

EXHIBIT 28  
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GRANDFATHERED SHORT SPACING  
(MUTUAL INCREASE WITH WCEF)

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WLGN-FM is presently short spaced to WCEF - Ripley, West Virginia, which operates on FM Channel 252A. This short spacing was originally created by the metrification of the former separation requirements outlined in Section 73.207 of the FCC Rules and further aggravated by the action in MM Docket 88-375 which increased the minimum separation requirements for Class A stations to accommodate 6 kilowatt operation.

WLGN-FM and WCEF have entered into a mutual consent agreement which permits WCEF to operate with facilities of 6 kilowatts at its presently licensed antenna height, or equivalent, while accepting any inter-station interference that will result from such a mutual increase. This agreement also permits WLGN-FM to operate with facilities of 6 kilowatts at its present antenna height, or equivalent, while accepting any inter-station interference that will result from such a mutual increase. A copy of this agreement is included as a separate attachment to this application. Although both stations will continue to operate from their present transmitter sites, the attached application also serves to correct the geographic coordinates and ground elevation for the WLGN-FM transmitter site to conform to the Antenna Structure Registration (1014017) for the existing tower that supports its presently licensed antenna. Based upon this coordinate correction, the separation between WLGN-FM and WCEF is 103.86 kilometers which is less than the former 3 kilowatt spacing requirement of 105 kilometers specified by Section 73.213(c)(1) of the FCC Rules for co-channel Class A stations. Since WLGN-FM and WCEF are pursuing a mutual increase pursuant to Section 73.213(c)(2) of the FCC

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Rules, this short spacing should not be an impediment to the grant of either application. This mutual consent agreement also permits either station to relocate its transmitter site as part of such a mutual increase, so long as the separation between these two stations is not reduced below the present spacing by such a site relocation.

It should be noted that although no change will be made to the height of the existing WLGN-FM antenna above ground level, the correction to the ground elevation at this site results in an antenna height that is 67 meters above average terrain, one meter lower than the presently licensed value.

Figure 28.0 presents a detailed interference study between the present and proposed WLGN-FM and WCEF operating facilities. Interference will be predicted to each station at locations within its predicted 60 dBu contour where the predicted signal strength does not exceed the other station's interfering signal by at least 20 dB. An examination of this figure shows that no inter-station interference is predicted to either station when the present operating facilities are considered for both stations. A small amount of interference will occur to each station if the mutual increase envisioned by this agreement is implemented.

