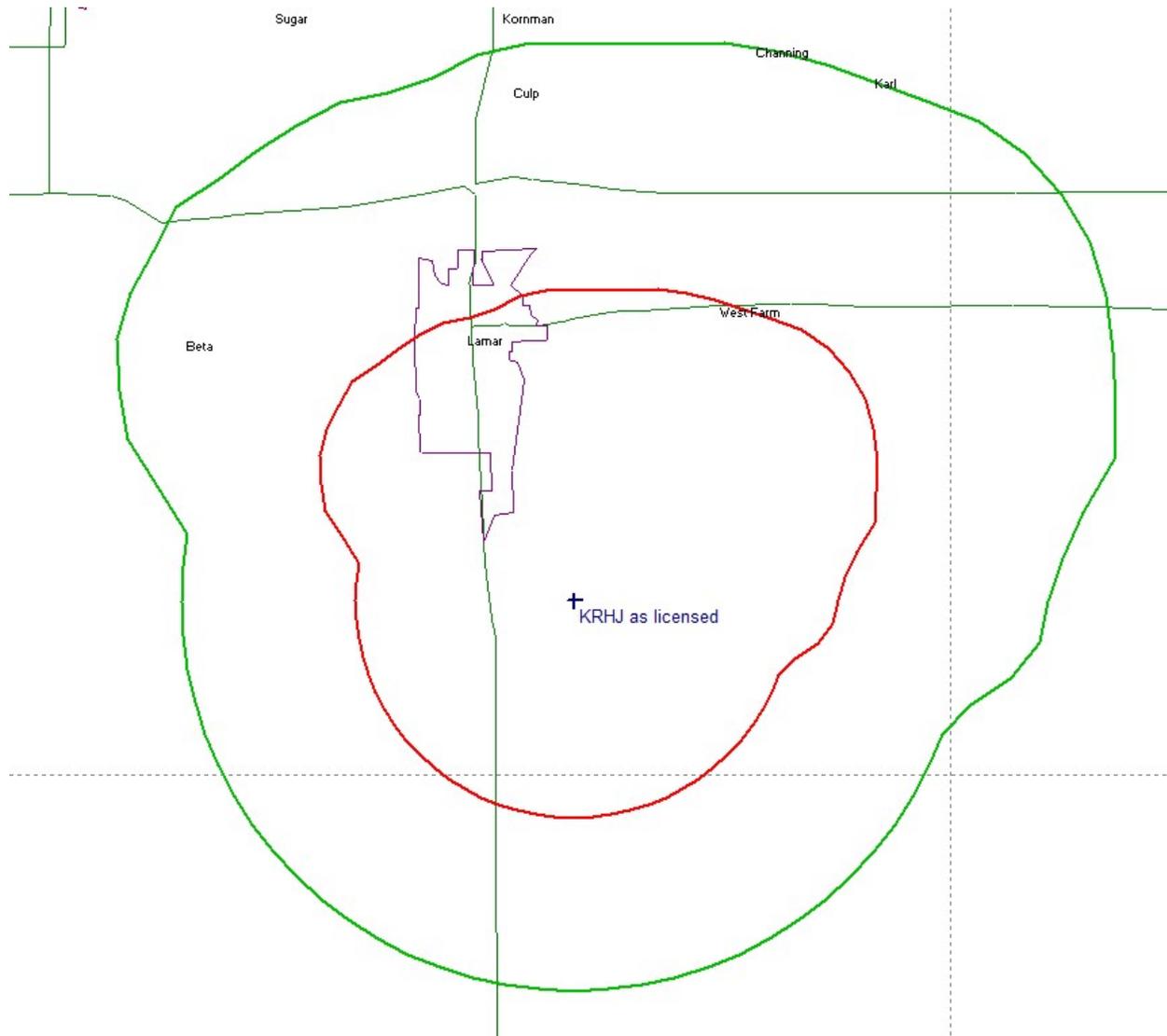
**This application seeks to increase the licensed ERP of KRHJ from .1kw (100 watts) to .5kw (500 watts). No change to the operating frequency, HAAT or antenna location is contemplated by this application. Only the antenna and transmitter will be changed subject to the grant of this application.**

