Appendix D

Biological Resources

Appendix D1

Bio Noise Study

Music Performance Community Noise Level Estimation and Assessment

Pantelis Vassilakis, Ph.D. @ AcousticsLab
Acoustics and Noise Mitigation Consulting for Art & Entertainment Events

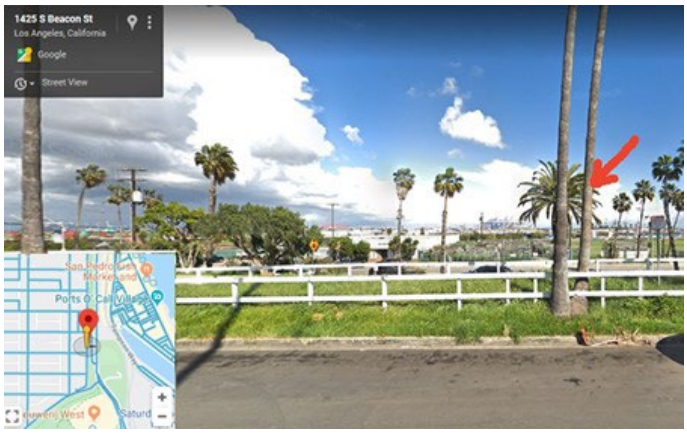
This section

A. Establishes average ambient community sound pressure levels (SPLs) with measurements obtained from two representative locations near the venue, under average environmental conditions.
B. Models maximum SPLs expected within and at the perimeter of the proposed West Harbor LA Amphitheater (hereafter "the Venue"), due to music performance events.
C. Models maximum SPLs anticipated to reach the community due to music performance events at the Venue, and their expected dissipation with distance from the source.
D. Assesses modeled noise levels against average ambient community noise measurements.

A. Ambient SPL Measurements

Data was collected using Piccolo II Professional Class 2 Sound Level Meters by Soft dB[1] over a five-day period (2/26/2020, 2:00 p.m. – 3/2/2020, 12:00 p.m.) from two measurement locations, chosen for their: a) relative placement between the Venue and residences and b) representative traffic noise conditions.

Location 1 (low-to-medium traffic[2]) - 33°43'51.4"N 118°16'49.5"W - https://goo.gl/maps/nMwovzCiRKywUCtH7
1498-1400 S Beacon St, San Pedro, CA 90731 (~1,400 ft E of the stage; palm tree, W side of the street)



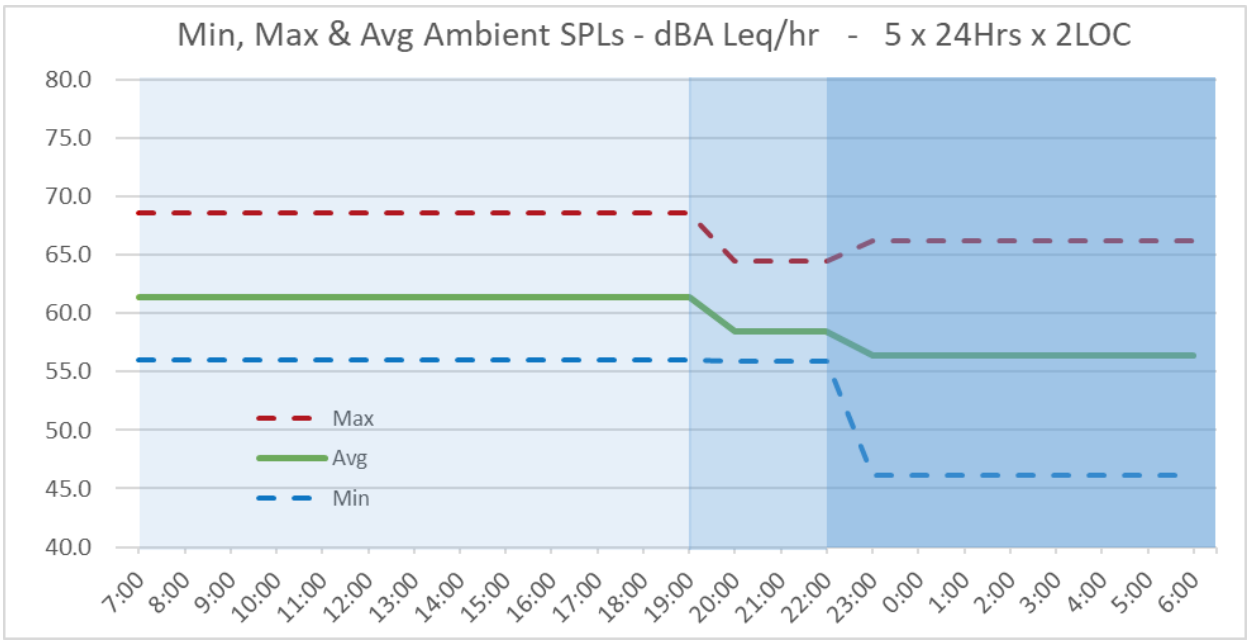
[1] https://www.softdb.com/products/piccolo2
[2] Traffic movement was assessed qualitatively. Descriptors (*e.g.* low; medium) reflect qualitative comparisons relative to the general area and are not based on quantitative analysis of measured vehicle flow, speed, and density.

System Tuning 1 (for favorable weather conditions)

Location 2 (medium traffic) - 33°43'34.1"N 118°17'05.0"W - https://goo.gl/maps/k1PKXeWtLznrNe928
1901-1999 S Crescent Ave, San Pedro, CA 90731 (~3,200,ft SE of the stage, pole, W side of the street)

Minimum and maximum hourly dBA Leq[3] data is reported per location, along with average dBA Leq values, over three periods: Day: 7:00 A.M.-7:00 P.M.; Evening: 7:00 P.M.- 10:00 P.M.; Night: 10:00 P.M.-7:00 A.M.

dBA Leq / Time Period	*Minimum*			*Average*			*Maximum*		
	Loc 1	Loc 2	Avg	Loc 1	Loc 2	Avg	Loc 1	Loc 2	Avg
Day	54.7	57	**56**	59.3	62.7	**61.3**	65.5	70.3	**68.5**
Evening	54.1	57.1	**55.9**	58.1	58.8	**58.5**	66.3	61	**64.4**
Night	44.8	47.2	**46.2**	54.1	57.9	**56.4**	63.7	67.8	**66.2**



[3] dBA Leq: time-averaged A-weighted SPLs of continuous signals matching in total energy the measured time-variant signals, over a given period of time. All measured SPL values are subject to ~ +-1dB uncertainty level, standard for Class 1 measurement instruments.

System Tuning 1 (for favorable weather conditions)

B. Music Performance SPLs Modeled at the Venue

SPLs within the Venue's perimeter were obtained via sound propagation modeling that

a) assumed the maximum music performance SPL target values provided by the Venue's developer team:
   i) ~106dBA SPL 5minLeq[4]: audience area nearest to the stage
   ii) ~110dBA SPL 5minLeq: mixing, or "front of house" position (hereafter "FOH") ~95ft from the stage
   iii) ~103dBA SPL 5minLeq: furthest audience locations at the Venue's perimeter

b) incorporated loudspeaker system design and software processing with sound focusing capabilities that aims at the developer-defined SPL limits within the Venue while reducing the amount of sonic energy spillage outside the venue.

Levels at the Venue were modeled using *d&b audiotechnik* products, compatible with the far-field SPL modeling software[5] used to estimate community noise levels. Several manufacturers[6] offer hardware, software, and expertise capable of addressing the project's requirements through permanent or removable installations, with *L-Acoustics* having historically led the way in sound wave propagation management.

d&b audiotechnik system used for sound source & SPL distribution modeling[7]

- L-R Flown Arrays: 12 x GSL8[8] & 4 x GSL12[9] per side
- L-R Flown Subs: 6 x SL-SUB[10] per side
- SUB Arc / Ground Subs: 8 x SL-SUB
- Front Fills 6 x Y10P[11] (@90^0)

Two sets of system tuning parameters were defined, aimed at reducing community SPLs at different environmental conditions,[12] within the prescribed onsite SPLs. Both involve extensive software processing that introduces spectral artifacts.

System Tuning 1: appropriate to favorable weather conditions, where refraction would direct sonic energy aiming outside the Venue upwards, and wind-flow would direct it towards the ocean. This permits the aiming of sonic energy outside the venue, helping increase SPL dissipation with distance through wave interference. A 40m-wide area was defined, surrounding the Venue, 30m off its perimeter. The system was tuned for reduced SPLs reaching that area.

System Tuning 2: appropriate to unfavorable weather conditions, where refraction would redirect any sonic energy exiting the Venue downwards, and wind flow would redirect it towards the community. The system was tuned for reduced SPLs exiting the venue, within the prescribed onsite SPLs.

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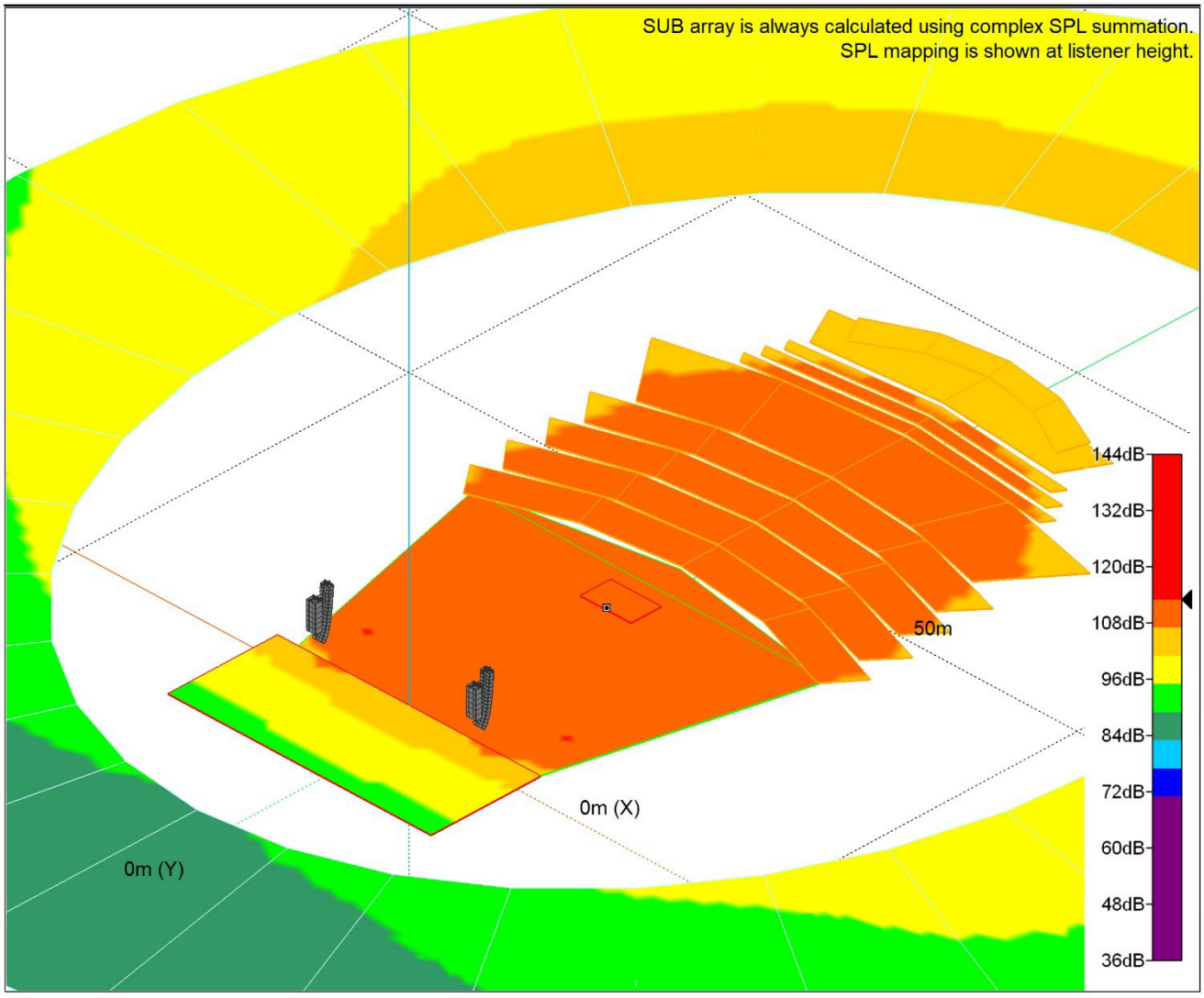
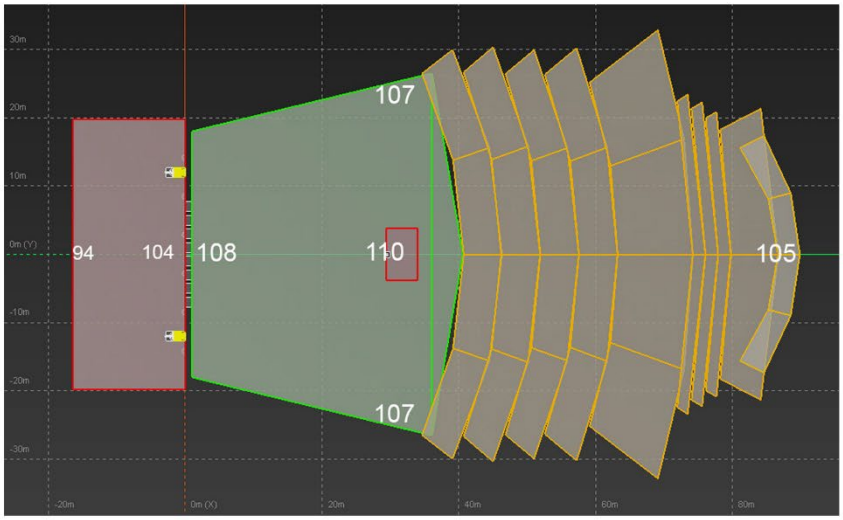
[4] *i.e.* A-weighted energy-equivalent SPLs, averaged over 5 minutes.
[5] : NoizCalc https://www.dbaudio.com/global/en/products/software/noizcalc. Created with SoundPLAN https://www.soundplan.eu/en, a specialist software developer for environmental noise prediction.
[6] L-Acoustics: https://www.l-acoustics.com - d&b Audiotechnik: https://www.dbaudio.com/global/en - Meyer Sound: https://meyersound.com
[7] Onsite SPLs were modeled with d&b audiotechnik's ArrayCalc https://www.dbaudio.com/global/en/products/software/arraycalc
[8] https://www.dbaudio.com/global/en/products/series/sl-series/gsl8
[9] https://www.dbaudio.com/global/en/products/series/sl-series/gsl12
[10] https://www.dbaudio.com/global/en/products/series/sl-series/sl-sub
[11] https://www.dbaudio.com/global/en/products/series/y-series/y10p
[12] See the next section.

