

**EXHIBIT D-1**

**ALLOCATION STUDY**

PROPOSED WKCR-FM  
CHANNEL 210B1 — NEW YORK, NEW YORK

In the instant application, The Trustees of Columbia University in the City of New York (“Columbia” or “Applicant”), licensee of noncommercial radio station WKCR-FM (Facility No. 68270), New York, New York, seek to relocate the station’s facilities to the Riverside Church in uptown Manhattan. Station WKCR-FM currently is licensed to operate at the World Trade Center, but lost that facility on September 11, 2001. The station hopes ultimately to relocate to the Empire State Building, but that building will be making major changes in the broadcast facilities located there during the foreseeable future in order to accommodate other local stations seeking relocation there. Station WKCR-FM is seeking the facilities specified in the instant application so as to have a reasonably effective operation while it waits. The station presently is operating pursuant to Special Temporary Authority from a campus building which affords extremely limited coverage.

The facility proposed in this application with an ERP of 6.9 kW at 136 meters is the equivalent of the station’s licensed 0.63 kW ERP at 433 meters, in that both produce the same 60 dBμ contour distance. However, because of extensive high-rise construction in the New York City area, the station’s actual coverage with the proposed facilities will be inferior to its previous coverage from the World Trade Center site. Nevertheless, this proposal represents the best that station WKCR-FM can do at this point in time. By specifying an equivalent facility, the main change results from the 11.9 kilometer difference between the licensed and proposed sites.

Attached as Exhibit D-2 is a tabulation of spacings to pertinent co- and adjacent channel stations, prepared based on the spacing criteria for commercial FM stations. This table identifies twenty stations with transmitting sites close enough to the new site proposed for WKCR-FM to require detailed study. Exhibits D-3, D-4, D-5, and D-6 present allocation study maps for each of these nearby stations and provide interference analyses for co-channel, first-adjacent channel, second-adjacent channel, and third-adjacent channel stations, respectively. As these exhibits demonstrate, there is no prohibited overlap with any of the stations studied in Exhibits D-3, D-4, and D-6. However, Exhibit D-5 shows that the proposed relocation of WKCR-FM arguably will create new overlap with noncommercial station WHPC(FM), Garden City, New York.<sup>1</sup> Station WKCR-FM requests a waiver of §73.509 with respect to this station. Such a waiver is warranted for the reasons specified in the Request for Waiver, attached to this application as Exhibit E.

In one sense the overlap with WHPC(FM) is “new” because its 100 db $\mu$  contour does not overlap the licensed WKCR-FM 60 db $\mu$  contour. But in another sense the overlap with WHPC(FM) is “old” because when WKCR-FM was authorized initially to operate from the World Trade Center the relevant WHPC(FM) contour was the 80 db $\mu$  contour, and the proposed WKCR-FM 60 db $\mu$  contour was shown to overlap it.

In addition, it must be noted that the overlap with WHPC(FM) would result in interference only to WKCR-FM, but not to WHPC(FM). The effect of the overlap is to slightly reduce WKCR-FM’s service from the proposed facility, and this reduction in coverage would fall in an area not previously receiving predicted 60 db $\mu$  service from WKCR-FM. Consequently, no

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<sup>1</sup> Exhibit D-5 also shows a change in overlap with respect to noncommercial station WSOU(FM), South Orange, New York. It is Columbia’s understanding that this change is consistent with Commission precedent, because the overlap with this station previously existed and is not newly created.