**KRHJ as currently authorized and licensed-**



**Green contour is 60 dbu, red contour is 70 dbu.**

**KRHJ proposed-**



**This proposed power increase will make the following changes in the area covered and population covered:**

**KRHJ Existing**

**60 dbu    152.2km    9453 pop**

**KRHJ Proposed**

**60 dbu    342.5km    9957 pop**

## KRHJ Existing

70 dbu 48.5km 771 pop

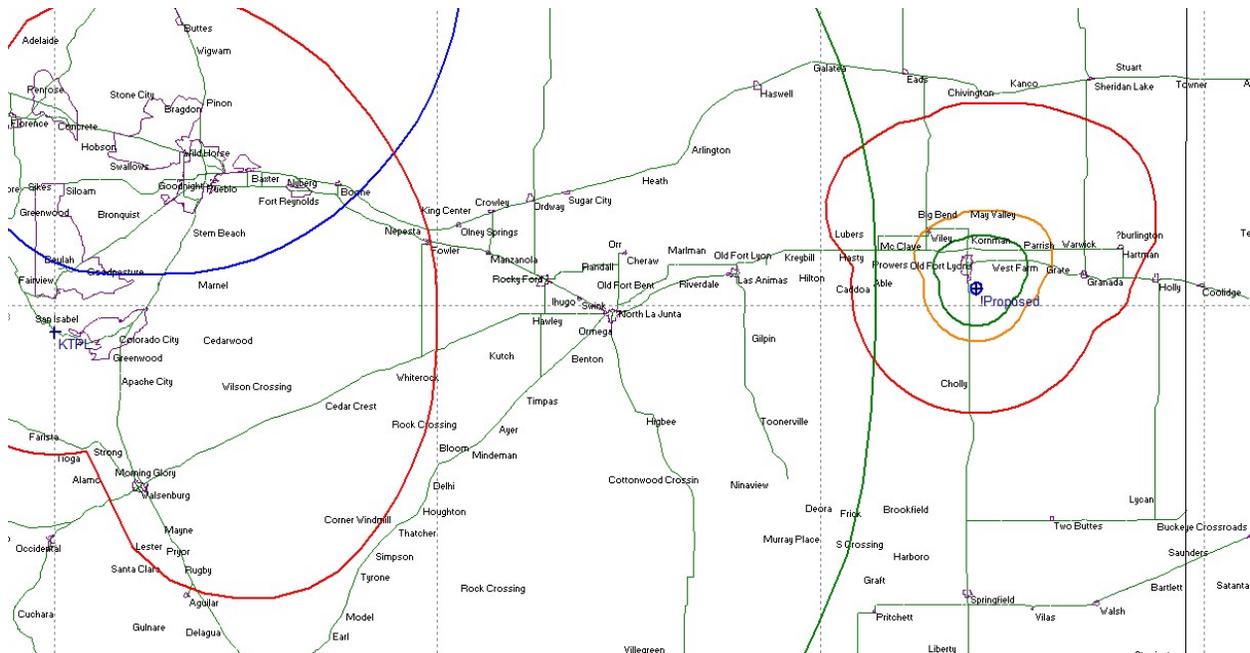
## KRHJ Proposed

70 dbu 106.8km 7528 pop

While there's not a significant difference in the population covered within the 60 dbu contour, there is within the proposed 70 dbu (city grade) contour-an increase of more than tenfold. This fact alone makes the application (and its grant) in the public interest by providing a higher quality aural service to Lamar, Colorado.

The applicant proposes the installation of a Nicom BKG-77-4 (or equivalent) with full wave spacing. The transmitter will be selected such that adequate power output, taking into account line loss and antenna gain so that the requested ERP of .5kw (500 watts) is achieved with adequate headroom.

The map below shows that the proposed power increase will not cause prohibited overlap to any facility (licensed or proposed)-



The only facility of any consequence is co-channel station KTPL, Pueblo, Colorado licensed for 65kw and a HAAT of -177.94 meters. The map clearly shows no overlap of interfering contours between the existing KTPL and the proposed higher power operation of KRHJ.

**The spreadsheet below is a study of separations from the proposed higher power operation of KRHJ to other facilities-**

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Distance	Sep	Clr
KXDP-LD	CO	DENVER	82.1	6	3000	TV	LIC	313.45	0	0
DDKBEX-L	TX	AMARILLO	82.1	6	300	TV	APP	319.08	0	0
KWNB-TV	NE	HAYES CENTER	82.1	6	45000	TV	CP	317.72	0	0
KWNB-TV	NE	HAYES CENTER	82.1	6	11900	TV	LIC	317.72	0	0
KXDP-LD	CO	DENVER	82.1	6	3000	TV	LIC	313.45	0	0
KXDP-LD	CO	DENVER	82.1	6	3000	TV	APP	313.45	0	0
KBSD-DT	KS	ENSIGN	82.1	6	31000	TV	LIC	202.7	0	0
KZCK	KS	COLBY	88.1	201	2000	A	LIC	198.29	72	38.16 dB
KJDR	OK	GUYMON	88.1	201	1000	A	LIC	180.84	72	39.05 dB
KCME	CO	MANITOU SPRINGS	88.7	204	8900	C1	LIC	213.26	75	38.46 dB
KENE	NM	EAGLE TAIL	88.1	201	1250	C3	LIC	220.22	89	38.03 dB
KJLJ	KS	SCOTT CITY	88.5	203	25000	C3	LIC	153.87	89	20.13 dB
KENU	NM	DES MOINES	88.5	203	240	C3	LIC	186.18	89	35.78 dB
KTPL	CO	PUEBLO	88.3	202	65000	C1	LIC	211.55	200	2.47 dB

**In summation, a grant of this application will provide improved aural service to Lamar, Colorado and will not introduce prohibited overlap with any other licensed or proposed facility.**