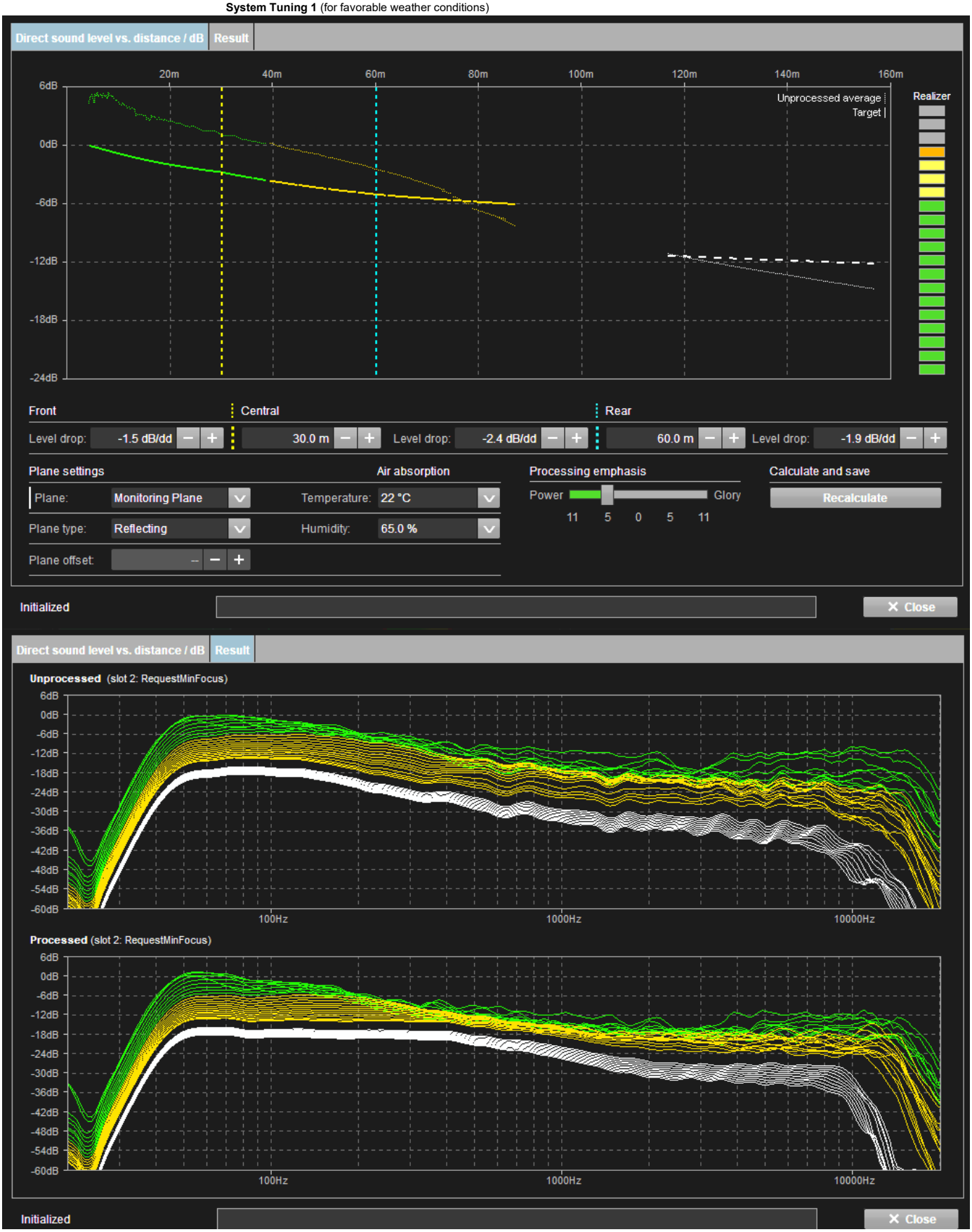
System Tuning 1 (for favorable weather conditions)



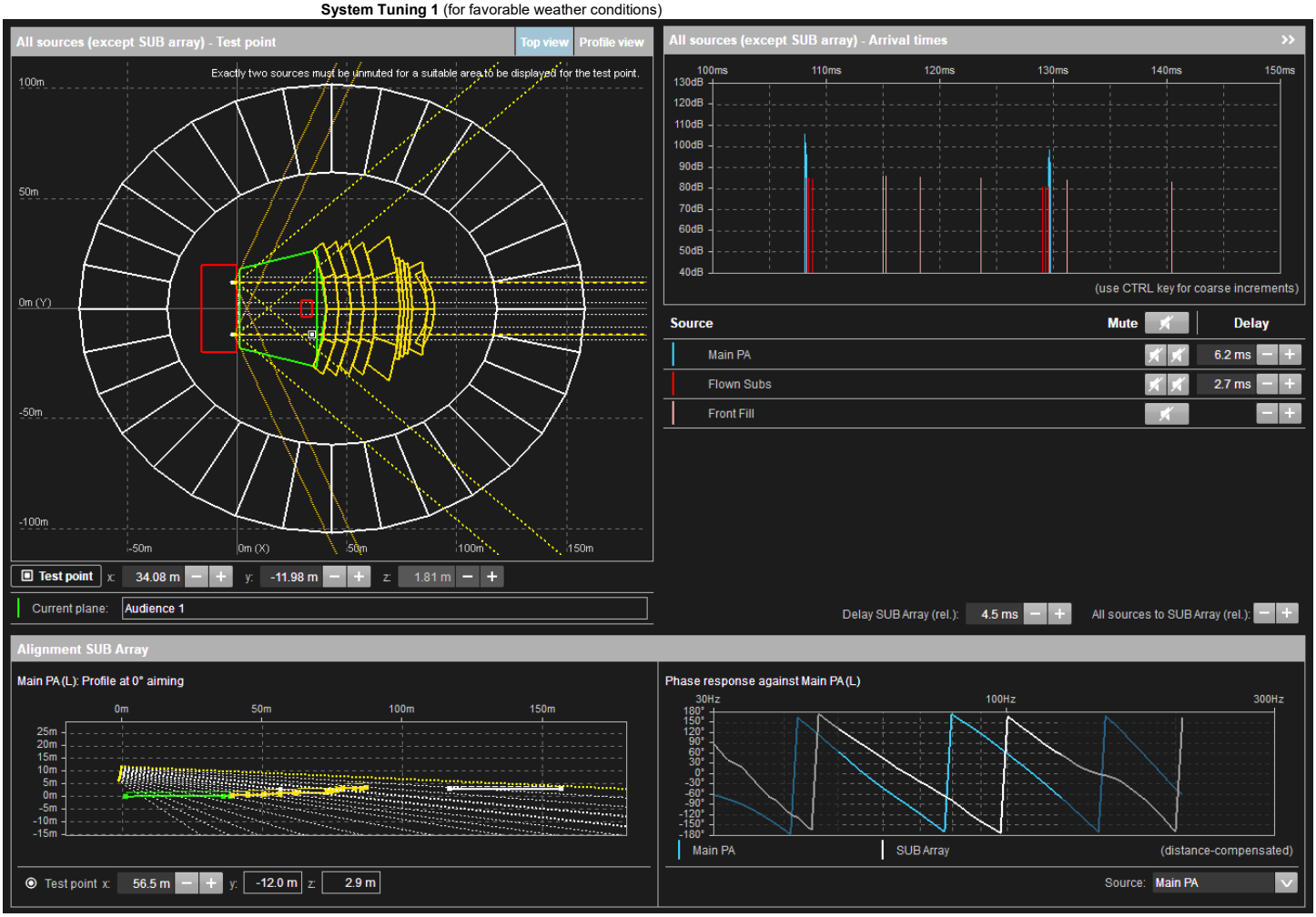
SPL calculation	
Resolution:	Mid (2m)
Highest SPL:	113.1 dB
Simulated signal	
Level:	3.4 dBu
Signal:	BB pink (A)
Show interferences:	Off
Air absorption	
On/Off:	On
Temperature:	22 °C
Humidity:	65.0 %
NoizCalc reference point	
x:	29.6 m
y:	0.0 m
z:	2.0 m
SPL:	110.0 dB



System Tuning 1 (for favorable weather conditions)

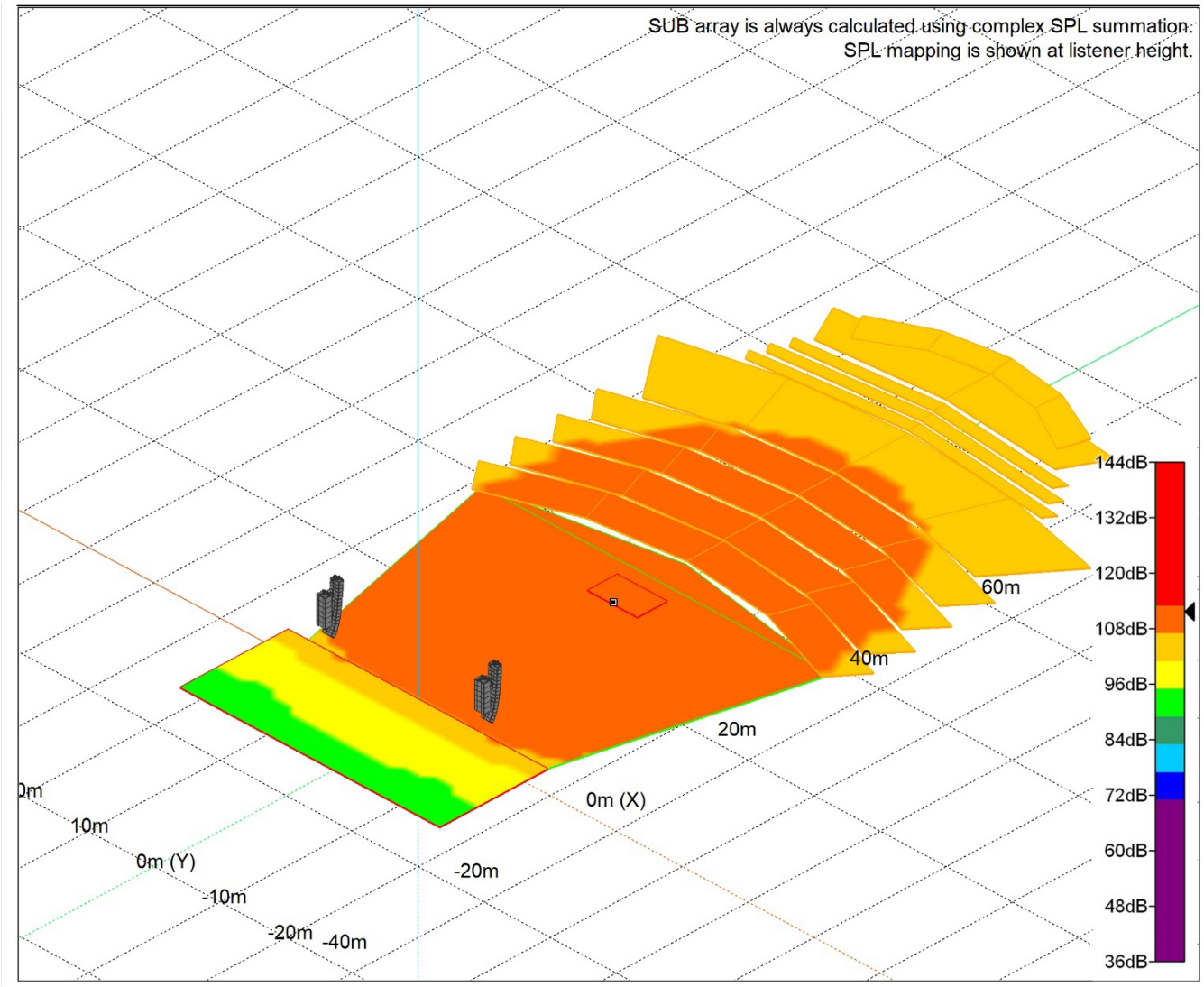


System Tuning 1 (for favorable weather conditions)