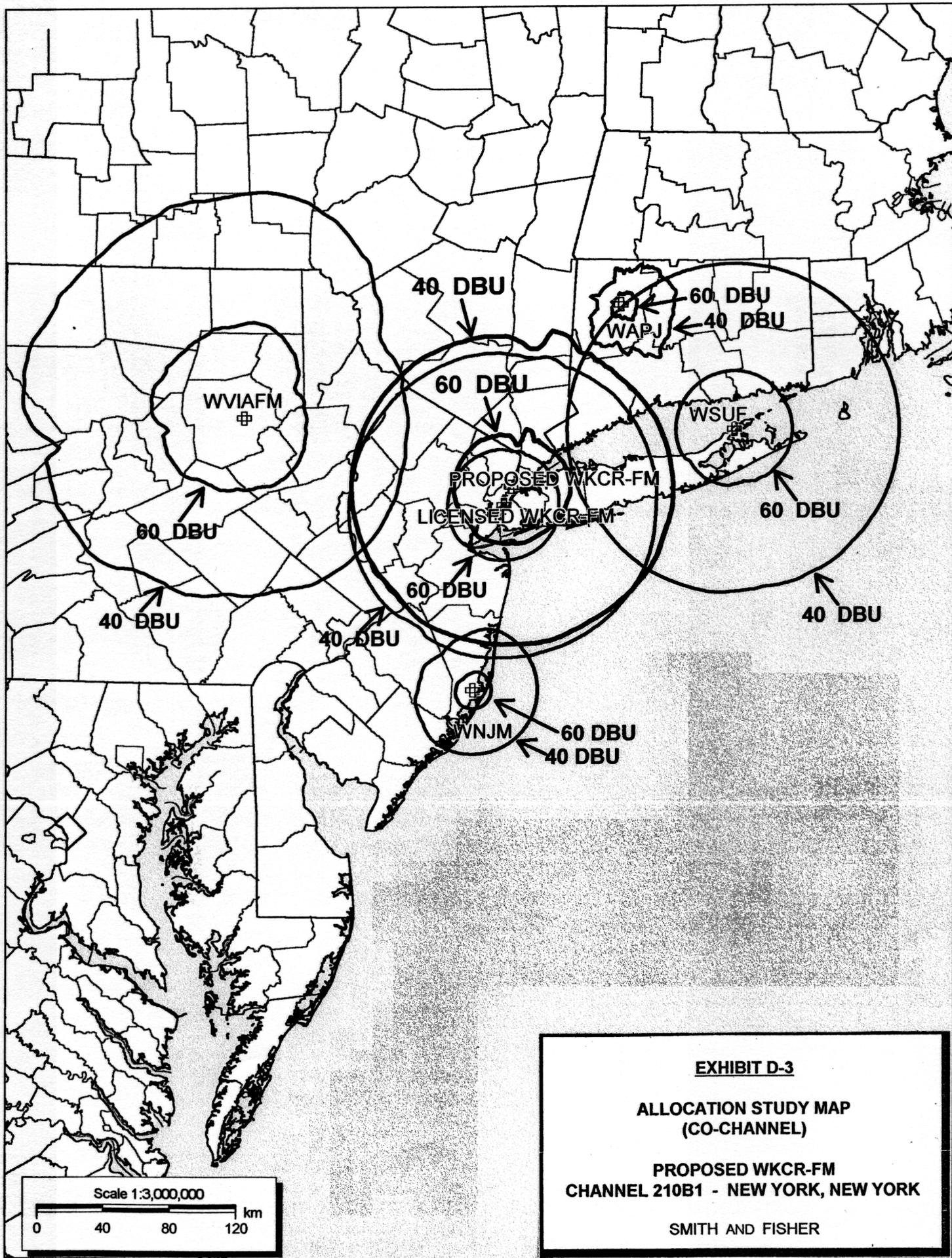
actual loss of service would result. Further, the population within the WHPC(FM) 100 dbμ contour is only 1,660 persons, or 0.01 percent of the 12,474,183 persons within the proposed 60 dbμ contour, which may be considered negligible.

Because the Riverside Church site is the only reasonable transmitting location available to WKCR-FM at this time, the only way to avoid the overlap with WHPC(FM)'s 100 dbμ contour would be to reduce power toward WHPC(FM). However, to accomplish this WKCR-FM would have to reduce its proposed power from 6.9 kW to 4.3 kW. On an omnidirectional basis, this would decrease the station's proposed 60 dbμ coverage by 706,820 persons, which would appear contrary to the public interest just to eliminate an overlap area including only 1,660 persons. Even if the station ideally could employ a directional antenna to eliminate the overlap, the reduction in 60 dbμ service would affect 16,710 persons, and, since such an idealized pattern cannot be created in the real world, the population loss actually would be greater.

