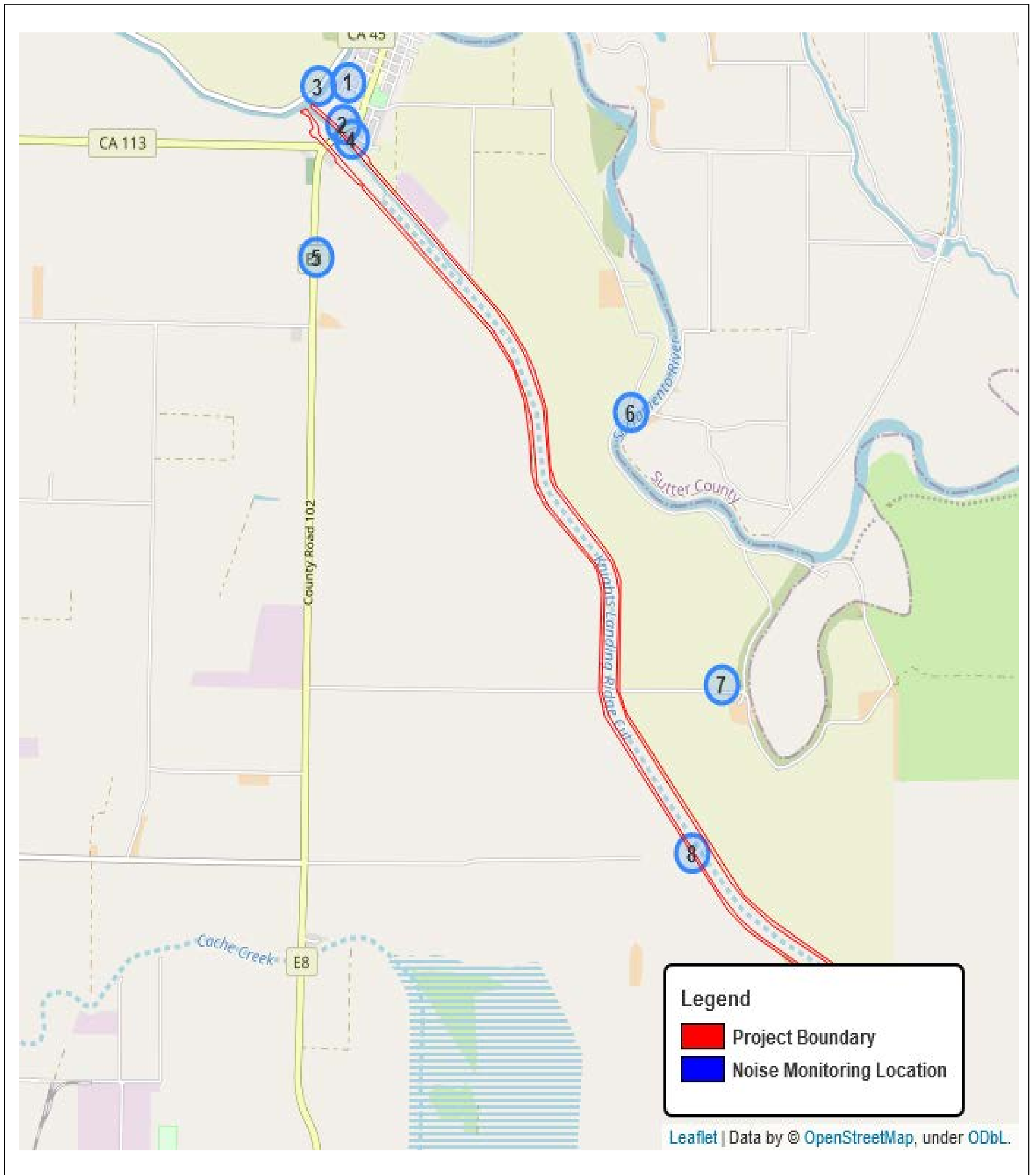


Noise Figures and Modeling Outputs  
for the  
Knights Landing Ridge Cut Erosion  
Repair Project

# **BASELINE NOISE MEASUREMENTS**



<b>Site Number:</b> 1			
<b>Recorded By:</b> Collin Crawford-Martin			
<b>Job Number:</b> 2021-056.01 Knight's Landing			
<b>Date:</b> 07/23/21			
<b>Time:</b> 11:33 a.m. – 11:48 a.m.			
<b>Location:</b> Cul-de-sac at end of Reed Street; at property line near levee			
<b>Source of Peak Noise:</b> construction activity, birds chirping (peacock in distance)			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
40.4	33.2	54.9	87.5