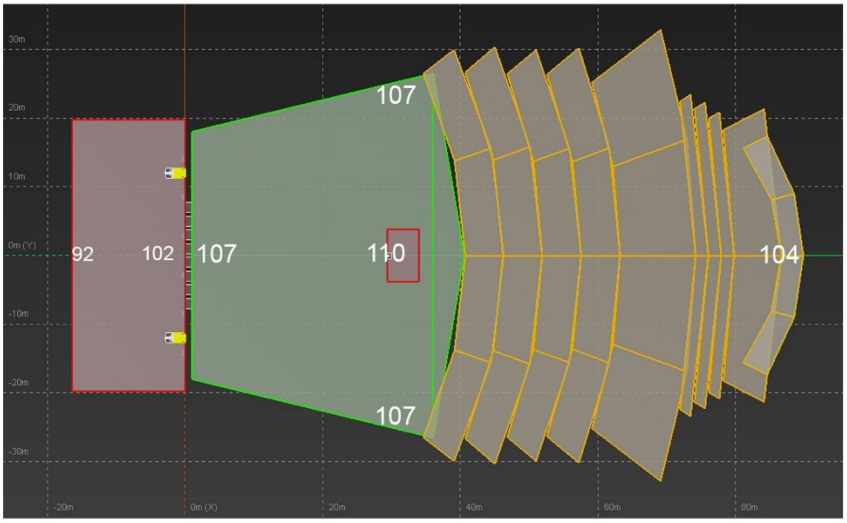


System Tuning 1 (for favorable weather conditions)

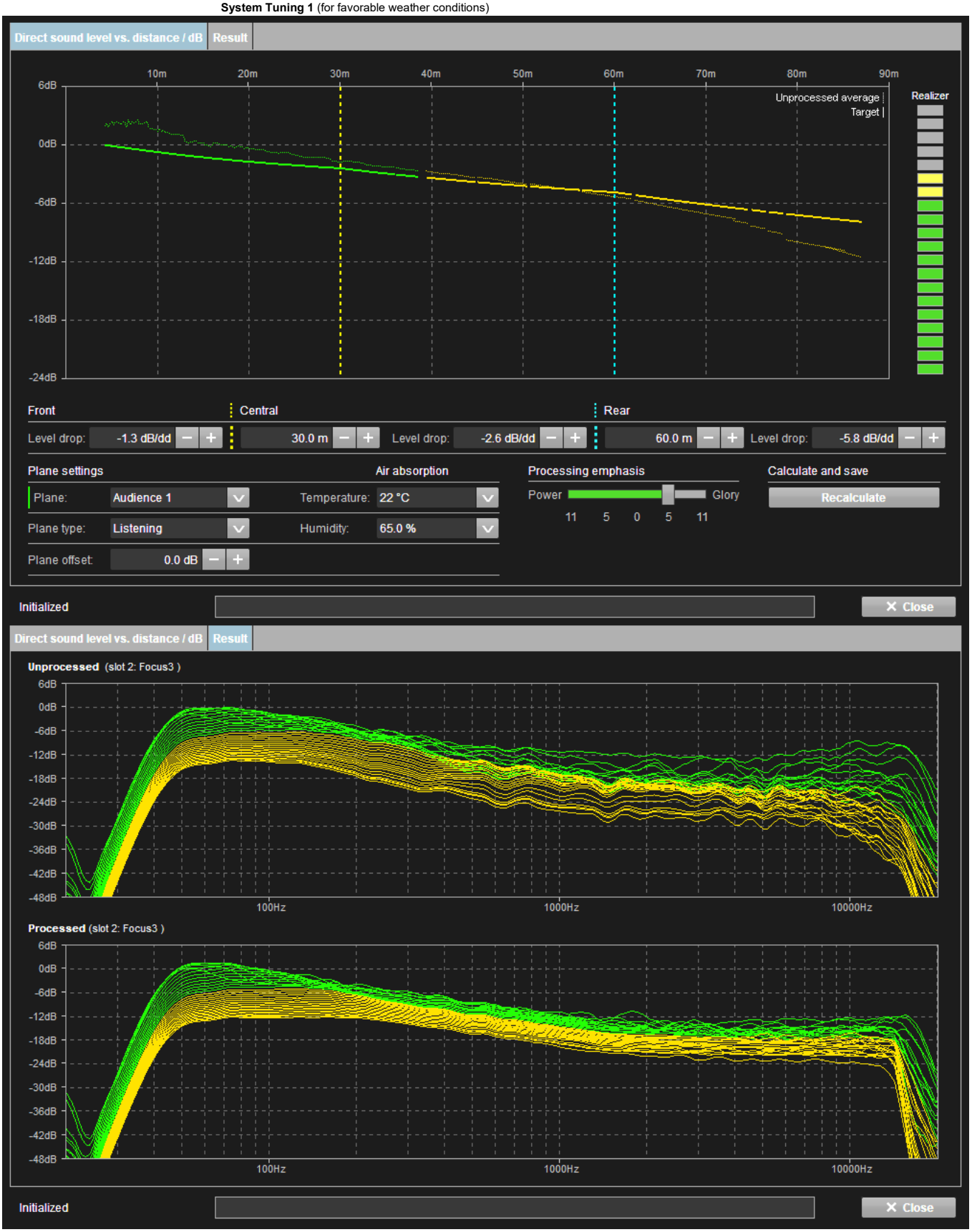
System Tuning 2 (for unfavorable weather conditions)



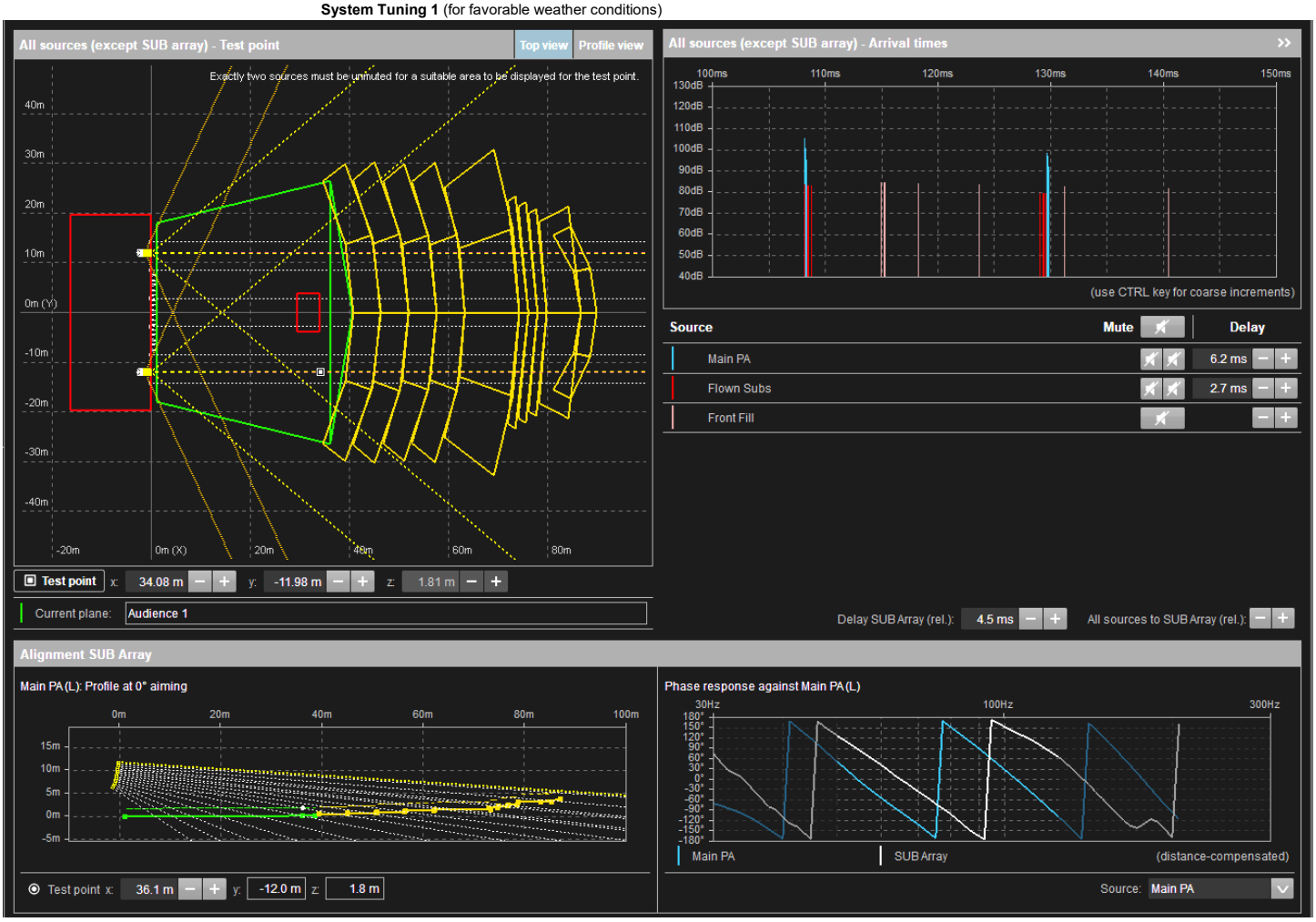
SPL calculation	
Resolution:	Mid (2m)
Highest SPL:	111.7 dB
Simulated signal	
Level:	1.9 dBu
Signal:	BB pink (A)
Show interferences:	Off
Air absorption	
On/Off:	On
Temperature:	22 °C
Humidity:	65.0 %
NoizCalc reference point	
x:	29.6 m
y:	0.0 m
z:	2.0 m
SPL:	110.0 dB



System Tuning 1 (for favorable weather conditions)



System Tuning 1 (for favorable weather conditions)



SPL at the Source & Weather	Key SPL Values @ the Venue					
	Audience				Stage	
	Front	**FOH**	Back	Left / Right	Front	Back
Requested Favorable Weather	108	**110**	105	107	104	94
Requested Unfavorable Weather	107	**110**	104	107	102	92

System Tuning 1 (for favorable weather conditions)

C. Music Performance SPLs Modeled at the Community

Four noise maps are included, based on the sound source design and SPL levels described above, modeling the spread of A-Weighted SPLs[13] away from the venue in 20m (~66ft) increments, under:

2 x Environmental Conditions[14]

1) Favorable Weather
   Wind direction: 285^0 (from W-N/W) - *away from residences;*
   Temperature gradient: -0.09K/m - *temperature dropping with elevation, directing upward-bound sonic energy away from the ground (common daytime condition)*
2) Unfavorable Weather
   Wind direction: 85^0 (from E-N/E) - *towards residences*;
   Temperature gradient:+0.09K/m - *temperature rising with elevation, directing upward-bound sonic energy back towards the ground (ground temperature inversion[15])*

System Tuning Profiles (*each performing best under different conditions*)

1) System tuning appropriate under Favorable Weather conditions: refraction will direct sonic energy that aims outside the Venue upwards and wind-flow will direct it towards the ocean.
2) System tuning appropriate under Unfavorable Weather conditions: refraction will direct sonic energy exiting the Venue downwards (temperature inversion condition), and wind flow will direct it towards the community.

2 x Measurement Heights

1) 5.5ft (1.70m) *(i.e. street level)*
2) 16ft (4.9m) *(i.e. building level)*

The summary table, below, compares average ambient SPL's to average maximum SPLs predicted by the sound source and sound propagation models to reach the residence blocks nearest to the venue, extending North-to-South between S. Beacon St. @ W. 8th St. (USPS) and Quartermaster Rd. @ Meyler Rd. (Fort MacArthur Inn).

