

**June 2011**  
**KOMO-FM Channel 249C Belfair, Washington**  
**New FM Channel 253C3 Oakville, Washington**  
**Section 307(b) Analysis Engineering**

**Contingent Application Group**

The instant application is being filed as part of a contingent application group comprised of the following two applications:

- 1) South Sound Broadcasting proposes to modify KOMO-FM from Channel 249C at Oakville to Channel 249C at Belfair, with no change in transmitter site.
- 2) In order to ensure continued local service to Oakville, Sunnylands Broadcasting proposes to implement its Ilwaco Channel 253A allotment from FM Auction #91 on Channel 253C3 at Oakville.

**Belfair 249C Spacing Study**

A single site is being used for the proposed allotment site and the proposed transmitter site. This is the same location as the licensed KOMO-FM facility. The attached allocation study exhibit demonstrates that the proposed Belfair Channel 249C allotment site meets the co-channel and adjacent channel spacing requirements for Class C stations as prescribed in §73.207 of the Commission's Rules. (Certain special considerations are detailed in the allocation study exhibit.) This proposal is mutually-exclusive with the existing license for KOMO-FM on Channel 249C at Oakville.

**Oakville 253C3 Spacing Study**

A single site is being used for the proposed allotment site and the proposed transmitter site. The attached spacing study demonstrates that the proposed Oakville 253C3 allotment site meets the domestic co-channel and adjacent channel spacing requirements for Class C3 stations as prescribed in §73.207 of the Commission's Rules. The spacing study also demonstrates that this proposal is mutually-exclusive with retention of the existing allotment of Channel 253A at Ilwaco.

The proposed Channel 253C3 allotment site is an existing tower site located 17.5 kilometers from the far side of Oakville. The standard 70 dBu contour distance for a Class C3 facility is 23.2 km. Therefore, and as depicted on the contour map exhibit, the proposed allotment will provide 70 dBu service to 100% of Oakville.

Hatfield & Dawson Consulting Engineers

### **Belfair Will Receive Its First Local Service**

This proposal will provide the first local service to Belfair, a Census Designated Place in Mason County, with a 2010 Census population of 3,931 persons. The FCC considers a town or city to be a community for allotment purposes when it is either incorporated or listed in the US Census.

Oakville will retain local service in the form of the Ilwaco Channel 253A allotment which is simultaneously proposed to be reallocated to Oakville Channel 253C3.<sup>1</sup> Ilwaco will retain service from FM station KVAS on Channel 280C3.

Notably, the community of Ilwaco has seen a reduction in population since the 2000 Census. While the 2000 Census population of Ilwaco was 950 persons, the 2010 Census reports the population of Ilwaco as 936 persons. Meanwhile Belfair has been growing. The 2000 Census population of Belfair was 3,091 persons, while the 2010 Census reports the population of Belfair as 3,931 persons, an increase of 27%.<sup>2</sup>

### **Urbanized Areas**

The community of Belfair is not located within any Urbanized Area. Furthermore, while the 70 dBu contour from the Belfair Channel 249C facility will encompass 100% of the Olympia-Lacey UA, 35% of the Bremerton UA, and 11% of the Seattle UA, the same is true of the licensed KOMO-FM facility. Consequently there will be no change in the station's service area, and the instant proposal does not trigger the requirement of a "Tuck" study.

The city of Oakville is not located within any Urbanized Area as defined by the Census, and the Ilwaco-to-Oakville element of this proposal does not claim a new first local service preference.

### **Gain and Loss Areas**

There is no change proposed in the transmitter site, class, or service area of KOMO-FM. Therefore there are no gain or loss areas associated with the reallocation of KOMO-FM to Belfair.

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<sup>1</sup> Oakville is an incorporated city with a 2000 Census population of 675 persons.

<sup>2</sup> Belfair was not included as a CDP in the 2000 Census. The 3,091 person population noted above is the 2000 Census population corresponding to those block centroids which are within the 2010 Census Belfair CDP boundary.