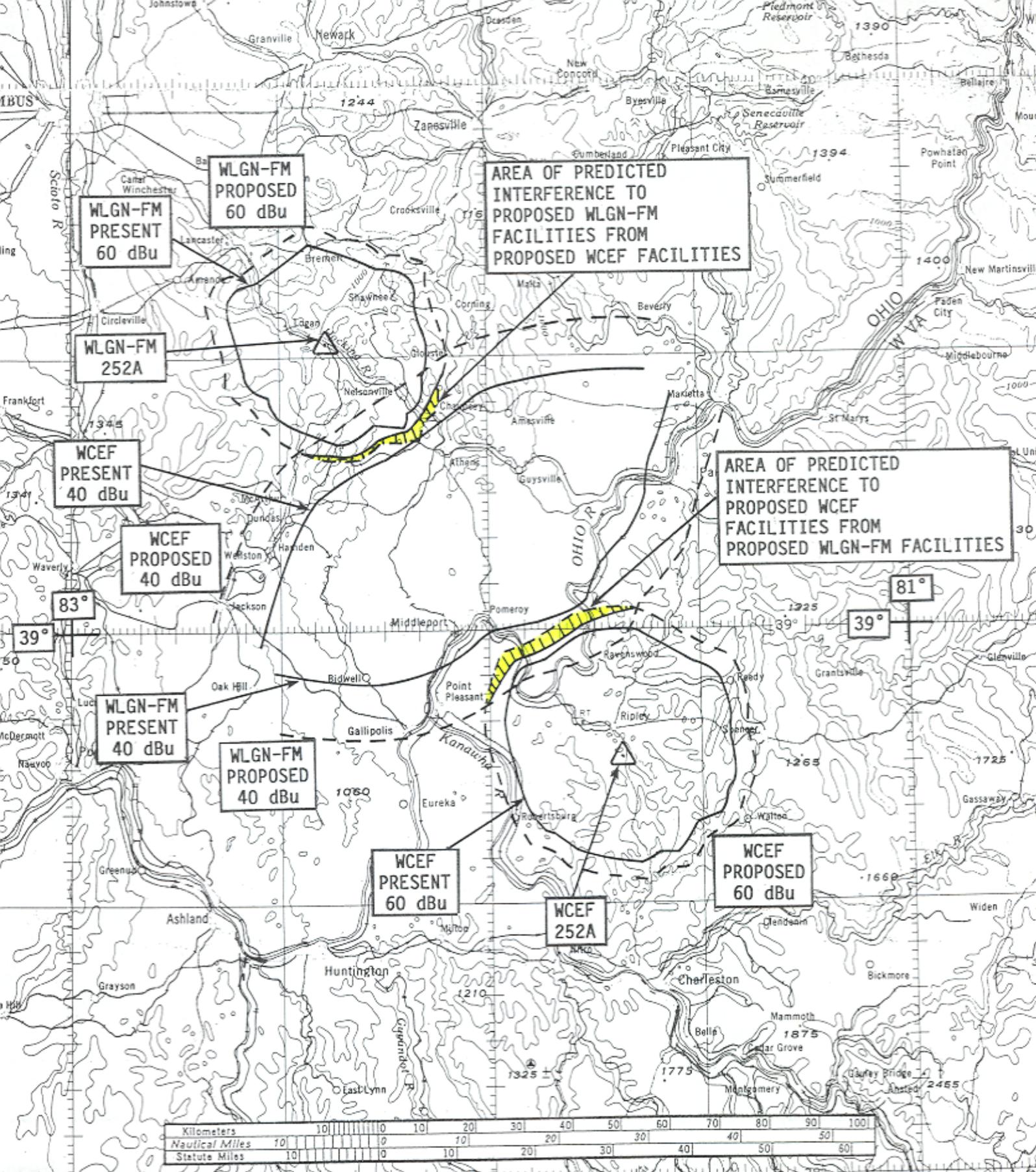
Table 28.0 is a tabulation of the area and population within the 60 dBu contours for the present and proposed WLGN-FM facilities, as well as for the proposed gain area. It should be noted that the proposed WLGN-FM facilities will not cause a loss of service to any area that receives 60 dBu service from the presently licensed facilities. As can be seen from an examination of this table, the implementation of this mutual increase by WCEF and WLGN-FM will result in a net gain of 478.6 square kilometers containing 10,008 persons that will receive 60 dBu interference-free service from WLGN-FM.

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Table 28.1 presents a tabulation of the area and population within the 60 dBu contours for the present and proposed WCEF facilities, as well as for the proposed gain and loss areas and areas of predicted interference. It should be noted that the proposed WCEF facilities will not cause a loss of service to any area that receives 60 dBu service from the presently licensed facilities. This table shows that the implementation of the mutual increase by WLGN-FM and WCEF will result in a net gain of 543.9 square kilometers containing 7,136 persons that will receive interference free 60 dBu service from WCEF.

There are portions within the gain areas for each station that presently do not receive at least five full time aural services. Figure 28.2 depicts the portions of the gain area for WLGN-FM that presently receive less than five full time aural services. Table 28.2 lists the area and population for these areas where the proposed WLGN-FM facilities will provide a fourth or fifth aural service. Figure 28.3 depicts the portion of the gain area for WCEF that presently receives less than five full time aural services. Table 28.3 lists the area and population for these areas where the proposed WCEF facilities will provide a third, fourth, or fifth aural service.

Based upon the above information, the proposed mutual upgrade by WLGN-FM and WCEF should be considered to serve the public interest since it will provide additional aural service to areas that are presently underserved.