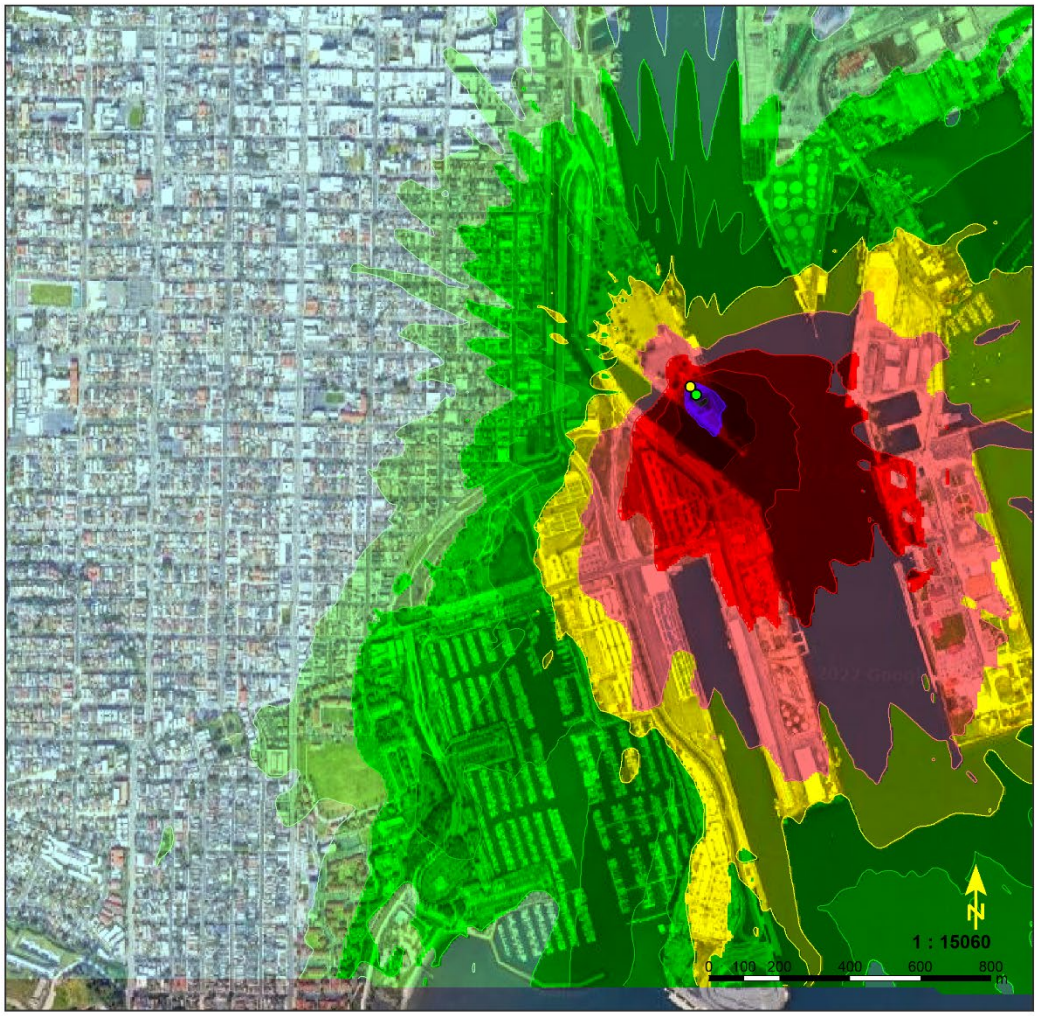
Ambient Vs Noise dBA SPL		**System Tuning 1** (best for favorable weather conditions)				**System Tuning 2** (best for unfavorable weather conditions)			
		5.5ft. Elev.		16ft Elev.		5.5ft. Elev.		16ft Elev.	
Time Period	***Ambient***	*Noise*	*Overage*	*Noise*	*Overage*	*Noise*	*Overage*	*Noise*	*Overage*
Day	**61.3**	67	>5	69	>7	69	>7	68	>6
Evening	**58.5**	67	>8	69	>10	69	>10	68	>9
Night	**56.4**	67	>10	69	>12	69	>12	68	>11

[13] Noise maps model A-Weighted SPLs (measured in dBA). They bias middle frequencies, are representative of hearing response at moderate SPLs, and are consistent with standard noise level measurement and assessment.
[14] Both conditions assume 22^0C; 65% RH; 1014mbar P; gentle breeze 4.3m/s - based on April/September historical data from https://www.timeanddate.com/weather
[15] Temperature inversion occurs more frequently after sundown and its effects are enhanced under more humid, overcast conditions.

System Tuning 1 (for favorable weather conditions)

NoizCalc 3.0 **Project:** SPPM Amphitheater - Favorable Weather @5.5ft - System Configuration 1 **Author:** Pantelis Vassilakis

Calculation standard: Nord2000 **Height** above ground: 1.7 m **Meteorology:** 22°C, Humidity 65%, Wind 3 Bft (Gentle breeze) 285.0°, Temp.grad. -0.090 K/



San Pedro Amphitheater
Spectrum: All Live bands
SPL at reference point: 110.0 dB(A)

Signs and symbols
- Stage origin
- Reference point

System Configuration 1
Front: ~106 dBA
FOH: ~110 dBA
Back: ~102 dBA
Moderate Focusing

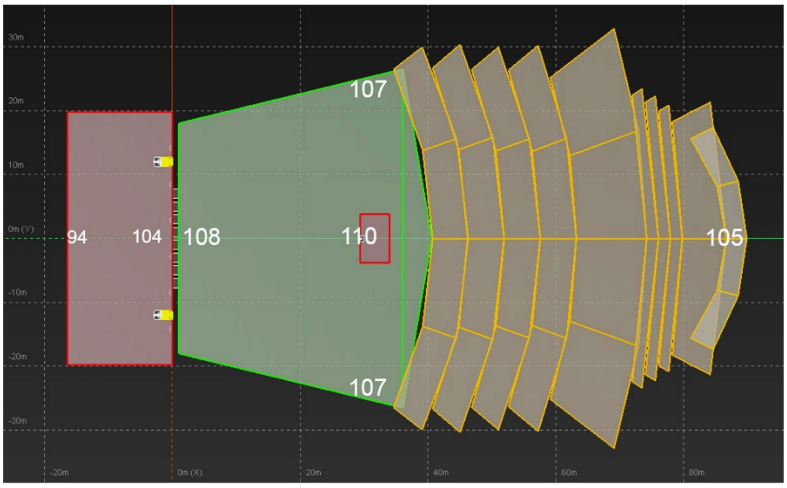
Favorable Weather
Wind away from homes
Temp. drop with elev.

Elevation: 5.5ft

Levels in dB(A)

> 110	
104 - 110	
98 - 104	
92 - 98	
86 - 92	
80 - 86	
74 - 80	
68 - 74	
62 - 68	
56 - 62	
< 56	

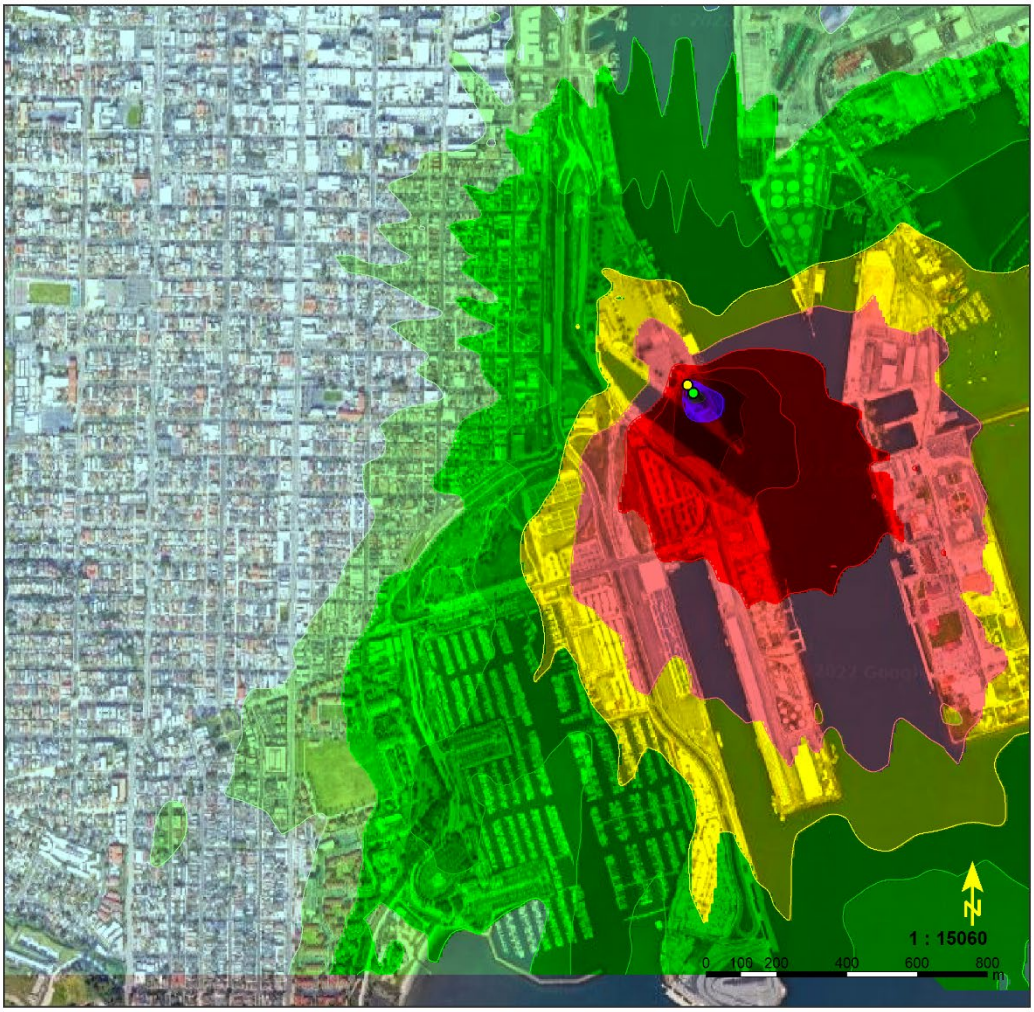
SPL calculation	
Resolution:	Mid (2m)
Highest SPL:	113.1 dB
Simulated signal	
Level:	3.4 dBu
Signal:	BB pink (A)
Show interferences:	Off
Air absorption	
On/Off:	On
Temperature:	22 °C
Humidity:	65.0 %
NoizCalc reference point	
x:	29.6 m
y:	0.0 m
z:	2.0 m
SPL:	110.0 dB



System Tuning 1 (for favorable weather conditions)

NoizCalc 3.0 **Project:** SPPM Amphitheater - Favorable Weather @16ft - System Configuration 1 **Author:** Pantelis Vassilakis

Calculation standard: Nord2000 **Height** above ground: 4.9 m **Meteorology:** 22°C, Humidity 65%, Wind 3 Bft (Gentle breeze) 285.0°, Temp.grad. -0.090 K/



San Pedro Amphitheater
Spectrum: All Live bands
SPL at reference point: 110.0 dB(A)

Signs and symbols
- Stage origin
- Reference point

System Configuration 1
Front: ~106 dBA
FOH: ~110 dBA
Back: ~102 dBA
Moderate Focusing

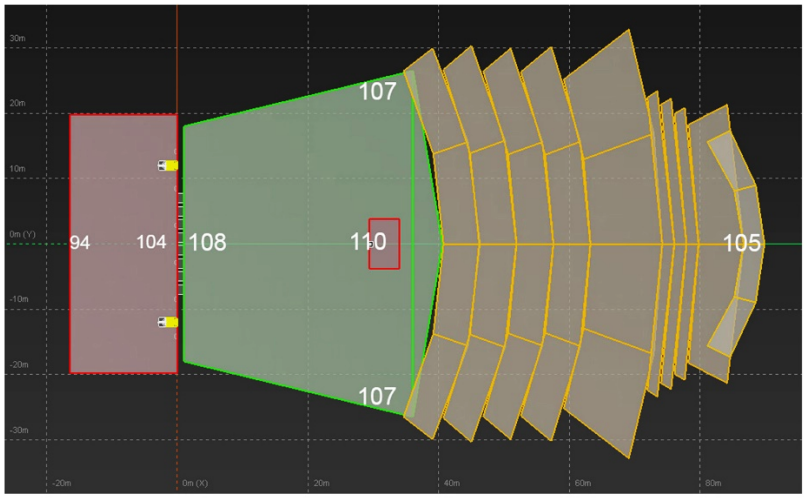
Favorable Weather
Wind away from homes
Temp. drop with elev.

Elevation: 16ft

Levels in dB(A)

> 110	
104 - 110	
98 - 104	
92 - 98	
86 - 92	
80 - 86	
74 - 80	
68 - 74	
62 - 68	
56 - 62	
< 56	

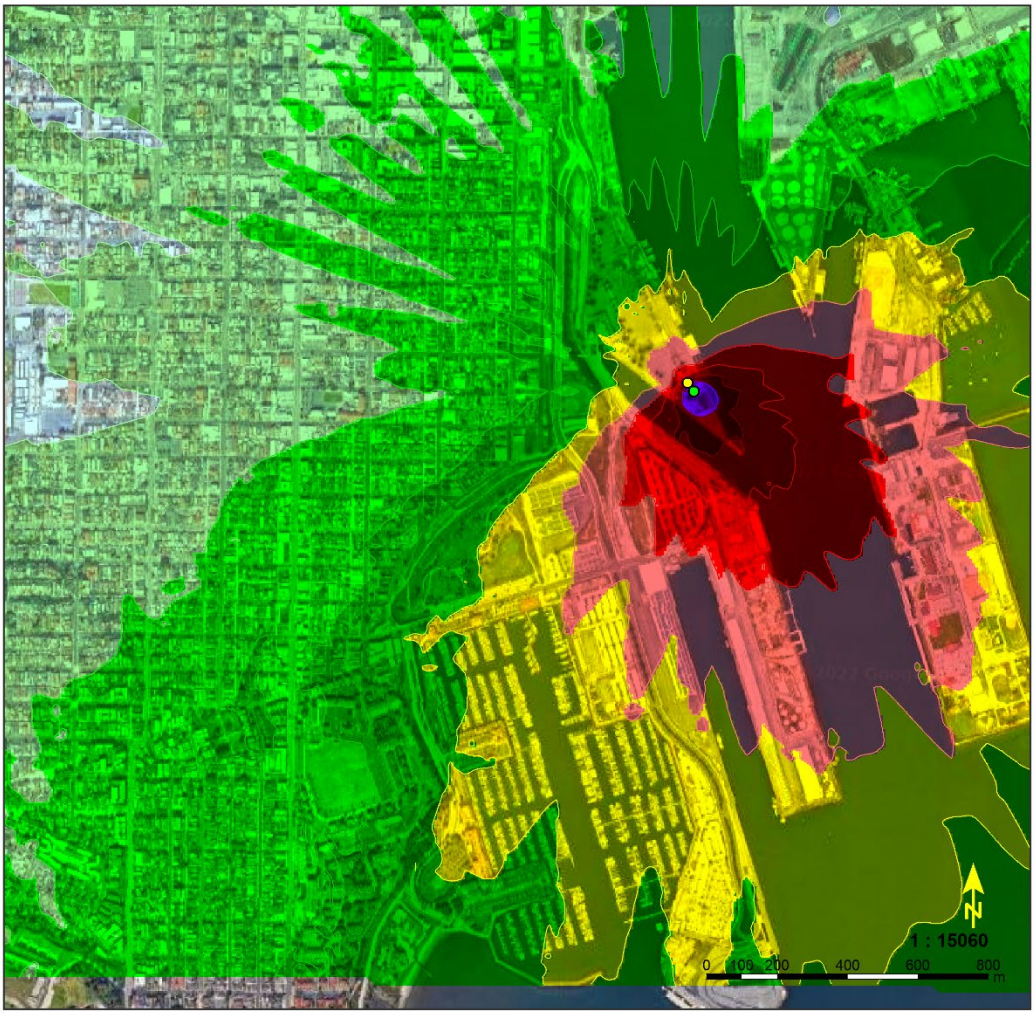
SPL calculation	
Resolution:	Mid (2m)
Highest SPL:	113.1 dB
Simulated signal	
Level:	3.4 dBu
Signal:	BB pink (A)
Show interferences:	Off
Air absorption	
On/Off:	On
Temperature:	22 °C
Humidity:	65.0 %
NoizCalc reference point	
x:	29.6 m
y:	0.0 m
z:	2.0 m
SPL:	110.0 dB