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	<b>Duration:</b> 15 minutes			<b>Sky:</b> Clear		
	<b>Note:</b> dBA Offset = -0.02			<b>Sensor Height (ft):</b> 3.5		
	<b>Wind Ave Speed (mph)</b>		<b>Temperature (degrees Fahrenheit)</b>		<b>Barometer Pressure (hPa)</b>	
	2 mph		88		29.96	

**Photo of Measurement Location**



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.071.s	Computer's File Name	LxT_0006133-20210723 113321-LxT_Data.071.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 11:33:21	Duration	0:15:00.0	
End Time	2021-07-23 11:48:21	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	40.4 dB		
LAE	70.0 dB	SEA	--- dB
EA	1.1 μPa <sup>2</sup> h		
EA8	35.4 μPa <sup>2</sup> h		
EA40	176.8 μPa <sup>2</sup> h		
LZS <sub>peak</sub>	87.5 dB	2021-07-23 11:38:18	
LAS <sub>max</sub>	54.9 dB	2021-07-23 11:34:47	
LAS <sub>min</sub>	33.2 dB	2021-07-23 11:36:56	
LA <sub>eq</sub>	40.4 dB		
LC <sub>eq</sub>	54.1 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	13.7 dB
LAI <sub>eq</sub>	43.7 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	3.2 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
40.4 dB	40.4 dB	0.0 dB	
LDEN	LDay	LEve	LNight
40.4 dB	40.4 dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	40.4 dB		--- dB		--- dB	
L <sub>S(max)</sub>	54.9 dB	2021-07-23 11:34:47	--- dB		--- dB	
L <sub>S(min)</sub>	33.2 dB	2021-07-23 11:36:56	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		87.5 dB	2021-07-23 11:38:18

### Overloads

Count	Duration
0	0:00:00.0

### Statistics

LAS 5.0	44.6 dB
LAS 10.0	42.3 dB
LAS 33.3	38.6 dB
LAS 50.0	37.5 dB
LAS 66.6	36.3 dB
LAS 90.0	34.5 dB

<b>Site Number: 2</b>			
<b>Recorded By:</b> Collin Crawford-Martin			
<b>Job Number:</b> 2021-056.01 Knight's Landing			
<b>Date:</b> 07/23/21			
<b>Time:</b> 11:52 a.m. – 12:07 p.m.			
<b>Location:</b> 100' W. of S. Oak Grove Ave/SR 113 intersection; between orchard and SR 113			
<b>Source of Peak Noise:</b> Vehicle traffic on SR 113, birds, residential activity			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
56.8	36.0	69.4	95.9

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	Duration: 15 minutes			Sky: Clear		
	Note: dBA Offset = -0.02			Sensor Height (ft): 3.5		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	2 mph		89		29.96	

**Photo of Measurement Location**



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.072.s	Computer's File Name	LxT_0006133-20210723 115250-LxT_Data.072.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 11:52:50	Duration	0:15:00.0	
End Time	2021-07-23 12:07:50	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	56.8 dB		
LAE	86.4 dB	SEA	--- dB
EA	48.0 μPa <sup>2</sup> h		
EA8	1.5 mPa <sup>2</sup> h		
EA40	7.7 mPa <sup>2</sup> h		
LZS <sub>peak</sub>	95.9 dB	2021-07-23 12:04:57	
LAS <sub>max</sub>	69.4 dB	2021-07-23 12:04:58	
LAS <sub>min</sub>	36.0 dB	2021-07-23 12:03:04	
LA <sub>eq</sub>	56.8 dB		
LC <sub>eq</sub>	68.5 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	11.7 dB
LAI <sub>eq</sub>	57.8 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	1.0 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
56.8 dB	56.8 dB	0.0 dB	
LDEN	LDay	LEve	LNight
56.8 dB	56.8 dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	56.8 dB		--- dB		--- dB	
L <sub>S(max)</sub>	69.4 dB	2021-07-23 12:04:58	--- dB		--- dB	
L <sub>S(min)</sub>	36.0 dB	2021-07-23 12:03:04	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		95.9 dB	2021-07-23 12:04:57

### Overloads

Count	Duration
0	0:00:00.0

### Statistics

LAS 5.0	62.3 dB
LAS 10.0	59.9 dB
LAS 33.3	56.2 dB
LAS 50.0	54.0 dB
LAS 66.6	51.3 dB
LAS 90.0	43.8 dB

