

**LPFM Preclusion Study**

This application has been studied to determine preclusion to LPFM points. Due to the location of the proposed transmitter site being within 39km of multiple Spectrum Available Market Grids and the existence of the Technical Amendment for this application, Grid Tests are required.

As seen in Exhibit 1-A, the proposed facility meets all minimum distance separation requirements with regard to co-channel, first-, and second-adjacent channel LPFM opportunities for Modesto, CA.

As seen in Exhibit 1-B, the proposed facility meets all minimum distance separation requirements with regard to co-channel, first-, and second-adjacent channel LPFM opportunities for Stockton, CA.

**Modesto CA Market Study**

Modesto, CA  
Latitude 37-38-21  
Longitude 120-59-45  
Grid Size 21 x 21  
Micro FM 100 Watts at 30m HAAT  
Co-Channel and 1st Adjacent Protected  
2nd Adjacent Channel Protected  
3rd Adjacent Channel Not Protected  
I.F. Not Protected  
TV Channel 6 Protected  
CP Records Protected  
APP Records Protected  
FM Translators Protected  
TV Channel 6 Translators/LP Protected  
Auc83 FX App Records Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	0	240	0	260	0	280	0
201	0	221	0	241	0	261	0	281	0
202	0	222	0	242	0	262	0	282	0
203	0	223	0	243	0	263	0	283	0
204	0	224	0	244	0	264	0	284	0
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	0	266	0	286	189
207	0	227	0	247	0	267	13	287	10
208	0	228	0	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	3	270	0	290	0
211	0	231	0	251	0	271	0	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	0	293	0
214	0	234	0	254	4	274	0	294	0
215	0	235	0	255	18	275	0	295	0
216	0	236	0	256	0	276	0	296	0
217	0	237	0	257	5	277	0	297	0
218	0	238	0	258	0	278	0	298	0
219	0	239	0	259	25	279	0	299	142
								300	1
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Total		410							

Total allotments, least preclusive spacing: 14  
Total allotments, most preclusive spacing: 11