System Tuning 1 (for favorable weather conditions)

NoizCalc 3.0 **Project:** SPPM Amphitheater - Unfavorable Weather @5.5ft - System Configuration 2 **Author:** Pantelis Vassilakis

Calculation standard: Nord2000 **Height** above ground: 1.7 m **Meteorology:** 22°C, Humidity 65%, Wind 3 Bft (Gentle breeze) 85.0°, Temp.grad. 0.090 K/m



San Pedro Amphitheater
Spectrum: Live bands
SPL at reference point: 110.0 dB(A)

Signs and symbols
- Stage origin
- Reference point

System Configuration 2
Front: ~106 dBA
FOH: ~110 dBA
Back: ~102 dBA
Array Tilt
Moderate Processing

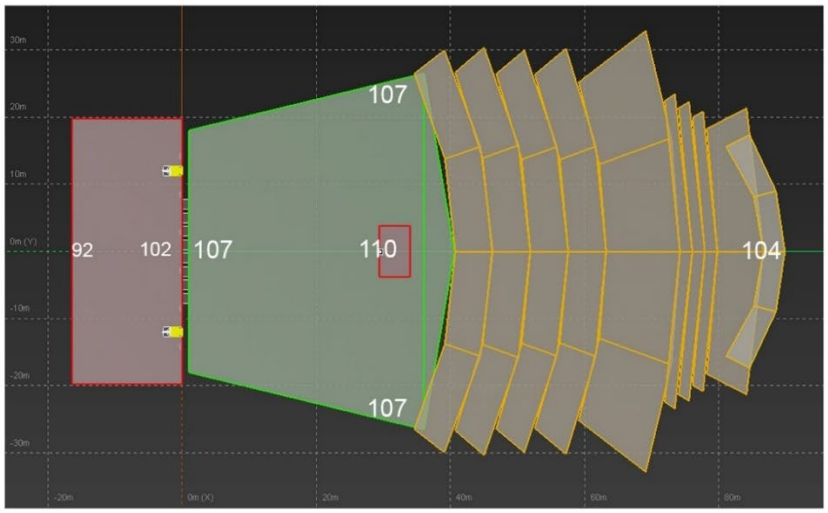
Unfavorable Weather
Wind towards homes
Temp. rise with elev.

Elevation: 5.5ft

Levels in dB(A)

> 110	
104 - 110	
98 - 104	
92 - 98	
86 - 92	
80 - 86	
74 - 80	
68 - 74	
62 - 68	
56 - 62	
< 56	

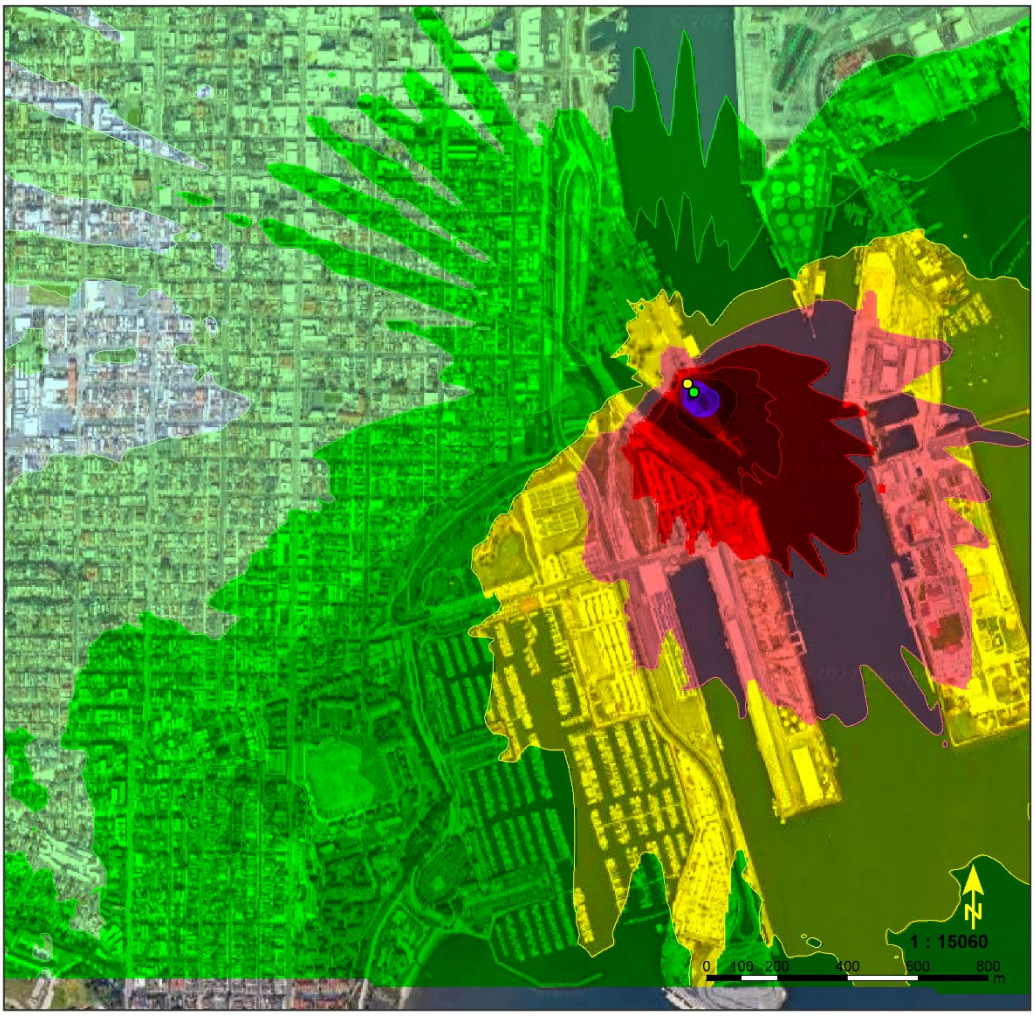
SPL calculation	
Resolution:	Mid (2m)
Highest SPL:	111.7 dB
Simulated signal	
Level:	1.9 dBu
Signal:	BB pink (A)
Show interferences:	Off
Air absorption	
On/Off:	On
Temperature:	22 °C
Humidity:	65.0 %
NoizCalc reference point	
x:	29.6 m
y:	0.0 m
z:	2.0 m
SPL:	110.0 dB



System Tuning 1 (for favorable weather conditions)

NoizCalc 3.0 **Project:** SPPM Amphitheater - Unfavorable Weather @16ft - System Configuration 2 **Author:** Pantelis Vassilakis

Calculation standard: Nord2000 **Height** above ground: 4.9 m **Meteorology:** 22°C, Humidity 65%, Wind 3 Bft (Gentle breeze) 85.0°, Temp.grad. 0.090 K/m



San Pedro Amphitheater
Spectrum: Live bands
SPL at reference point: 110.0 dB(A)

Signs and symbols
- Stage origin
- Reference point

System Configuration :
Front: ~106 dBA
FOH: ~110 dBA
Back: ~102 dBA
Array Tilt
Moderate Processing

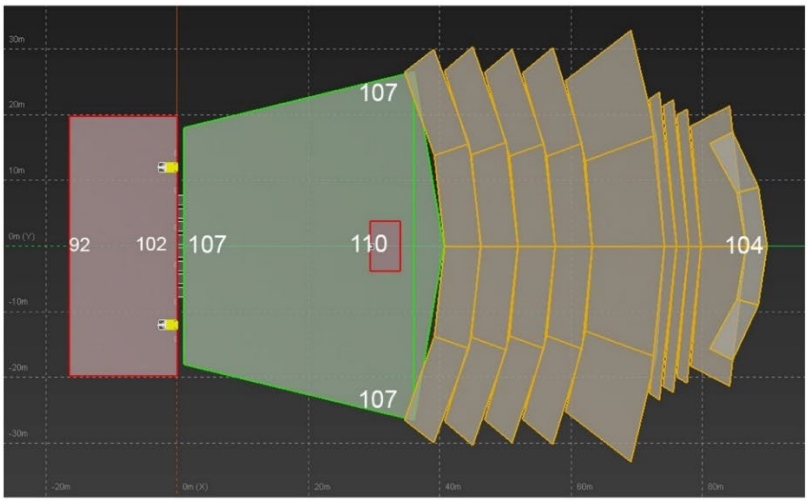
Unfavorable Weather
Wind towards homes
Temp. rise with elev.

Elevation: 16ft

Levels in dB(A)

> 110
104 - 110
98 - 104
92 - 98
86 - 92
80 - 86
74 - 80
68 - 74
62 - 68
56 - 62
< 56

SPL calculation	
Resolution:	Mid (2m)
Highest SPL:	111.7 dB
Simulated signal	
Level:	1.9 dBu
Signal:	BB pink (A)
Show interferences:	Off
Air absorption	
On/Off:	On
Temperature:	22 °C
Humidity:	65.0 %
NoizCalc reference point	
x:	29.6 m
y:	0.0 m
z:	2.0 m
SPL:	110.0 dB



System Tuning 1 (for favorable weather conditions)

D. Modeled Noise Level Assessment & Suggestions

Based on the sound system design and noise modeling presented, the max SPLs expected at the Venue would generate community noise levels that are projected to exceed evening average ambient noise levels by >8dBA, under favorable weather conditions, and >10dBA, under unfavorable weather conditions.

+3dB: *Noticeable*. 3dB increase corresponds to ~2-fold increase in power.
+5dB: *Increasingly Noticeable*. 5dB increase corresponds to ~3-fold increase in power.
+10dB *Likely Complaints*. 10dB increase corresponds to ~10-fold increase in power and ~2-fold increase in perceived loudness. [16]

Community noise salience and associated annoyance/complaint potential increase with:

- signal time-variance (*i.e.* music versus steady noise signals)[17] and
- low frequency content (low frequencies cut through ambient noise easier than high frequencies)[18]

At the same time, the max SPLs expected onsite would likely inhibit the intended effect of sustained, intense loudness at the Venue. 110dBA can trigger the audience's automatic hearing protection mechanism within 6 minutes of exposure, reducing the apparent loudness by the equivalent of ~6dB and up to ~10dB, as exposure continues, in an effect that outlasts most music events. This short-term decrease in hearing sensitivity (temporary threshold shift or TTS) [19,20] degrades loudness, timbre, and sonic clarity perception,[21] and is likely to initiate upward sound level and downward loudness spirals.

An effective and efficient way to reduce the sonic impact of onsite events to the community, while also significantly improving the audience experience at the Venue is to drop the max SPL at FOH to ~100dBA 5minLeq. The sound at the Venue will appear to the audience louder, fuller, and clearer for longer, while the associated ~10dB drop relative to average peak values modeled at the Venue will be barely noticeable onsite but clearly noticeable in the far field,[22] bringing the Venue's contributions to community noise levels down to +2dBA from or even under average ambient noise levels, depending on environmental conditions.

Note that time variant, patterned signals (such as music signals) are perceptible at levels as low as 10dB below steady, broadband background noise.

The Appendix, below, provides an example of the impact a 100dBA max limit at FOH would have on SPLs at the community.