**FIG. 28.0**

**DETAILED INTERFERENCE STUDY  
 BETWEEN WLGN-FM AND WCEF**

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TABLE 28.0

PRESENT AND PROPOSED  
 WLGN-FM AREA AND POPULATION  
(60 dBu CONTOUR)

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Land Area (km<sup>2</sup>)

|          | <u>60 dBu Contour</u> | <u>Interference</u> | <u>Interference Free</u> |
|----------|-----------------------|---------------------|--------------------------|
| Present  | 1233.2                | 0.0                 | 1233.2                   |
| Gain     | 527.1                 | 48.5                | 478.6                    |
| Loss     | 0.0                   | 0.0                 | 0.0                      |
| Proposed | 1760.3                | 48.5                | 1711.8                   |
| Net Gain | 527.1                 | 48.5                | 478.6                    |

Population (2000 Census)

|          | <u>60 dBu Contour</u> | <u>Interference</u> | <u>Interference Free</u> |
|----------|-----------------------|---------------------|--------------------------|
| Present  | 39,829                | 0                   | 39,829                   |
| Gain     | 10,841                | 833                 | 10,008                   |
| Loss     | 0                     | 0                   | 0                        |
| Proposed | 50,670                | 833                 | 49,837                   |
| Net Gain | 10,841                | 833                 | 10,008                   |

TABLE 28.1

PRESENT AND PROPOSED  
WCEF AREA AND POPULATION  
(60 dBu CONTOUR)

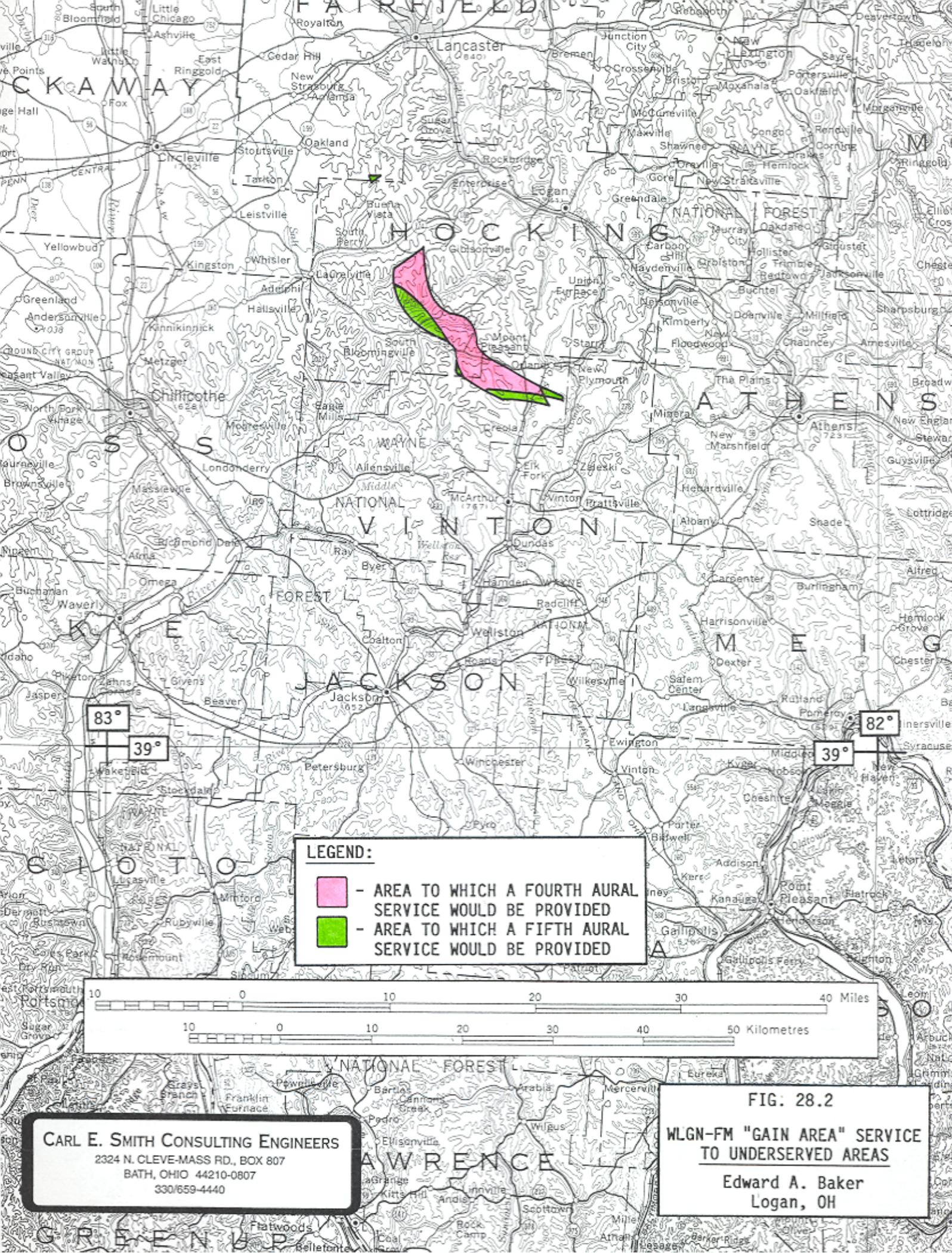
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Land Area (km<sup>2</sup>)