<b>Site Number: 3</b>			
<b>Recorded By: Collin Crawford-Martin</b>			
<b>Job Number: 2021-056.01 Knight's Landing</b>			
<b>Date: 07/23/21</b>			
<b>Time: 12:31 p.m. – 12:46 p.m.</b>			
<b>Location: 70 feet South of SR 113 centerline, on levee access driveway</b>			
<b>Source of Peak Noise: Vehicle traffic on SR 113, birds chirping</b>			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
64.9	47.7	77.5	103.7

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	Duration: 15 minutes			Sky: Clear		
	Note: dBA Offset = -0.02			Sensor Height (ft): 3.5		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	3 mph		93		29.94	

**Photo of Measurement Location**





# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.074.s	Computer's File Name	LxT_0006133-20210723 123156-LxT_Data.074.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 12:31:56	Duration	0:15:00.0	
End Time	2021-07-23 12:46:56	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	64.9 dB		
LAE	94.5 dB	SEA	--- dB
EA	310.9 μPa²h		
EA8	9.9 mPa²h		
EA40	49.7 mPa²h		
LZS <sub>peak</sub>	103.7 dB	2021-07-23 12:36:32	
LAS <sub>max</sub>	77.5 dB	2021-07-23 12:33:39	
LAS <sub>min</sub>	47.7 dB	2021-07-23 12:34:48	
LA <sub>eq</sub>	64.9 dB		
LC <sub>eq</sub>	72.7 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	7.8 dB
LAI <sub>eq</sub>	67.1 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	2.2 dB

Exceedances	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight	
	64.9 dB	64.9 dB	0.0 dB	
	LDEN	LDay	LEve	LNight
	64.9 dB	64.9 dB	--- dB	--- dB

Any Data	A	C	Z			
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	64.9 dB		--- dB		--- dB	
L <sub>S(max)</sub>	77.5 dB	2021-07-23 12:33:39	--- dB		--- dB	
L <sub>S(min)</sub>	47.7 dB	2021-07-23 12:34:48	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		103.7 dB	2021-07-23 12:36:32

Overloads	Count	Duration
	0	0:00:00.0

### Statistics

LAS 5.0	70.0 dB
LAS 10.0	68.1 dB
LAS 33.3	64.4 dB
LAS 50.0	62.4 dB
LAS 66.6	59.7 dB
LAS 90.0	53.2 dB

<b>Site Number: 4</b>			
<b>Recorded By:</b> Collin Crawford-Martin			
<b>Job Number:</b> 2021-056.01 Knight's Landing			
<b>Date:</b> 07/23/21			
<b>Time:</b> 12:10 p.m. – 12:25 p.m.			
<b>Location:</b> 130' South of Locust Street/Daniel Street intersection; near property line of residence			
<b>Source of Peak Noise:</b> Vehicle traffic on SR 113, birds, residential activity, car audio bass, dog barking @ 10 min, jet overhead at 14 min			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
48.6	37.9	70.4	88.7

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	Duration: 15 minutes			Sky: Clear		
	Note: dBA Offset = -0.02			Sensor Height (ft): 3.5		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	2 mph		92		29.95	

**Photo of Measurement Location**



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.073.s	Computer's File Name	LxT_0006133-20210723 121028-LxT_Data.073.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 12:10:28	Duration	0:15:00.0	
End Time	2021-07-23 12:25:28	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	48.6 dB		
LAE	78.2 dB	SEA	--- dB
EA	7.3 μPa²h		
EA8	233.7 μPa²h		
EA40	1.2 mPa²h		
LZS <sub>peak</sub>	88.7 dB	2021-07-23 12:21:04	
LAS <sub>max</sub>	70.4 dB	2021-07-23 12:21:04	
LAS <sub>min</sub>	37.9 dB	2021-07-23 12:23:09	
LA <sub>eq</sub>	48.6 dB		
LC <sub>eq</sub>	58.5 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	9.9 dB
LAI <sub>eq</sub>	54.5 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	5.8 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
48.6 dB	48.6 dB	0.0 dB	
LDEN	LDay	LEve	LNight
48.6 dB	48.6 dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	48.6 dB		--- dB		--- dB	
LS <sub>(max)</sub>	70.4 dB	2021-07-23 12:21:04	--- dB		--- dB	
LS <sub>(min)</sub>	37.9 dB	2021-07-23 12:23:09	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		88.7 dB	2021-07-23 12:21:04