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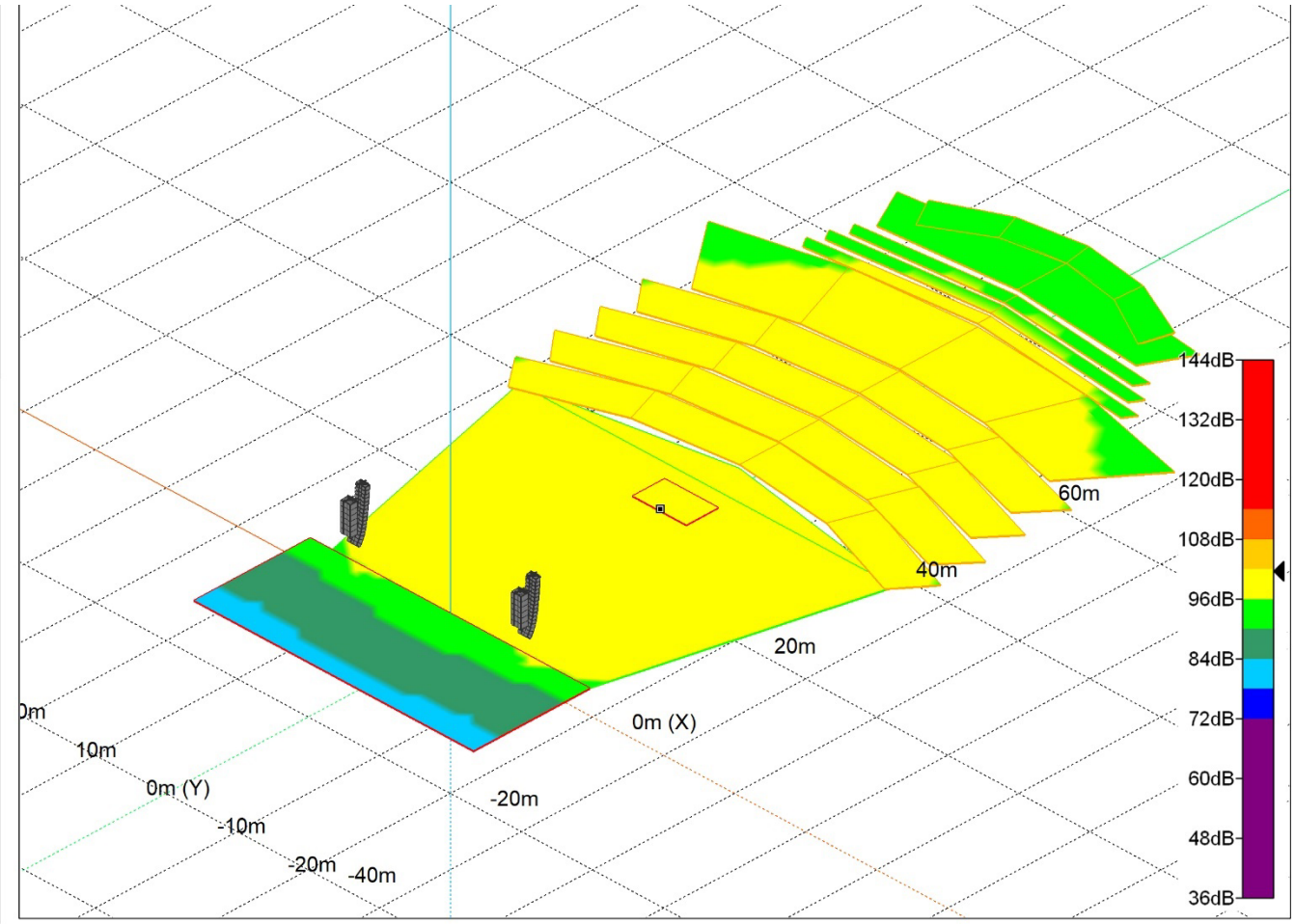
[16] Belcham, A. (2014). Manual of Environmental Management. p.258. Reference criteria need adjustment at very low/high starting levels.
[17] In Guignard, J.C. (1973). A Basis for Limiting Noise Exposure for Hearing Conservation. EPA. p. A 9-5. https://nepis.epa.gov/Exe/ZyPDF.cgi/9101XEFB.PDF?Dockey=9101XEFB.PDF
[18] Small, A.M. and Gales, R.S. (1998). Hearing Characteristics. In C.M. Harris, Handbook of Acoustical Measurements and Noise Control. ASA, Chapt. 17.
[19] World Health Organization. Reports on recreational exposure to sound: 2015 - 2017
[20] In Guignard, J.C. (1973). EPA. A 12-6 – A 12-7.
[21] The TTS-induced reduction in loudness is unevenly distributed across frequencies (impacts more the 1-6kHz region), altering the intended spectral and timbral balance.
[22] As broadband signals exceed 100dBA, our hearing mechanism's ability to tell frequencies and levels apart becomes progressively coarser, reducing sonic clarity and rendering sonic nuances effected by musicians and sound engineers imperceptible.

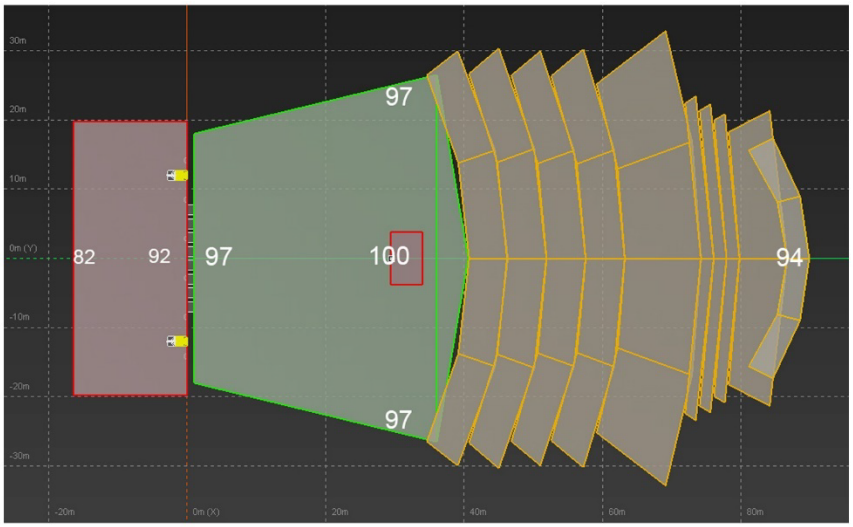
System Tuning 1 (for favorable weather conditions)

APPENDIX

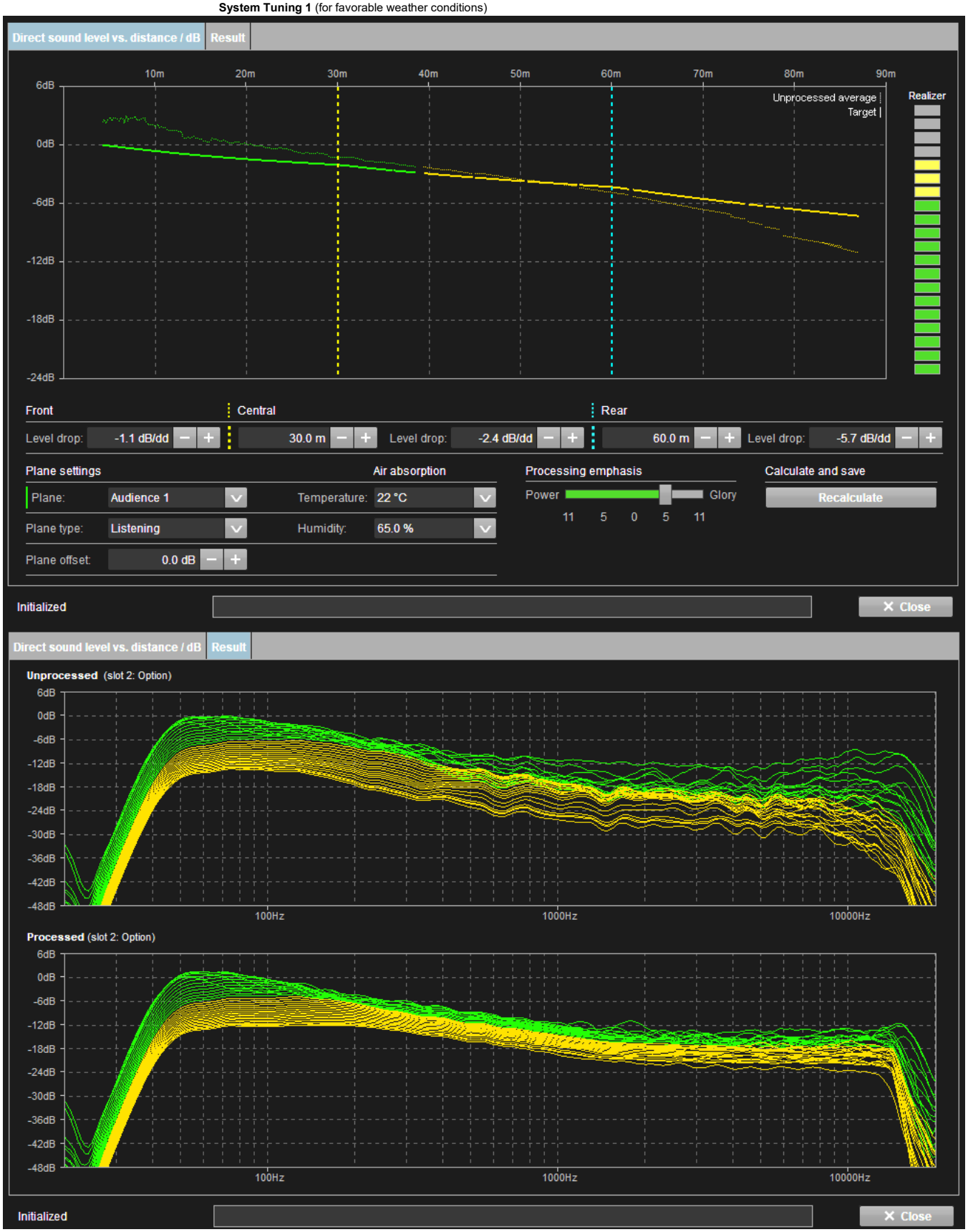
System Tuning 3 (@100dBA FOH)



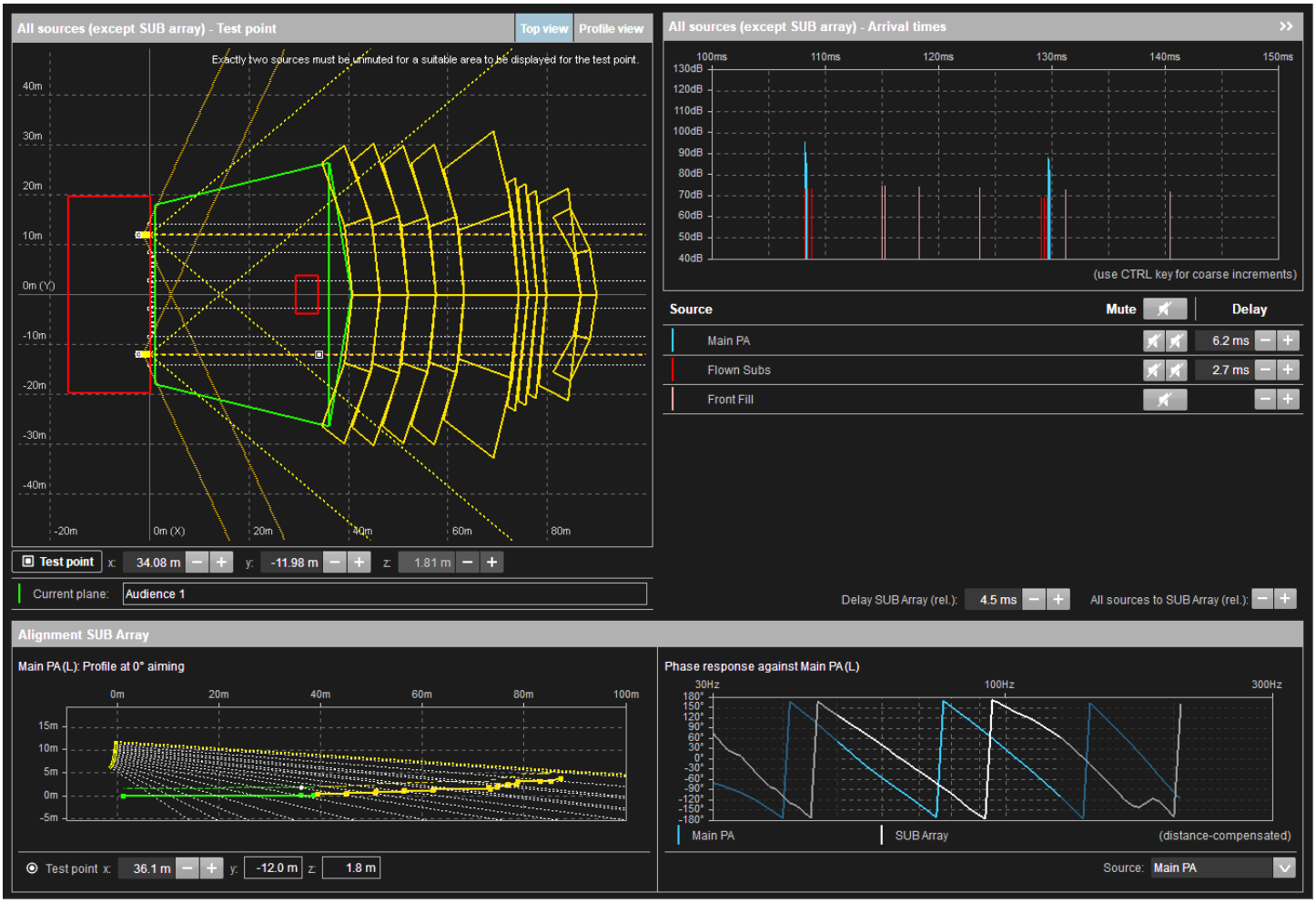
SPL calculation	
Resolution:	Mid (2m)
Highest SPL:	101.6 dB
Simulated signal	
Level:	-8.0 dBu
Signal:	BB pink (A)
Show interferences:	Off
Air absorption	
On/Off:	On
Temperature:	22 °C
Humidity:	65.0 %
NoizCalc reference point	
x:	29.6 m
y:	0.0 m
z:	2.0 m
SPL:	100.0 dB