|          | <u>60 dBu Contour</u> | <u>Interference</u> | <u>Interference Free</u> |
|----------|-----------------------|---------------------|--------------------------|
| Present  | 1705.2                | 0                   | 1705.2                   |
| Gain     | 617.5                 | 73.6                | 543.9                    |
| Loss     | 0.0                   | 0                   | 0.0                      |
| Proposed | 2322.7                | 73.6                | 2249.1                   |
| Net Gain | 617.5                 | 73.6                | 543.9                    |

Population (2000 Census)

|          | <u>60 dBu Contour</u> | <u>Interference</u> | <u>Interference Free</u> |
|----------|-----------------------|---------------------|--------------------------|
| Present  | 32,167                | 0                   | 32,167                   |
| Gain     | 8,882                 | 1746                | 7,136                    |
| Loss     | 0                     | 0                   | 0                        |
| Proposed | 41,049                | 1746                | 39,303                   |
| Net Gain | 8,882                 | 1746                | 7,136                    |



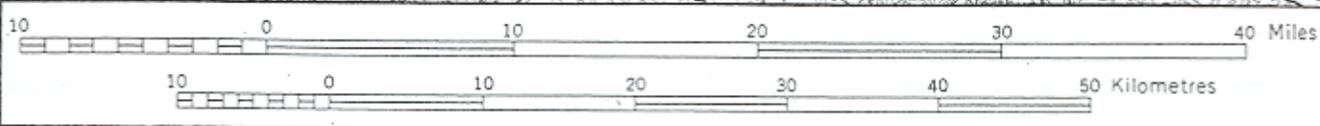
**LEGEND:**



- AREA TO WHICH A FOURTH AURAL SERVICE WOULD BE PROVIDED



- AREA TO WHICH A FIFTH AURAL SERVICE WOULD BE PROVIDED



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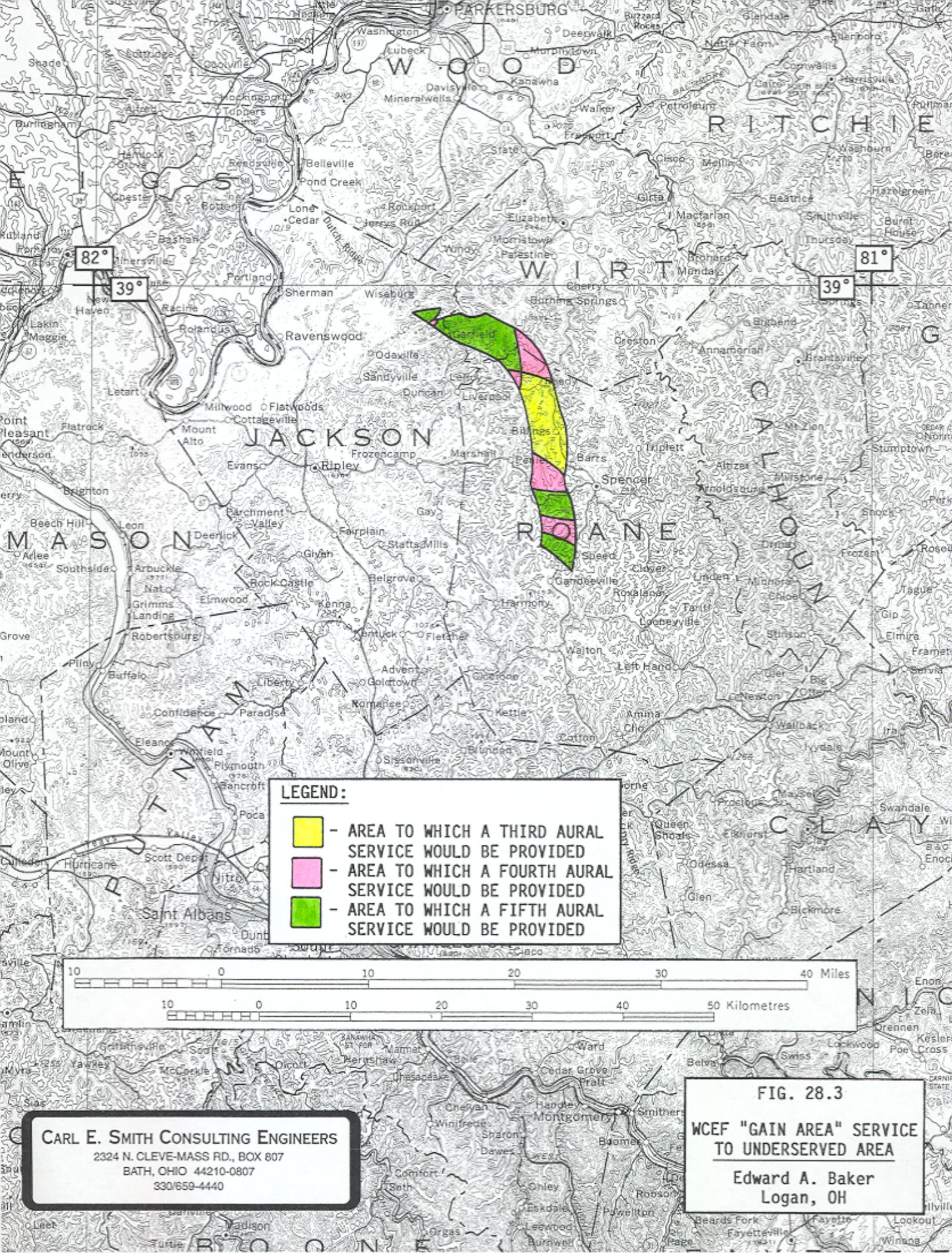
**FIG. 28.2**  
**WLGJ-FM "GAIN AREA" SERVICE TO UNDERSERVED AREAS**  
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TABLE 28.2

AREA AND POPULATION DATA FOR  
UNDERSERVED PORTIONS OF WLGN-FM GAIN AREA

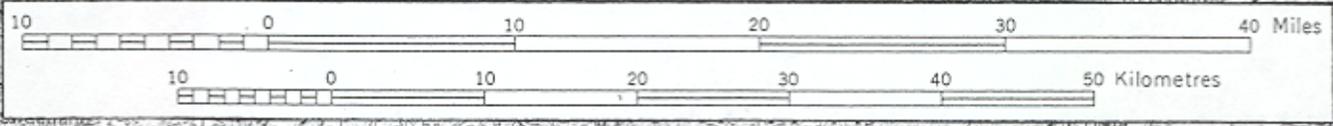