### Overloads

Count	Duration
0	0:00:00.0

### Statistics

LAS 5.0	53.7 dB
LAS 10.0	49.6 dB
LAS 33.3	45.4 dB
LAS 50.0	44.2 dB
LAS 66.6	43.1 dB
LAS 90.0	40.5 dB

<b>Site Number: 5</b>			
<b>Recorded By:</b> Collin Crawford-Martin			
<b>Job Number:</b> 2021-056.01 Knight's Landing			
<b>Date:</b> 07/23/21			
<b>Time:</b> 12:52 p.m. – 1:07 p.m.			
<b>Location:</b> Driveway of Zamora Creek Ranch Estate			
<b>Source of Peak Noise:</b> Vehicle traffic on E-8, birds chirping			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
67.7	39.0	81.1	98.7

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	Duration: 15 minutes			Sky: Clear		
	Note: dBA Offset = -0.02			Sensor Height (ft): 3.5		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	4 mph		93		29.94	

**Photo of Measurement Location**



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.075.s	Computer's File Name	LxT_0006133-20210723 125206-LxT_Data.075.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 12:52:06	Duration	0:15:00.0	
End Time	2021-07-23 13:07:06	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	67.7 dB		
LAE	97.2 dB	SEA	--- dB
EA	587.2 μPa²h		
EA8	18.8 mPa²h		
EA40	93.9 mPa²h		
LZS <sub>peak</sub>	98.7 dB	2021-07-23 12:56:38	
LAS <sub>max</sub>	81.1 dB	2021-07-23 13:04:13	
LAS <sub>min</sub>	39.0 dB	2021-07-23 13:00:17	
LA <sub>eq</sub>	67.7 dB		
LC <sub>eq</sub>	71.6 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	4.0 dB
LAI <sub>eq</sub>	69.4 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	1.7 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
67.7 dB	67.7 dB	0.0 dB	
LDEN	LDay	LEve	LNight
67.7 dB	67.7 dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	67.7 dB		--- dB		--- dB	
L <sub>S(max)</sub>	81.1 dB	2021-07-23 13:04:13	--- dB		--- dB	
L <sub>S(min)</sub>	39.0 dB	2021-07-23 13:00:17	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		98.7 dB	2021-07-23 12:56:38

### Overloads

Count	Duration
0	0:00:00.0

### Statistics

LAS 5.0	74.3 dB
LAS 10.0	72.4 dB
LAS 33.3	65.7 dB
LAS 50.0	59.2 dB
LAS 66.6	49.7 dB
LAS 90.0	41.1 dB

<b>Site Number: 6</b>			
<b>Recorded By:</b> Collin Crawford-Martin			
<b>Job Number:</b> 2021-056.01 Knight's Landing			
<b>Date:</b> 07/23/21			
<b>Time:</b> 2:17 p.m. – 2:32 p.m.			
<b>Location:</b> On levee, 60 feet west of Sacramento River, 60 feet east of E-116B/river front road/levee intersection			
<b>Source of Peak Noise:</b> Truck idling across Sacramento River, vehicles traversing E-116B, birds, plane in distance			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
42.1	31.2	63.5	84.7

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	Duration: 15 minutes			Sky: Clear		
	Note: dBA Offset = -0.02			Sensor Height (ft): 3.5		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	1-2 mph		99		29.92	

**Photo of Measurement Location**



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.078.s	Computer's File Name	LxT_0006133-20210723 141734-LxT_Data.078.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 14:17:34	Duration	0:15:00.0	
End Time	2021-07-23 14:32:34	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	42.1 dB		
LAE	71.7 dB	SEA	--- dB
EA	1.6 μPa²h		
EA8	52.1 μPa²h		
EA40	260.7 μPa²h		
LZS <sub>peak</sub>	84.7 dB	2021-07-23 14:30:52	
LAS <sub>max</sub>	63.5 dB	2021-07-23 14:30:53	
LAS <sub>min</sub>	31.2 dB	2021-07-23 14:27:58	
LA <sub>eq</sub>	42.1 dB		
LC <sub>eq</sub>	54.0 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	11.9 dB
LAI <sub>eq</sub>	43.5 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	1.4 dB

Exceedances	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight	
	42.1 dB	42.1 dB	0.0 dB	
	LDEN	LDay	LEve	LNight
	42.1 dB	42.1 dB	--- dB	--- dB