System Tuning 1 (for favorable weather conditions)



System Tuning 1 (for favorable weather conditions)

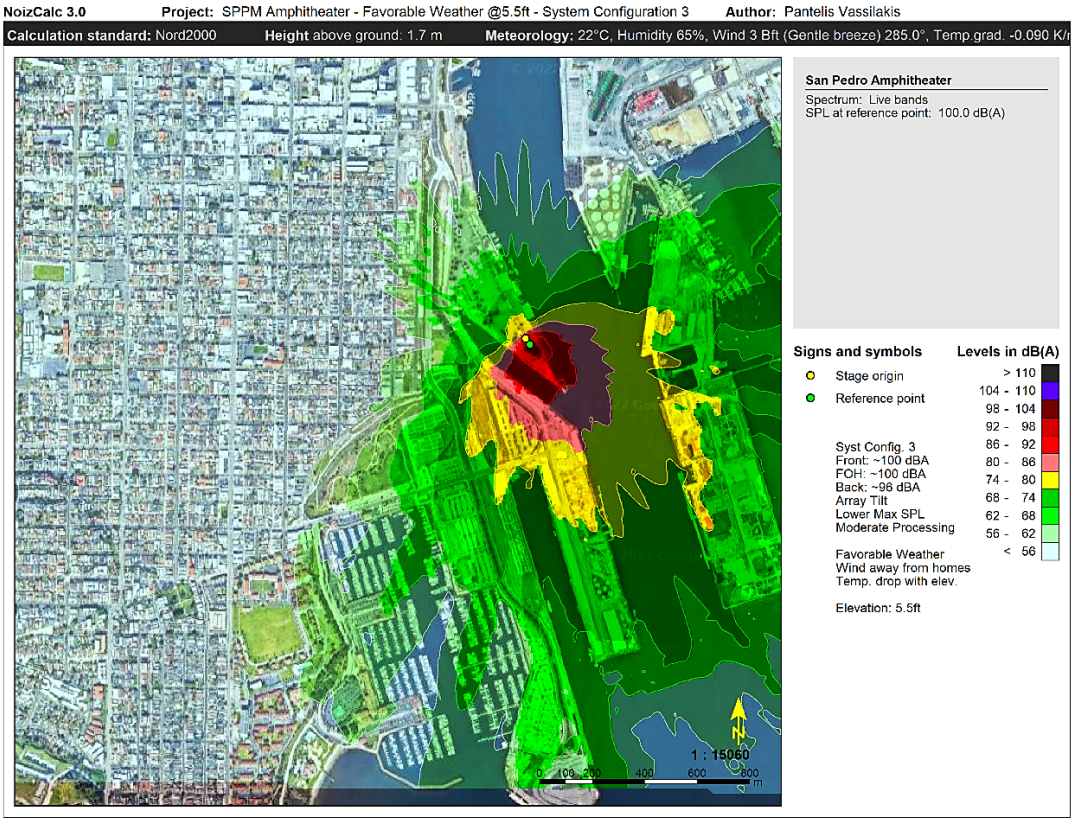


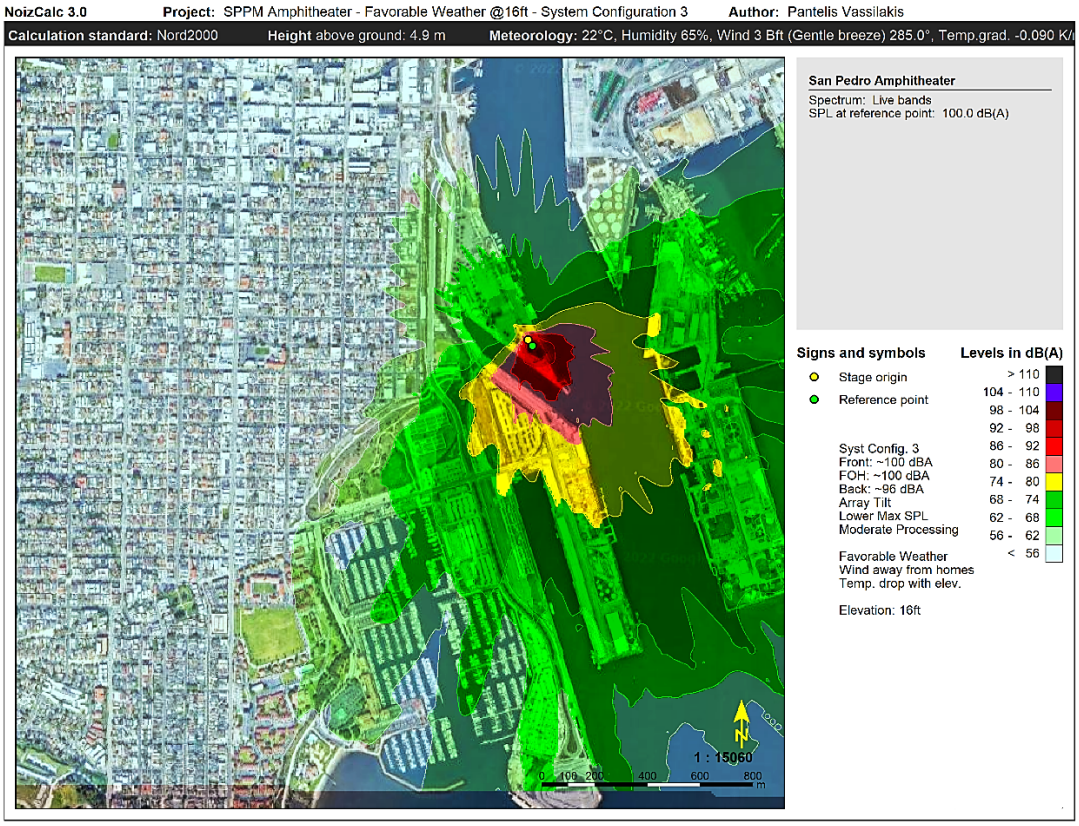
Community Noise SPLs for System Tuning 3 (100dBA @ FOH)

Comparison of average ambient SPL's to average maximum SPLs predicted to reach the residence blocks nearest to the venue.

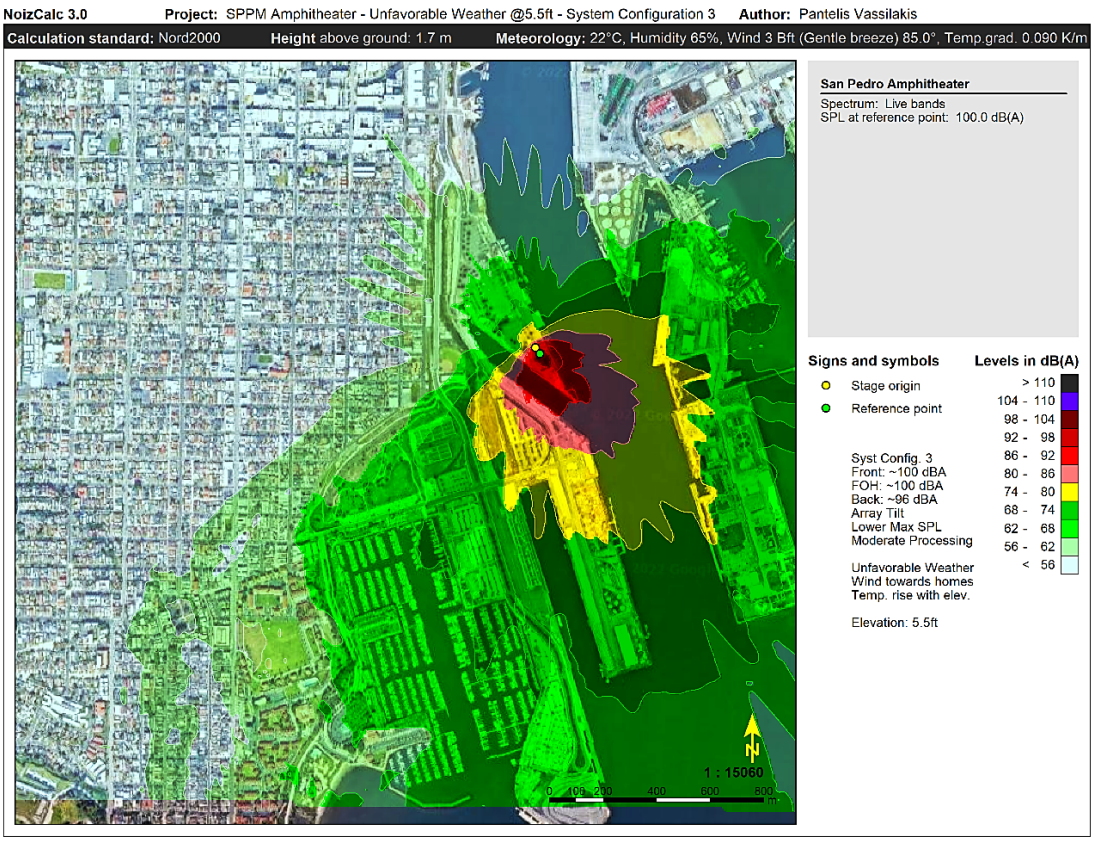
Ambient Vs Noise dBA SPL (100 dBA @ FOH)		**Favorable Weather Conditions**				**Unfavorable Weather Conditions**			
		5.5ft. Elev.		16ft Elev.		5.5ft. Elev.		16ft Elev.	
Time Period	***Ambient***	*Noise*	*Overage*	*Noise*	*Overage*	*Noise*	*Overage*	*Noise*	*Overage*
Day	61.3	58	-2	58	-2	60	-1	58	-2
Evening	58.5	58	0	58	0	60	>1	58	0
Night	56.4	58	>1	58	>1	60	>3	58	>1

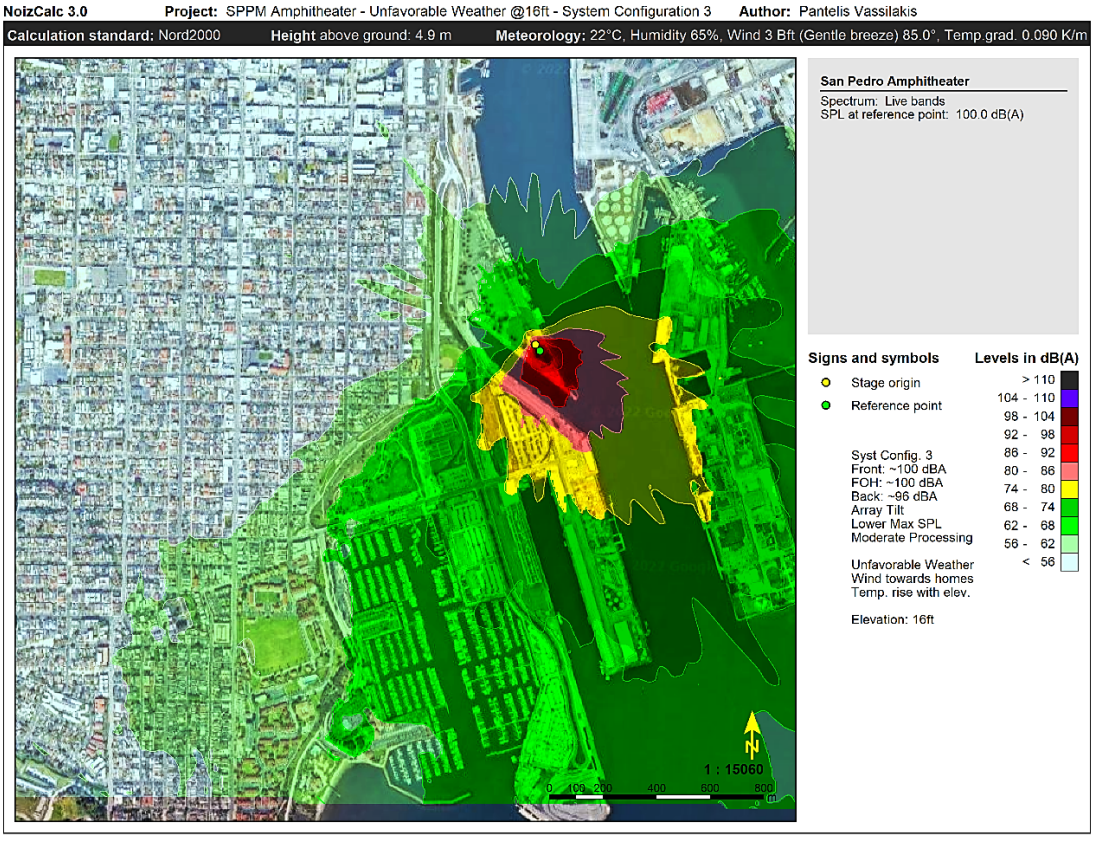
System Tuning 1 (for favorable weather conditions)