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| <u>Portions of Gain Area<br/>Which Will Receive:</u> | <u>Area<br/>(Square Kilometers)</u> | <u>Population<br/>(2000 Census)</u> |
|--|-------------------------------------|-------------------------------------|
| Fourth full time aural service                       | 62.3                                | 400                                 |
| Fifth full time aural service                        | 12.0                                | 192                                 |
| Total underserved area                               | 74.3                                | 592                                 |



**LEGEND:**

- AREA TO WHICH A THIRD AURAL SERVICE WOULD BE PROVIDED
- AREA TO WHICH A FOURTH AURAL SERVICE WOULD BE PROVIDED
- AREA TO WHICH A FIFTH AURAL SERVICE WOULD BE PROVIDED



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**FIG. 28.3**  
**WCEF "GAIN AREA" SERVICE TO UNDERSERVED AREA**  
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TABLE 28.3

AREA AND POPULATION DATA FOR  
UNDERSERVED PORTIONS OF WCEF GAIN AREA

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| <u>Portions of Gain Area<br/>Which Will Receive:</u> | <u>Area<br/>(Square Kilometers)</u> | <u>Population<br/>(2000 Census)</u> |
|--|-------------------------------------|-------------------------------------|
| Third full time aural service                        | 37.7                                | 613                                 |
| Fourth full time aural service                       | 12.4                                | 143                                 |
| Fifth full time aural service                        | 62.3                                | 634                                 |
| Total underserved area                               | 112.4                               | 1,390                               |