Any Data	A	C	Z			
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	42.1 dB		--- dB		--- dB	
L <sub>S(max)</sub>	63.5 dB	2021-07-23 14:30:53	--- dB		--- dB	
L <sub>S(min)</sub>	31.2 dB	2021-07-23 14:27:58	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		84.7 dB	2021-07-23 14:30:52

Overloads	Count	Duration
	0	0:00:00.0

### Statistics

LAS 5.0	40.6 dB
LAS 10.0	37.5 dB
LAS 33.3	34.8 dB
LAS 50.0	33.5 dB
LAS 66.6	32.9 dB
LAS 90.0	32.2 dB

<b>Site Number: 7</b>			
<b>Recorded By:</b> Collin Crawford-Martin			
<b>Job Number:</b> 2021-056.01 Knight's Landing			
<b>Date:</b> 07/23/21			
<b>Time:</b> 1:51 p.m. – 2:06 p.m.			
<b>Location:</b> 100 feet north of drainage canal; 1000 feet west of E-16/E-16 intersection at Gray's Bend			
<b>Source of Peak Noise:</b> Truck driving on farm road 5 ft from sensor, birds chirping, insects			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
41.6	30.7	61.3	89.4

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	Duration: 15 minutes			Sky: Clear		
	Note: dBA Offset = -0.02			Sensor Height (ft): 3.5		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	2 mph		96		29.93	

**Photo of Measurement Location**





# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.077.s	Computer's File Name	LxT_0006133-20210723 135121-LxT_Data.077.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 13:51:21	Duration	0:15:00.0	
End Time	2021-07-23 14:06:21	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	41.6 dB		
LAE	71.1 dB	SEA	--- dB
EA	1.4 μPa <sup>2</sup> h		
EA8	46.2 μPa <sup>2</sup> h		
EA40	231.0 μPa <sup>2</sup> h		
LZS <sub>peak</sub>	89.4 dB	2021-07-23 13:56:14	
LAS <sub>max</sub>	61.3 dB	2021-07-23 13:56:15	
LAS <sub>min</sub>	30.7 dB	2021-07-23 13:52:18	
LA <sub>eq</sub>	41.6 dB		
LC <sub>eq</sub>	52.3 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	10.7 dB
LAI <sub>eq</sub>	44.3 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	2.7 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
41.6 dB	41.6 dB	0.0 dB	
LDEN	LDay	LEve	LNight
41.6 dB	41.6 dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	41.6 dB		--- dB		--- dB	
L <sub>S(max)</sub>	61.3 dB	2021-07-23 13:56:15	--- dB		--- dB	
L <sub>S(min)</sub>	30.7 dB	2021-07-23 13:52:18	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		89.4 dB	2021-07-23 13:56:14

### Overloads

Count	Duration
0	0:00:00.0

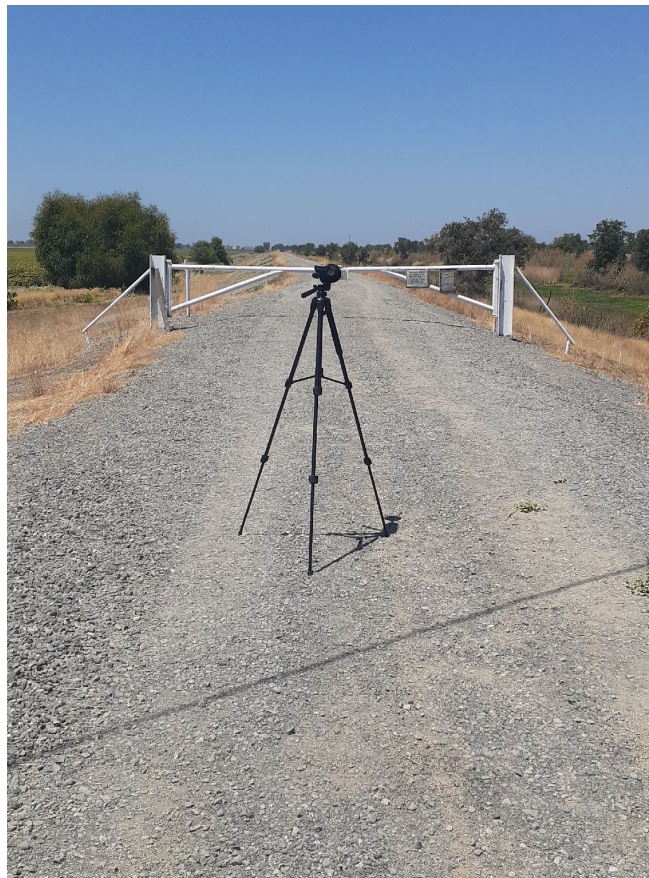
### Statistics

LAS 5.0	47.2 dB
LAS 10.0	42.7 dB
LAS 33.3	38.1 dB
LAS 50.0	34.9 dB
LAS 66.6	33.7 dB
LAS 90.0	32.4 dB