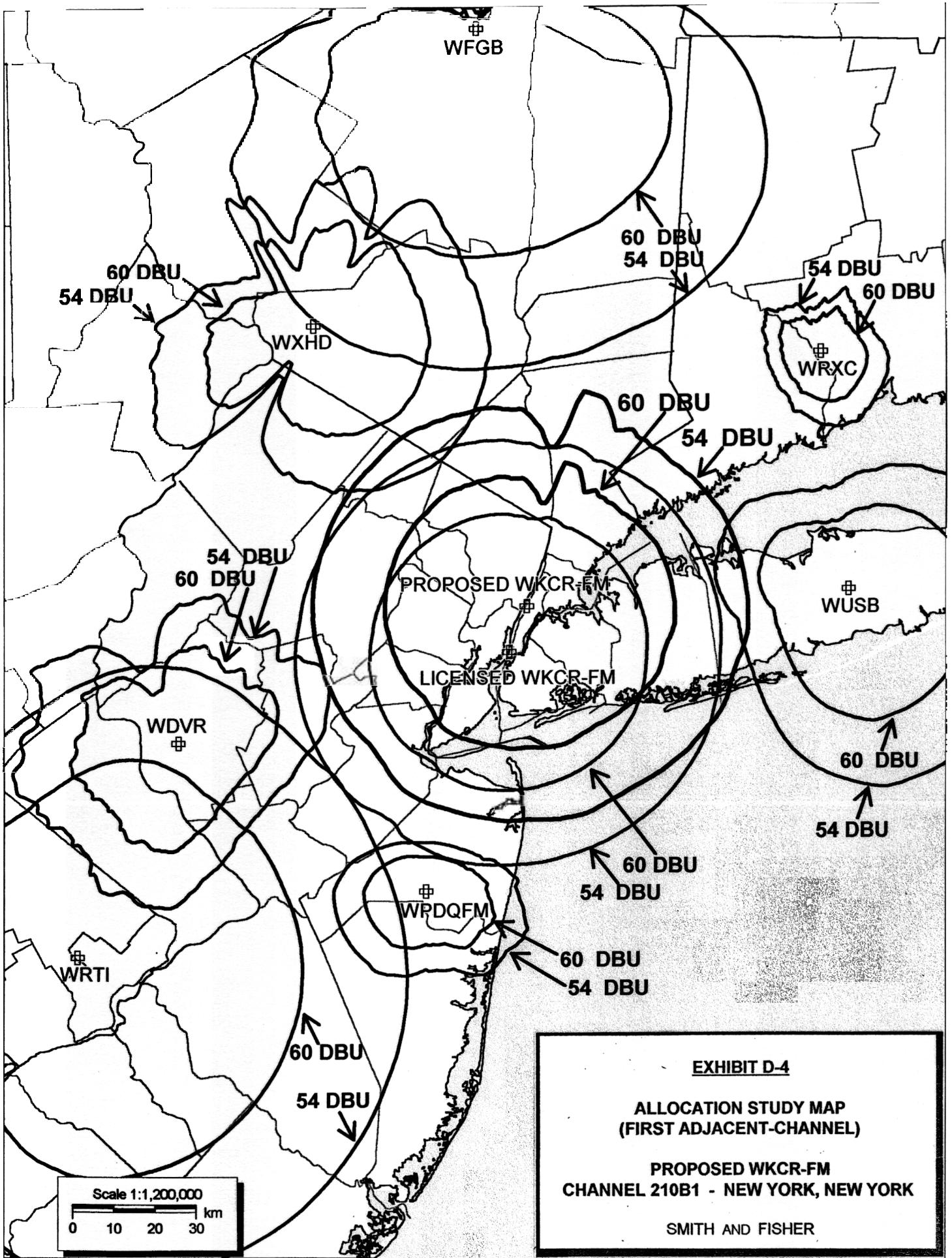
## ALLOCATION STUDY