The gain area directly associated with the reallocation of Ilwaco 253A to Oakville 253C3 encompasses a land area of 4,592 sq km and a population of 276,342 persons. The loss area directly associated with the reallocation away from Ilwaco encompasses a land area of 800 sq km and a population of 29,767 persons. There will be a net increase of service provided by this allotment to 3,792 sq km and 246,575 persons.<sup>3</sup>

### **Ilwaco Loss Area Remaining Services Analysis**

All but a tiny portion of the Ilwaco loss area will remain well-served, i.e. with at least five aural services remaining. As is depicted on the attached map exhibit, the following stations each provide service to all or a portion of the Ilwaco loss area.<sup>4</sup>

A	KLOP	201A	Ocean Park
B	KLOY	204A	Astoria
C	KOAC-FM	209A	Astoria
D	KGIO	213A	Astoria
E	KCPB-FM	215A	Warrenton
F	KMUN	220C2	Astoria
G	KQCB-FM	235C3	Cannon Beach
H	KCYS	251A	Seaside
I	KLMY	259C3	Long Beach
J	KCRX-FM	272C3	Seaside
K	KNBQ	275C	Centralia

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<sup>3</sup> Unless otherwise noted, all population figures quoted in this study are based on 2000 Census block-level data. At the time this application was prepared, 2010 Census block-level data was not yet available in a format compatible with the mapping software utilized by this firm.

<sup>4</sup> In determining reception service provided by FM stations, the area of service circumscribed by the station's 1.0 mV/m signal contour was considered, assuming 1) actual facilities for non-commercial stations operating on reserved channels, 2) maximum facilities for the class of station for stations (other than Class C stations) operating on non-reserved channels, and 3) minimum or existing Class C facilities, whichever is greater, for Class C stations. For clear channel Class A AM stations, the service area was defined by the station's 0.5 mV/m groundwave contour, based on its licensed facilities. For all other classes of full-time AM stations, reception service was defined as that service received within a station's nighttime interference-free contour. See Meeker and Craig, Colorado, 15 FCC Rcd 23858 (2000), Stamps and Fouke, Arkansas, 14 FCC Rcd 10533 (1999), Silverton and Bayfield, Colorado, 14 FCC Rcd 4071 (1999), Malvern and Bryant, Arkansas, 13 FCC Rcd 8426 (1998), and others.

L	KVAS	280C3	Ilwaco
M	KDUX-FM	284C2	Aberdeen
N	KJET	289C2	Raymond
O	KLSY	300A	South Bend
P	KIRO	710 kHz	Seattle Class A 0.5 mV/m
Q	KSWB	840 kHz	Seaside
R	KKEE	1230 kHz	Astoria
S	KAST	1370	Astoria

The following populations will lose an additional potential service:

Services Remaining	Population
4	50
5	1,614
6	2,152
7	4,703
8	1,153
9	843
10-12	19,252

The population which will be left underserved is just 50 persons, which amounts to just 0.2% of the total population of the Ilwaco loss area. None of this population will see a change in actual service, since Ilwaco 253A is not a licensed station.

### **Gain Area Existing Service Analysis**

The entire Oakville gain area is considered to be well-served, with at least five aural services. As is depicted on the attached map exhibit, the following stations each provide service to all or a portion of the Oakville gain area.

A	KLOP	201A	Ocean Park
B	KPLU-FM	203C	Tacoma
C	KSWS	205C3	Chehalis
D	KAOS	207A	Olympia
E	KWFJ	209A	Roy
F	KGHP	210A	Gig Harbor
G	KPLI	211A	Olympia
H	KACS	213A	Chehalis
I	KVTI	215C1	Tacoma
J	KTJC	216C2	Kelso
K	KCED	217A	Centralia
L	KCFL	217A	Elma
M	KXOT	219C2	Tacoma
N	KQMV	223C	Bellevue
O	KUBE	227C0	Seattle
P	KANY	229C3	Ocean Shores
Q	KMPS-FM	231C	Seattle
R	KRXY	233A	Shelton
S	KUOW-FM	235C1	Seattle
T	KITI-FM	236A	Winlock
U	KXXK	237A	Hoquiam
V	KJR-FM	239C	Seattle
W	KXXO	241C	Olympia
X	KJAQ	243C	Seattle
Y	KGY-FM	245C2	McCleary
Z	KIRO-FM	247C	Tacoma
AA	KOMO-FM	249C	Oakville
AB	KING-FM	251C	Seattle
AC	KLCK-FM	255C	Seattle