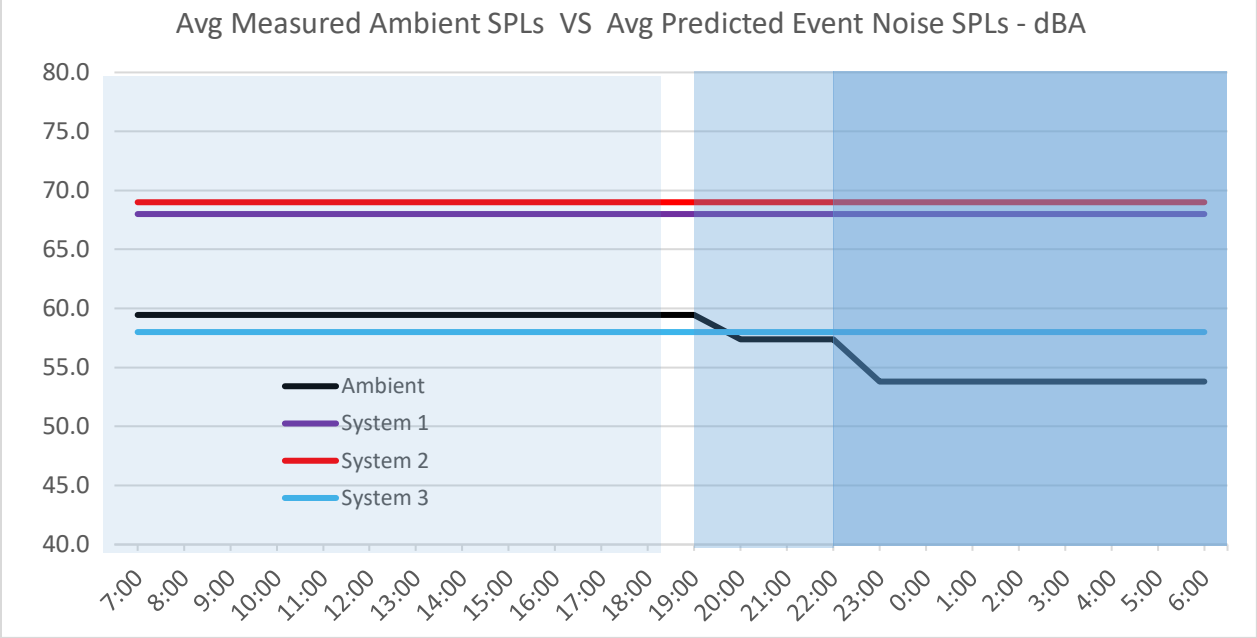


System Tuning 1 (for favorable weather conditions)





System Tuning 1 (for favorable weather conditions)



Appendix D2

Fireworks Permit

Los Angeles Regional Water Quality Control Board

June 9, 2023

TO ALL INTERESTED PARTIES

PUBLIC NOTICE OF ADOPTION OF ORDER NO. R4-2023-0180, GENERAL NPDES NO. CAG994007 FOR DISCHARGES OF RESIDUAL FIREWORK POLLUTANTS FROM PUBLIC FIREWORKS DISPLAYS TO SURFACE WATERS IN LOS ANGELES AND VENTURA COUNTIES

This serves to notify the general public that Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) in accordance with administrative procedures, at a public hearing held on **May 25, 2023, at 320 W 4th Street, Carmel Room, Los Angeles, California, 90013**, considered and adopted the enclosed Order following full considerations of oral comments and comments submitted in writing regarding the Order.

The Los Angeles Water Board urges the public or entities wishing to conduct fireworks display over a water body during the coming 4th of July 2023, and thereafter, to file a Notice of Intent form with necessary documentations with the Los Angeles Water Board to enroll under the Fireworks General NPDES Permit. Fireworks display being conducted over a water body in the jurisdictional area of this Los Angeles Water Board is unpermitted and cannot proceed without enrollment under this General NPDES Permit.

A adopted Order is available on the Los Angeles Water Board's website https://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/index.html wherein the NOI form can be found.

If you have any further questions, please contact Peter Ho at Peter.Ho@waterboards.ca.gov or Augustine Anijielo at augustine.anijielo@waterboards.ca.gov.

Sincerely,

Augustine Anijielo
General Permitting Unit, Supervisor

Enclosures: Order No. R4-2023-0180, NPDES Permit for Discharge of Residual Firework Pollutants from Public Fireworks Displays to Surface Waters

Mailing List

(via email only)

Peter Kozelka, Becky Mitschele, Environmental Protection Agency, Region 9, Permit Branch
Kenneth Wong, Crystal Marquez, Stephen Estes, U.S. Army Corps of Engineers
Corrine Bell, Natural Resources Defense Council
Steve Fleischli, Natural Resources Defense Council
Bryant Chesney, NOAA, National Marine Fisheries Service
Chris Diel, U.S. Fish and Wildlife Service
Jonathan Snyder, U.S. Fish and Wildlife Service
Steve Hudson, California Coastal Commission, South Coast Region
Nat Cox, California Parks and Recreation
Aurora Nunez, Annelisa Moe, Heal the Bay
Ben Harris, Barak Kamelgard, Bruce Reznik, Los Angeles Waterkeeper
Stephan Tucker, Water Replenishment District of Southern California
Robert Wu, Department of Transportation (Caltrans)
Ray Tahir, TECS Environmental
Sara Torres, PG Environmental
Tim Smith, Los Angeles County, Department of Public Works
Angelo Bellomo, Los Angeles County, Department of Public Works
Sierra Club Los Cerritos Wetlands
Coastal Environmental Rights Foundation
Pyro Spectaculars, Inc.
Collier Walsh Nakazawa, LLP
City of Long Beach
Surfrider Foundation
Coast Guard
State Fire Marshal
Los Angeles County Beaches
Long Beach Business District
Jose Diaz, Javier Hinojosa, Department of Toxics Substance Control
Terrence Mann, AQMD
USDOT
Heidi Ortiz, Ventura County Fairgrounds

Appendix D3

Special Status Species

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (San Pedro (3311863) OR Torrance (3311873) OR Redondo Beach (3311874) OR Long Beach (3311872))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Aphanisma blitoides aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
Astragalus hornii var. hornii Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Atriplex pacifica south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Brennania belkini Belkin's dune tabanid fly	IIDIP17010	None	None	G1G2	S1S2	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata western beach tiger beetle	IICOL02110	None	None	G2G3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Crossosoma californicum Catalina crossosoma	PDCRO02020	None	None	G3	S3	1B.2
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Dithyrea maritima beach spectaclepod	PDBRA10020	None	Threatened	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dudleya virens ssp. insularis island green dudleya	PDCRA040S2	None	None	G3?T3	S3	1B.2
Euphilotes battoides allyni El Segundo blue butterfly	IILEPG201B	Endangered	None	G5T1	S1	
Glaucopsyche lygdamus palosverdesensis Palos Verdes blue butterfly	IILEPG402A	Endangered	None	G5T1	S1	
Glyptostoma gabrielense San Gabriel chestnut	IMGASB1010	None	None	G2	S3	
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Habroscelimorpha gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Isocoma menziesii var. decumbens decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Lycium brevipes var. hassei Santa Catalina Island desert-thorn	PDSOL0G0N0	None	None	G5T1Q	S1	3.1
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
Pentachaeta lyonii Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
Perognathus longimembris pacificus Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Rhaphiomidas terminatus terminatus El Segundo flower-loving fly	IIDIP05022	None	None	G1T1	S1	
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Siphateles bicolor mohavensis Mohave tui chub	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
Southern Coastal Bluff Scrub Southern Coastal Bluff Scrub	CTT31200CA	None	None	G1	S1.1	
Spea hammondii western spadefoot	AAABF02020	None	None	G2G3	S3S4	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S2	
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	

Record Count: 53

CNPS Rare Plant Inventory

California Native Plant Society

Search Results

34 matches found. Click on scientific name for details

Search Criteria: Quad is one of [**3311863:3311873:3311874:3311872**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED
Aphanisma blitoides	aphanisma	Chenopodiaceae	annual herb	Feb-Jun	None	None	G3G4	S2	1B.2		1980-01-01
Astragalus hornii var. *hornii*	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	None	None	GUT1	S1	1B.1		2006-12-01
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	None	None	G3	S1S2	1B.2		1994-01-01
Atriplex pacifica	south coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4	S2	1B.2		1994-01-01
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G1G2	S1	1B.1		1988-01-01
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G5T1	S1	1B.2		1994-01-01
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar-Jun	None	None	G3G4	S3S4	4.2	Yes	1974-01-01
Calystegia peirsonii	Peirson's morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	None	None	G4	S4	4.2	Yes	1974-01-01
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	Mar-May(Jun)	None	None	G4	S4	3		1994-01-01
Centromadia parryi ssp. *australis*	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1		1994-01-01
Centromadia pungens ssp. *laevis*	smooth tarplant	Asteraceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.1	Yes	1994-01-01
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	FE	CE	G4?T1	S1	1B.2		1974-01-01
Cistanthe maritima	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2		1980-01-01
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01
Crossosoma californicum	Catalina crossosoma	Crossosomataceae	perennial deciduous shrub	Feb-May	None	None	G3	S3	1B.2		1980-01-01
Dithyrea maritima	beach spectaclepod	Brassicaceae	perennial rhizomatous herb	Mar-May	None	CT	G1	S1	1B.1		1980-01-01
Dudleya virens ssp. *insularis*	island green dudleya	Crassulaceae	perennial herb	Apr-Jun	None	None	G3?T3	S3	1B.2	Yes	2001-01-01

Erysimum suffrutescens	suffrutescent wallflower	Brassicaceae	perennial herb	Jan-Jul(Aug)	None	None	G3	S3	4.2	Yes	1980-01-01
Horkelia cuneata var. *puberula*	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	Yes	2001-01-01
Isocoma menziesii var. *decumbens*	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	None	None	G3G5T2T3	S2	1B.2		1994-01-01
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		1988-01-01
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01
Lycium brevipes var. *hassei*	Santa Catalina Island desert-thorn	Solanaceae	perennial deciduous shrub	Jun(Aug)	None	None	G5T1Q	S1	3.1	Yes	1974-01-01
Lycium californicum	California box-thorn	Solanaceae	perennial shrub	Mar-Aug(Dec)	None	None	G4	S4	4.2		2001-01-01
Nama stenocarpa	mud nama	Namaceae	annual/perennial herb	Jan-Jul	None	None	G4G5	S1S2	2B.2		1994-01-01
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	2001-01-01
Nemacaulis denudata var. *denudata*	coast woolly-heads	Polygonaceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.2		1994-01-01
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1		1974-01-01
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar-Aug	FE	CE	G1	S1	1B.1	Yes	1974-01-01
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	None	None	G1	S1	1B.1		1994-01-01
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2		1984-01-01
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2		1994-01-01
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	Yes	2004-01-01

Showing 1 to 34 of 34 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 16 March 2023].

Quad Name **San Pedro**
Quad Number **33118-F3**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - **X**
Range White Abalone (E) - **X**

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat - X

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

Quad Name **Long Beach OE S**
Quad Number **33118-F2**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - **X**
Range White Abalone (E) - **X**

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

uad Name **Long Beach (digital)**
Quad Number **33118-G2**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - **X**
Range White Abalone (E) - **X**

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

Quad Name **Torrance**
Quad Number **33118-G3**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds - X

Quad Name **Redondo Beach OE S**
Quad Number **33118-F4**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - **X**
Range White Abalone (E) - **X**

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat - X

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

Quad Name **Redondo Beach (digital)**
Quad Number **33118-G4**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - **X**
Range White Abalone (E) - **X**

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat - X

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901

In Reply Refer To:
Project Code: 2023-0056916
Project Name: POLA West Modification Project

March 17, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at the Fish and Wildlife Service's Endangered Species Consultation website at:

https://www.fws.gov/endangered/what-we-do/faq.html

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

PROJECT SUMMARY

Project Code: 2023-0056916
Project Name: POLA West Modification Project
Project Type: Port Development
Project Description: The proposed West Harbor Modification Project (proposed project) is located within the Port of Los Angeles (Port). The Port is located in San Pedro Bay within the County of Los Angeles, approximately 20 miles south of downtown Los Angeles. The proposed project involves development modifications to 2.5 of the previously approved 6.4-acre Discovery Sea Amusement Area in the southern portion of the San Pedro Public Market Project site, which comprises a total of approximately 42 acres, formerly the site of the Ports O'Call Village, located between the Los Angeles Harbor's Main Channel and Sampson Way Harbor Boulevard from Berths 73-Z to 83 within the Port. The proposed project also includes improvements to the 18-acre overflow parking lot located at 208 East 22nd Street. The proposed modification would include a 6,200-seat outdoor amphitheater and entertainment lawn venue, and would replace the previously analyzed 100-foot diameter Ferris wheel with an approximately 130-foot tall by 30-foot wide Aerobar attraction. In addition, modifications to previously approved mitigation measures are also being proposed to update certain requirements to current regulatory standards and to assess their effectiveness and need.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.7336016,-118.27814769653506,14z

Counties: Los Angeles County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

BIRDS

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPAC USER CONTACT INFORMATION

Agency: County of Los Angeles
Name: Colleen Martin
Address: 49 Discovery
Address Line 2: Suite 250
City: Irvine
State: CA
Zip: 92618
Email colleen.martin@icf.com
Phone: 5303545369

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Office of Community Planning and Development