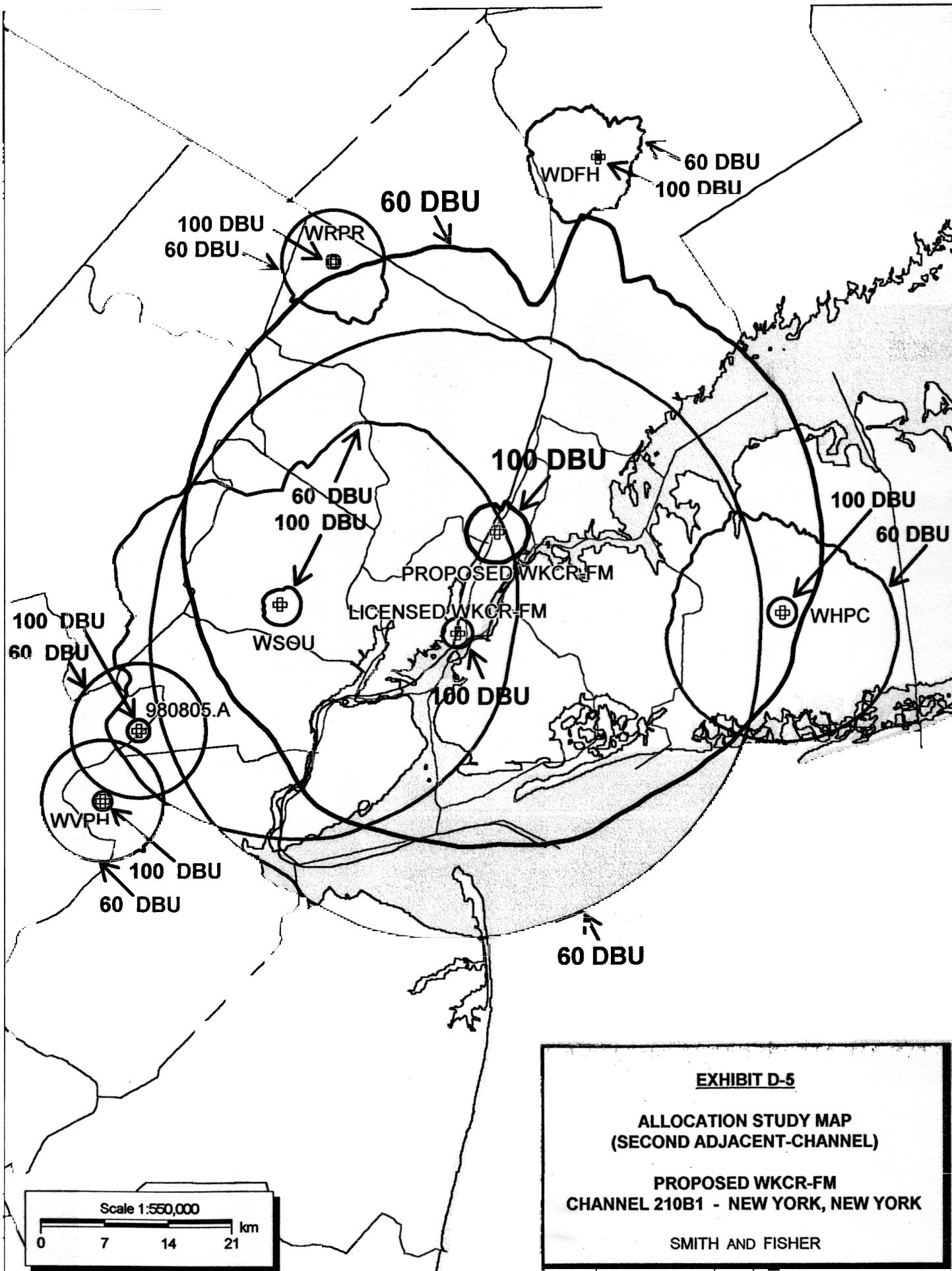
PROPOSED WKCR-FM  
CHANNEL 210B1 - NEW YORK, NEW YORK