AD	KDDS-FM	257C	Elma
AE	KISW	260C	Seattle
AF	KKWF	264C	Seattle
AG	KLWA	267A	Westport
AH	KPLZ-FM	268C	Seattle
AI	KSWW	271C3	Elma
AJ	KZOK-FM	273C	Seattle
AK	KNBQ	275C	Centralia
AL	KMTT	279C	Tacoma
AM	KMNT	282C3	Chehalis
AN	KDUX-FM	284C2	Aberdeen
AO	KSGX	285C3	Eatonville
AP	KCMS	287C1	Edmonds
AQ	KJET	289C2	Raymond
AR	KBKS-FM	291C	Tacoma
AS	KRWM	295C1	Bremerton
AT	KRQT	296C3	Castle Rock
AU	KNDD	299C	Seattle
AV	KLSY	300A	South Bend
AW	KVI	570 kHz	Seattle
AX	KBRD	680 kHz	Lacey
AY	KIRO	710 kHz	Seattle
AZ	KTTH	770 kHz	Seattle
BA	KGNW	820 kHz	Burien-Seattle
BB	KGTK	920 kHz	Olympia
BC	KJR	950 kHz	Seattle
BD	KOMO	1000 kHz	Seattle
BE	KMAS	1030 kHz	Shelton
BF	KPTK	1090 kHz	Seattle
BG	KGY	1240 kHz	Olympia

BH	KLDY	1280 kHz	Lacey
BI	KKOL	1300 kHz	Seattle
BJ	KXRO	1320 kHz	Aberdeen
BK	KUOW	1340 kHz	Tumwater
BL	KKMO	1360 kHz	Tacoma
BM	KITI	1420 kHz	Centralia-Chehalis
BN	KELA	1470 kHz	Centralia-Chehalis

The following populations will gain an additional service:

<b>Services Existing</b>	<b>Population</b>
7	254
8	2,218
9	1,932
10+	242,171

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SEARCH PARAMETERS FM Database Date: 110622

Channel: 249C 97.7 MHz  
 Latitude: 47 18 46  
 Longitude: 123 22 15  
 Safety Zone: 32 km  
 Job Title: KOMO-FM 249C BELFAIR

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
	METCHOSIN/SOOKE BC RM-		246A 97.1	0.000 0.0	48-24-09 123-34-20	353.0	122.10 21.10	101 CLEAR
KIROaux LIC	TACOMA WA BXLH-01018ACH		247C 97.3	50.000 388.0	47-32-35 122-06-25	74.5	98.74 0.00	0 AUX
KIRO-FM LIC	TACOMA WA BLH-891018KC		247C 97.3	55.000 729.0	47-30-14 121-58-29	78.1	107.49 2.49	105 CLOSE
KIROaux LIC	TACOMA WA BXLH-940302KB		247C 97.3	20.000 691.0	47-30-14 121-58-29	78.1	107.49 0.00	0 AUX
ADD	MANZANITA OR RM-11631		248C3 97.5	0.000 0.0	45-41-05 123-54-38	193.1	185.66 9.66	176 CLOSE
NEW-T APP	PORTLAND OR BNPFT-30310BFC		248D 97.5	0.010 220.0	45-36-31 122-51-20	168.0	193.53 0.00	0 TRANS
NEW-T APP	ARIEL WA BNPFT-30317KLO		248D 97.5	0.010 805.0	45-59-37 122-35-42	157.7	158.21 0.00	0 TRANS
NEW-T APP	BRUSH PRAIRIE WA BNPFT-30317KHD		248D 97.5	0.250 88.0	45-39-06 122-36-01	162.0	193.90 0.00	0 TRANS
NEW-T APP	VANCOUVER WA BNPFT-30317IJS		248D 97.5	0.250 52.0	45-38-20 122-36-19	162.2	195.14 0.00	0 TRANS
CBUFFM	VANCOUVER BC -		249C 97.7	100.000 567.0	49-21-12 122-57-18	7.6	228.99 -77.01	306 SHORT
KACI-FM LIC	THE DALLES OR BLH-71009ABD		249C2 97.7	5.100 271.1	45-38-58 121-16-25	138.3	245.20 -3.80	249 SHORT
NOTE:	KACI-FM ORDERED TO CHANNEL 228C2							
KYSN LIC	EAST WENATCHEE WA BLH-91015ABA		249A 97.7	6.000 -30.0	47-22-51 120-17-15	87.0	233.11 7.11	226 CLOSE
KYSN APP	EAST WENATCHEE WA BSTA-70116ADF		249C3 97.7	1.000 -32.0	47-22-52 120-17-15	87.0	233.11 -3.89	237 SHORT
NOTE:	STA FACILITY ONLY							
NEW-T APP	MANSFIELD WA BNPFT-30317AAP		249D 97.7	0.007 521.0	47-51-15 120-10-10	74.7	248.24 0.00	0 TRANS