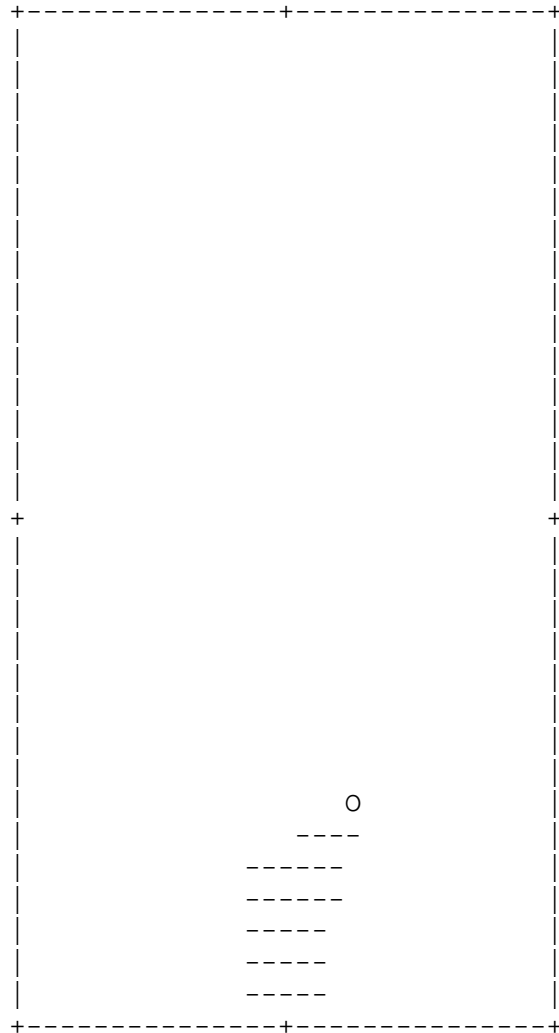
**Stockton CA Market Study**

Stockton, CA  
Latitude 37-57-28  
Longitude 121-17-23  
Grid Size 31 x 31  
Micro FM 100 Watts at 30m HAAT  
Co-Channel and 1st Adjacent Protected  
2nd Adjacent Channel Protected  
3rd Adjacent Channel Not Protected  
I.F. Not Protected  
TV Channel 6 Protected  
CP Records Protected  
APP Records Protected  
FM Translators Protected  
TV Channel 6 Translators/LP Protected  
Auc83 FX App Records Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	4	240	23	260	0	280	0
201	0	221	177	241	0	261	0	281	0
202	0	222	0	242	23	262	0	282	0
203	0	223	0	243	0	263	0	283	21
204	0	224	0	244	0	264	0	284	201
205	0	225	4	245	0	265	0	285	0
206	0	226	58	246	0	266	0	286	0
207	0	227	187	247	0	267	106	287	0
208	0	228	232	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	0	270	0	290	76
211	0	231	0	251	0	271	0	291	28
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	0	293	0
214	0	234	0	254	1	274	32	294	0
215	0	235	0	255	14	275	0	295	0
216	0	236	0	256	0	276	0	296	0
217	0	237	0	257	0	277	0	297	0
218	0	238	76	258	0	278	0	298	0
219	0	239	107	259	4	279	0	299	0
								300	5
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Total		1379							

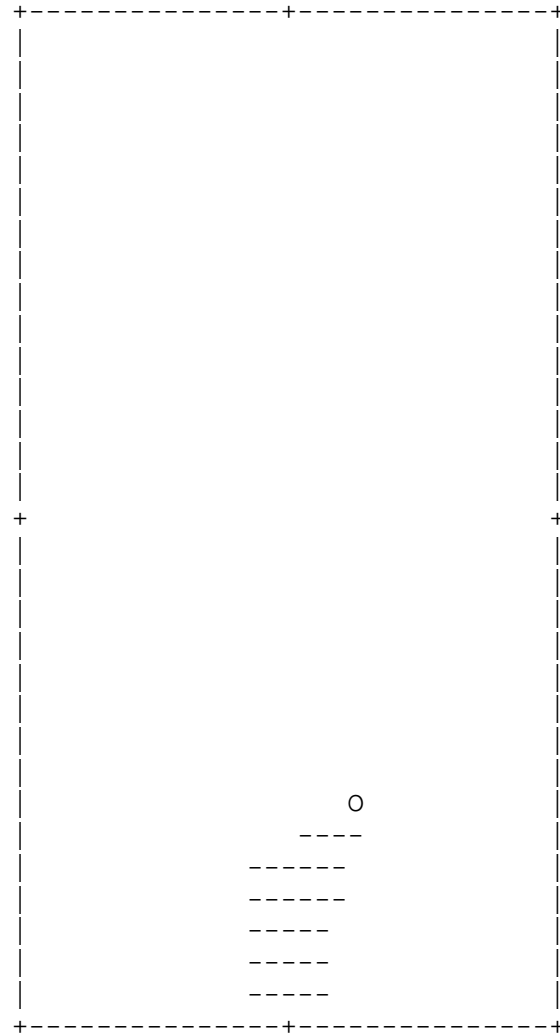
Total allotments, least preclusive spacing: 29  
Total allotments, most preclusive spacing: 21

Stockton, CA  
Latitude 37-57-28  
Longitude 121-17-23  
Least preclusive siting  
Availability of Channel 274 (X)