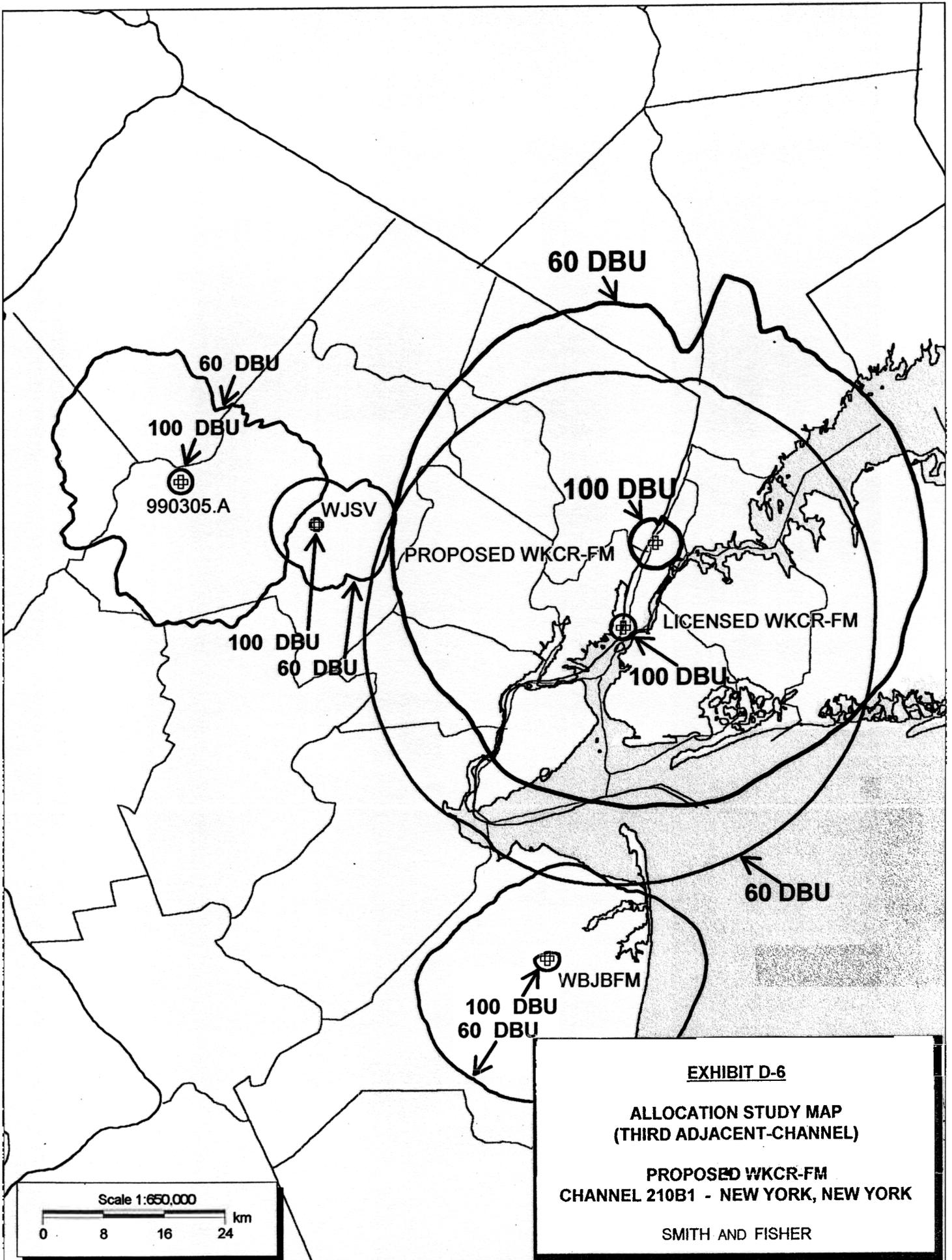
		<u>Separation (km)</u>		
		<u>Req'd.</u>	<u>Pres.</u>	<u>Prop.</u>
207A	Appl., Dover, NJ	48	55.6	59.4
208A	WSOU, South Orange, NJ	48	19.8	25.1
209A	WPDQ-FM, Freehold Township, NJ	96	61.5	73.5
209A	WDVR, Delaware Township, NJ	96	83.0	90.6
209B	WFGB, Kingston, NY	145	151.7	140.8
210B	WVIA-FM, Scranton, PA	211	164.9	165.7
210B1	WSUF(CP), Noyack, NY	175	145.5	138.2
210A	WNJM, Manahawkin, NJ	143	114.0	125.8
210A	WAPJ, Torrington, CT	143	140.5	128.6
211B1	WUSB, Stony Brook, NY	114	83.5	78.0
211B	WRTI, Philadelphia, PA	145	128.0	138.1
211A	WXHD, Mount Hope, NY	96	92.6	85.7
211A	WRXC, Shelton, CT	96	104.6	93.9
212A	WHPC, Garden City, NY	48	35.6	32.6
212A	Appl., Plainfield, NJ	48	36.6	45.0
212A	WVPH, Piscataway, NJ	48	43.1	52.4
212A	WRPR, Mahwah, NJ	48	43.2	34.7
212A	WDFH, Ossining, NJ	48	54.5	42.5
213A	WJSV, Morristown, NJ	48	42.3	44.3
213A	WBJB-FM, Lincroft, NJ	48	44.5	56.4