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SEARCH PARAMETERS FM Database Date: 110622

Channel: 249C 97.7 MHz  
 Latitude: 47 18 46  
 Longitude: 123 22 15  
 Safety Zone: 32 km  
 Job Title: KOMO-FM 249C BELFAIR

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KOMOaux LIC	OAKVILLE WA	BXLH-90728ACZ	249C 97.7	16.500 701.0	47-18-46 123-22-15	0.0	0.00 0.00	0 AUX
KOMO-FM LIC	OAKVILLE WA	BLH-80514AGI	249C 97.7	63.000 728.0	47-18-46 123-22-15	0.0 SS	0.00 -290.00	290 SHORT
KOMO-FM CP MOD	OAKVILLE WA	BMPH-00602AKM	249C 97.7	69.000 701.0	47-18-46 123-22-15	0.0	0.00 -290.00	290 SHORT
KOMO-FM LIC	OLYMPIA WA	BLFTB-11109AAG	249D 97.7	3.700 0.0	47-00-58 122-54-57	133.6	47.73 0.00	0 BOOST
K249CQ LIC	PACKWOOD WA	BLFT-80812ACZ	249D 97.7	0.041 574.0	46-36-09 121-38-08	120.3	153.89 0.00	0 TRANS
KOMOaux LIC	RAYMOND WA	BXLH-50406ACE	249C1 97.7	0.500 673.0	46-58-31 123-08-16	154.8	41.48 0.00	0 AUX
K249DX LIC	REDMOND WA	BLFT-90728ACY	249D 97.7	0.075 149.0	47-38-39 122-09-25	67.6	98.64 0.00	0 TRANS
ADD	ALOHA OR	RM-11631	250C1 97.9	0.000 0.0	45-29-20 122-41-40	165.4	209.31 0.31	209 CLOSE
KNRQ-FM APP	ALOHA OR	BMPH-00805AKO	250C1 97.9	10.000 470.0	45-31-21 122-44-45	166.2 SS	204.72 -4.28	209 SHORT
NOTE: 73.215 SHORT-SPACING CREATED BY KNRQ-FM								
KNRQ-FM RSV	ALOHA OR	-	250C1 97.9	0.000 0.0	45-29-20 122-41-40	165.4	209.31 0.31	209 CLOSE
DEL	TUALATIN OR	RM-11631	250C2 97.9	0.000 0.0	45-30-57 122-43-52	166.0	205.71 17.71	188 CLEAR
KNRQ-FM CP MOD	TUALATIN OR	BMPH-80331ACU	250C2 97.9	3.700 470.0	45-31-21 122-44-45	166.2 SS	204.72 16.72	188 CLEAR
NEW-T APP	CAMAS WA	BPFT-971027TH	250D 97.9	0.011 488.0	45-40-35 122-22-39	157.0	197.24 0.00	0 TRANS

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SEARCH PARAMETERS FM Database Date: 110622

Channel: 249C 97.7 MHz Page 3

Latitude: 47 18 46

Longitude: 123 22 15

Safety Zone: 32 km

Job Title: KOMO-FM 249C BELFAIR

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
K250AE LIC	LONGVIEW WA	BLFT-80623ABZ	250D 97.9	0.250 18.0	46-08-57 122-58-29	166.7	132.85 0.00	0 TRANS
NEW-T APP	ST HELENS WA	BNPFT-30317EAK	250D 97.9	0.250 45.0	45-51-22 122-49-16	165.3	167.32 0.00	0 TRANS
NEW-T APP	WOODLAND WA	BNPFT-30317LRI	250D 97.9	0.250 8.0	45-54-22 122-45-32	163.1	163.25 0.00	0 TRANS
KING-FM LIC	SEATTLE WA	BLH-80707AIW	251C 98.1	68.000 707.0	47-30-14 121-58-29	78.1	107.49 2.49	105 CLOSE
KINGaux LIC	SEATTLE WA	BXLH-20829ABH	251C 98.1	50.000 388.0	47-32-35 122-06-25	74.5	98.74 0.00	0 AUX