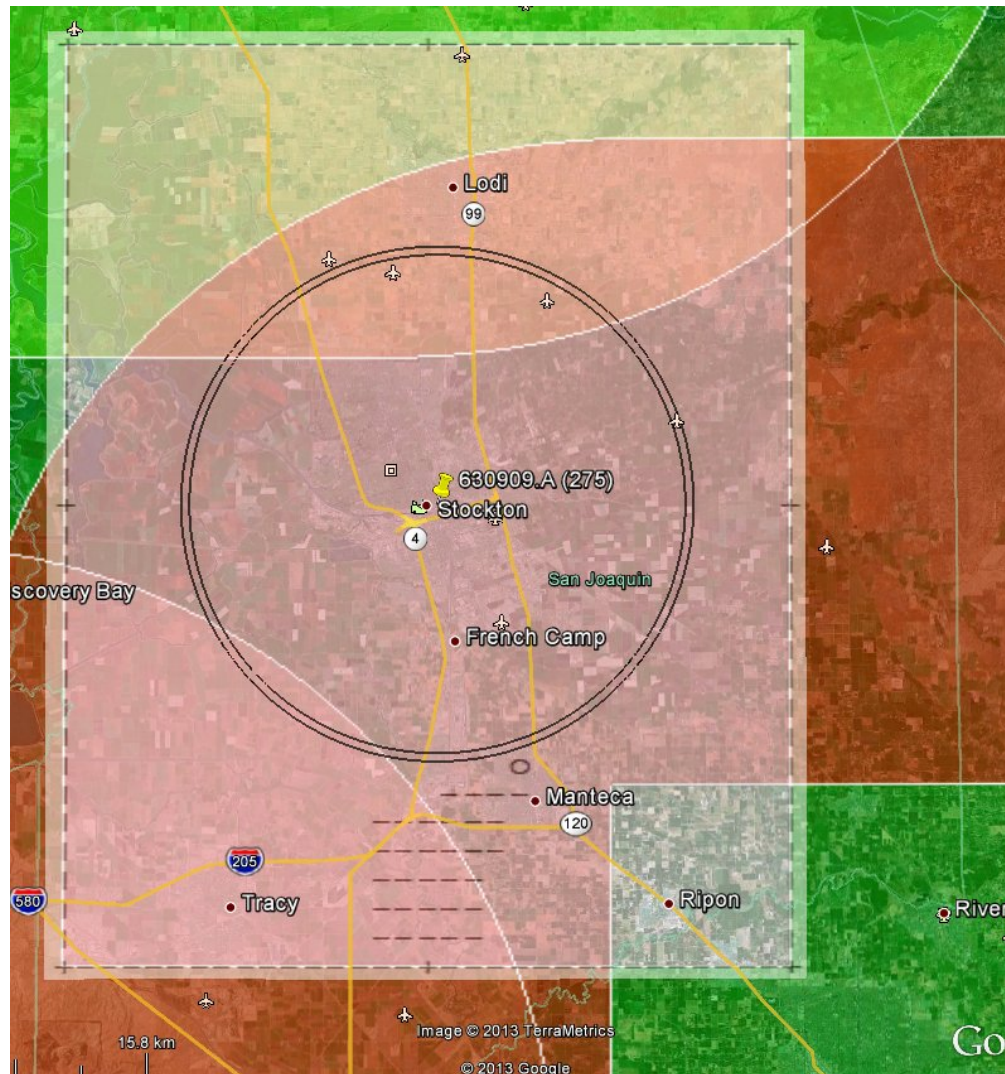


Point #348 at 37-48-28 121-13-23

Stockton, CA  
Latitude 37-57-28  
Longitude 121-17-23  
Most preclusive siting  
Availability of Channel 274 (X)



Point #348 at 37-48-28 121-13-23



12-radial HAAT is 109.3 m  
60 dBu contour distance is 7.141 km

LPFM Protected points for 1<sup>st</sup> Adj Ch 274 are shown aligned to Stockton grid.

The Yellow Tack indicates the proposed transmitter location.

The inner Black Circle Contour indicates minimum 1<sup>st</sup> Adj protection distance (15 km) to proposed transmitter (per 73.807). The outer Black Circle Contour (due to proximity to points, and out of an abundance of caution) indicates industry accepted 1<sup>st</sup> Adj protection distance (15.5 km) to proposed transmitter. No LPFM points are within the minimum distance or the cautionary industry accepted distance; therefore the proposed transmitter does not preclude any LPFM opportunities on Ch 274.