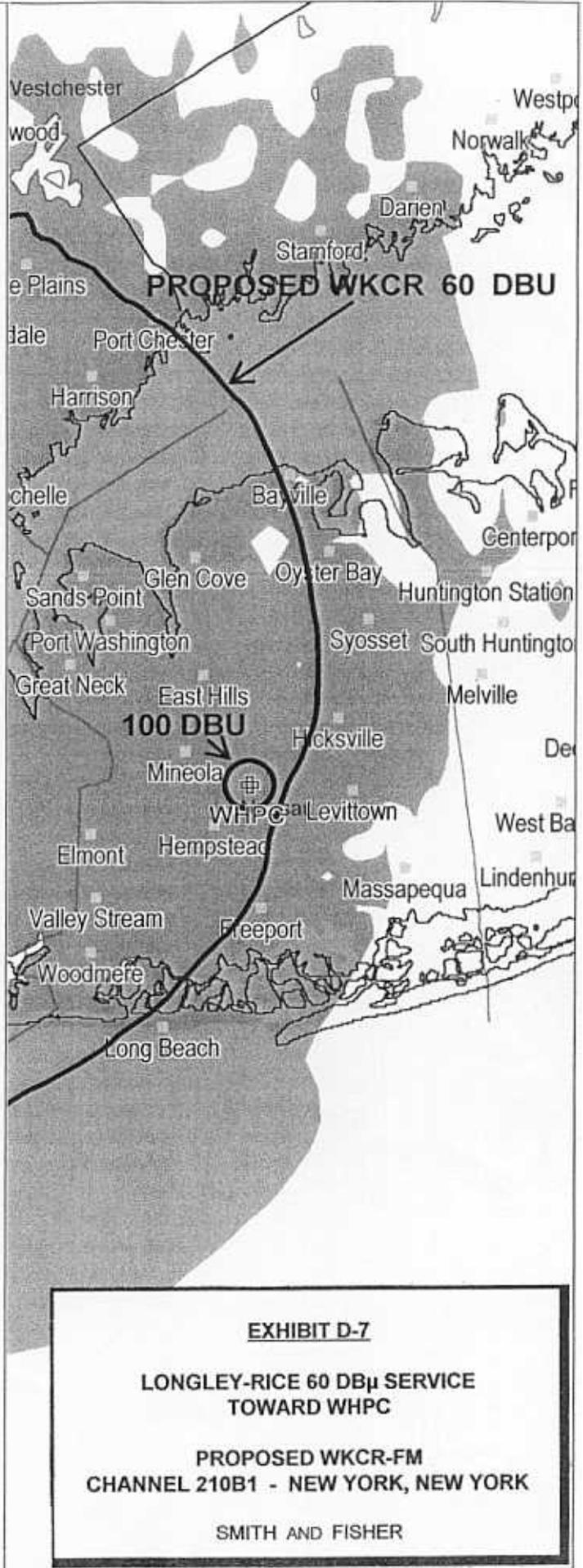
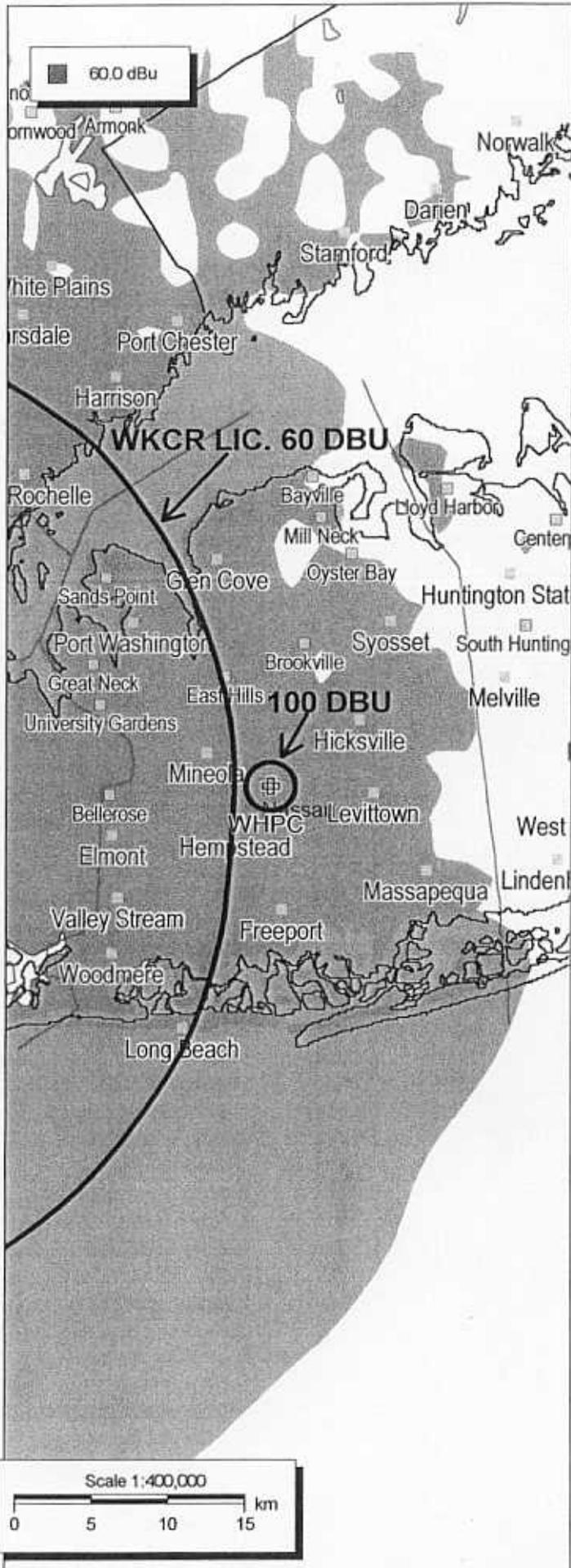


**EXHIBIT D-3**  
**ALLOCATION STUDY MAP**  
**(CO-CHANNEL)**  
**PROPOSED WKCR-FM**  
**CHANNEL 210B1 - NEW YORK, NEW YORK**  
**SMITH AND FISHER**









**EXHIBIT D-7**  
**LONGLEY-RICE 60 DB $\mu$  SERVICE TOWARD WHPC**  
**PROPOSED WKCR-FM CHANNEL 210B1 - NEW YORK, NEW YORK**  
 SMITH AND FISHER