44444 END OF FM SPACING STUDY FOR CHANNEL 249 44444

SEARCH PARAMETERS

FM Database Date: 110622

Channel: 253C3 98.5 MHz  
 Latitude: 46 58 31  
 Longitude: 123 8 16  
 Safety Zone: 32 km  
 Job Title: OAKVILLE 253C3

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KING-FM LIC	SEATTLE WA	BLH-80707AIW	251C 98.1	68.000 707.0	47-30-14 121-58-29	55.8	105.87 9.87	96 CLOSE
KINGaux LIC	SEATTLE WA	BXLH-20829ABH	251C 98.1	50.000 388.0	47-32-35 122-06-25	50.6	100.36 0.00	0 AUX
KPPK LIC	RAINIER OR	BLH-60802AFY	252A 98.3	1.600 195.0	46-10-59 122-57-29	171.1	89.14 0.14	89 CLOSE
CFMSFM	VICTORIA BC	-	253C 98.5	100.000 185.0	48-46-28 123-10-10	359.3	200.06 -58.94	259 SHORT
NEW-T APP	CAMANO WA	BNPFT-30317KPG	253D 98.5	0.115 143.0	48-05-11 122-34-56	18.5	130.43 0.00	0 TRANS
NEW-T APP	CENTRALIA WA	BNPFT-30310BNF	253D 98.5	0.250 83.0	46-43-52 123-01-28	162.3	28.49 0.00	0 TRANS
NEW-T APP	CHEHALIS WA	BNPFT-30314BKK	253D 98.5	0.016 394.0	46-33-17 123-03-27	172.5	47.15 0.00	0 TRANS
KGHO-LP LIC	HOQUIAM WA	BLL-80331AGD	253L1 98.5	0.100 3.2	46-58-22 123-51-10	270.0	54.41 0.00	0 LPFM
VAC	ILWACO WA	RM-11124	253A 98.5	0.000 0.0	46-18-33 124-02-31	223.3	101.37 -40.63	142 SHORT
NEW APP	ILWACO WA	BSFH-10210BBL	253A 98.5	0.000 0.0	46-18-33 124-02-31	223.3	101.37 -40.63	142 SHORT
NEW-T APP	OLYMPIA WA	BNPFT-30317HRF	253D 98.5	0.250 134.0	47-00-58 122-54-57	74.8	17.48 0.00	0 TRANS
NEW-T APP	SEATTLE WA	BNPFT-30314ALM	253D 98.5	0.020 89.0	47-36-17 122-19-46	40.8	92.93 0.00	0 TRANS
NEW-T APP	TENINO WA	BNPFT-30310ATP	253D 98.5	0.016 406.0	46-50-34 122-45-46	117.2	32.14 0.00	0 TRANS
NEW-T APP	UNION MILL WA	BNPFT-30314AHM	253D 98.5	0.140 168.0	47-03-42 122-49-48	67.5	25.30 0.00	0 TRANS

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SEARCH PARAMETERS                               FM Database Date: 110622
Channel: 253C3   98.5 MHz                        Page 2
Latitude: 46 58 31
Longitude: 123 8 16
Safety Zone: 32 km
Job Title: OAKVILLE 253C3

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Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KUPL LIC	PORTLAND OR	BLH-10422AAN	254C1 98.7	25.000 502.0	45-30-58 122-43-59	169.0	165.17 21.17	144 CLEAR
KUPLaux LIC	PORTLAND OR	BXLH-31107AAG	254C1 98.7	11.000 362.0	45-30-57 122-43-52	168.9	165.23 0.00	0 AUX
KLCKaux LIC	SEATTLE WA	BLH-990803KF	255C 98.9	8.300 377.0	47-32-41 122-06-28	50.5	100.43 0.00	0 AUX
KLCK-FM LIC	SEATTLE WA	BLH-60824AEB	255C 98.9	68.000 698.0	47-30-17 121-58-03	55.9	106.38 10.38	96 CLEAR

**44444** END OF FM SPACING STUDY FOR CHANNEL 253 **44444**