<b>Site Number: 8</b>			
<b>Recorded By:</b> Collin Crawford-Martin			
<b>Job Number:</b> 2021-056.01 Knight's Landing			
<b>Date:</b> 07/23/21			
<b>Time:</b> 1:20 p.m. – 1:35 p.m.			
<b>Location:</b> On Levee at end of E-17, 100 feet west of canal			
<b>Source of Peak Noise:</b> Birds chirping, agricultural activity in distance, frogs, insects			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
35.9	30.8	52.5	93.8

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	02/24/2020	
	Microphone	Larson Davis	377B02	315201	02/24/2020	
	Preamp	Larson Davis	PRMLxT1L	069947	02/24/2020	
	Calibrator	Larson Davis	CAL200	17325	02/25/2020	
Weather Data						
Est.	<b>Duration:</b> 15 minutes			<b>Sky:</b> Clear		
	<b>Note:</b> dBA Offset = -0.02			<b>Sensor Height (ft):</b> 3.5		
	<b>Wind Ave Speed (mph)</b>		<b>Temperature (degrees Fahrenheit)</b>		<b>Barometer Pressure (hPa)</b>	
	2-3 mph		94		29.94	

**Photo of Measurement Location**



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.076.s	Computer's File Name	LxT_0006133-20210723 132003-LxT_Data.076.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2021-07-23 13:20:03	Duration	0:15:00.0	
End Time	2021-07-23 13:35:03	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	35.9 dB		
LAE	65.4 dB	SEA	--- dB
EA	0.4 μPa <sup>2</sup> h		
EA8	12.4 μPa <sup>2</sup> h		
EA40	61.9 μPa <sup>2</sup> h		
LZS <sub>peak</sub>	93.8 dB	2021-07-23 13:20:30	
LAS <sub>max</sub>	52.5 dB	2021-07-23 13:20:03	
LAS <sub>min</sub>	30.8 dB	2021-07-23 13:29:23	
LA <sub>eq</sub>	35.9 dB		
LC <sub>eq</sub>	50.4 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	14.6 dB
LAI <sub>eq</sub>	40.3 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	4.4 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
35.9 dB	35.9 dB	0.0 dB	
LDEN	LDay	LEve	LNight
35.9 dB	35.9 dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	35.6 dB		--- dB		--- dB	
LS <sub>(max)</sub>	52.5 dB	2021-07-23 13:20:03	--- dB		--- dB	
LS <sub>(min)</sub>	30.8 dB	2021-07-23 13:29:23	--- dB		--- dB	
L <sub>Peak(max)</sub>	--- dB		--- dB		93.8 dB	2021-07-23 13:20:30

### Overloads

Count	Duration
0	0:00:00.0

### Statistics

LAS 5.0	38.6 dB
LAS 10.0	38.0 dB
LAS 33.3	35.8 dB
LAS 50.0	34.7 dB
LAS 66.6	33.9 dB
LAS 90.0	32.8 dB

**ROADWAY CONSTRUCTION NOISE MODEL OUTPUTS**

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/4/2021  
 Case Description: Erosion Control Activities

Description: Erosion Control Activities  
 Land Use: Residential

Description	Equipment		Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
	Impact Device	Usage(%)			
Excavator	No	40		80.7	400
Excavator	No	40		80.7	400
Bulldozer	No	40		81.7	400
Front End Loader	No	40		79.1	400
Water Truck	No	40		76.5	400
Dump Truck	No	40		76.5	400
Dump Truck	No	40		76.5	400
Dump Truck	No	40		76.5	400

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	62.6	58.7
Excavator	62.6	58.7
Bulldozer	63.6	59.6
Front End Loader	61	57.1
Water Truck	58.4	54.4
Dump Truck	58.4	54.4
Dump Truck	58.4	54.4
Dump Truck	58.4	54.4
<b>Total</b>	<b>63.6</b>	<b>66</b>

\*Calculated Lmax is the Loudest value.