APPENDIX F

ACOUSTICAL MEASUREMENT LOCATIONS

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This appendix includes Tables F-1 and F-2, which provide detailed descriptions of the acoustical measurement locations and corresponding levels and sources, and Figure F-1, which illustrates the acoustical measurement locations listed in the tables.

TABLE F-1: SUMMARY OF NOISE MEASUREMENTS

#	Date	Time	Location	Background Level (dBA)	Description of Sound / Noise Sources
1	9/11/99	8:30	First Merced River pedestrian bridge on John Muir Trail – base of Vernal Falls.	64.0	River sounds predominated. Also, visitor-related noise contributed somewhat. Vernal Falls was audible in the distance.
2	9/11/99	9:10	On the "mist" trail that winds up to Little Yosemite Valley adjacent to Vernal Falls.	75.5	Waterfall noise predominated. Maximum noise levels of up to 81 dBA were associated with people talking and yelling.
3	9/11/99	9:50	Viewing area atop Vernal Falls, overlooking the river and falls.	65.5	The falls produced the background sound environment and accounted for most of the measured level. Visitor-related noise sources accounted for the remainder. Maximum noise levels up to 70 dBA were associated with people talking and yelling.
4	9/11/99	10:47	Viewing area atop Nevada Falls overlooking river, trail bridge and falls.	60.5	The falls produced the background sound environment and accounted for most of the measured level. Visitor-related noise sources accounted for the remainder.
5	9/11/99	12:00	Little Yosemite Valley campground area - approximately 700 feet east from river.	40.0	Rushing water accounted for campground area background levels. Measurements were taken in an area with no people.
6	9/11/99	3:00	Bunnell Cascade area (3 miles east of Little Yosemite Valley), on trail adjacent to river.	53.5	Rushing water over granite cascades predominated. No visitor noise occurred during measurement.
7	9/12/99	11:00	Soda Springs, about 2 miles east of Merced Lake at river side.	56.0	Rushing water over granite cascades predominated. No visitor noise occurred during measurement.
8	9/12/99	11:30	0.25 miles, off trail, away from river, north of Soda Springs area.	41.5	Forest-related sounds predominated (birds, insects, and slight wind through trees). River sounds were also discernible.
9	9/12/99	16:15	One-half mile south of Washburn Lake on trail about 300 feet to river.	34.5	Background sound level reflected distant rushing water and nearby forest sources (birds, insects, and wind through trees).
10	9/12/99	16:30	On the shore at mid-portion of Washburn Lake.	30.5	No discernible sources of sound were observed. Sound level measurement approximates the limit of detection for the meter.
11	9/12/99	15:30	1 mile southeast of Washburn Lake within the overall Merced River confluence area. About 100 feet off river on trail.	35.5	Sources included distant river rapids wind in trees, and birds.
12	9/12/99	13:30	About 2 miles southeast of Washburn Lake near twin bridge at mouth of Merced Peak Fork River. About 200 feet from river.	40.5	Canyon was narrow in this area, and the river sound seemed amplified. Most sound was from river; other sources included wind in trees, birds, and high-altitude aircraft. Maximum noise level from aircraft overflight was 43 dBA.
13	9/12/99	14:30	On trail, climbing out of the Merced Peak Fork River valley, about 2.5 miles from Washburn. Gaining elevation away from river.	38.5	Rushing water sounds were noticeable but faded with elevation. Maximum noise level of 55.5 dBA was caused by an aircraft overflight directly overhead, which was clearly noticeable above the background level.

TABLE F-1: SUMMARY OF NOISE MEASUREMENTS (CONTINUED)

#	Date	Time	Location	Background Level (dBA)	Description of Sound / Noise Sources
14	9/12/99	15:10	On trail almost to saddle on the divide between the Merced Peak Fork and Triple Peak Fork.	35.0	Sources included distant rushing water and wind. Valley shape and exposed bedrock seemed to amplify river sounds.
15	9/18/99	8:40	Yosemite Falls Trail, second footbridge north of Northside Drive.	45.5	No water in Yosemite Falls Creek, people on trail, road traffic on Northside Drive (approximately 150 feet south of measurement location).
16	9/18/99	9:00	Yosemite Falls Trail, end of maintained foot trail (approximately 1,000 feet north of previous measurement).	46.5	There was no water in Yosemite Falls Creek. Visitors using the trail were the predominant source of noise. Maximum level of 65.5 dBA was associated with people talking as they walked past.
17	9/18/99	9:30	Devil's Elbow (on south side of Northside Drive adjacent to Merced River).	44.0	River sounds were relatively low since there were no rocks or rapids in this area. Very few people were around. Maximum level of 66.5 dBA associated with a bus on Northside Drive.
18	9/18/99	9:50	El Capitan Meadow approximately 1,500 feet south of Northside Drive.	38.5	The river was calm in this area, and no people were present. Most of the sound came from wind through the trees on the opposite bank of the river.
19	9/18/99	10:30	El Portal Road in the Gorge Segment of the Merced River. Along the river at the stone bridge between Arch Rock and Big Oak Flat Road.	52.0	Rushing water sounds accounted for majority of the background level. Measurements were taken in area with no people. Some vehicle noise was audible from El Portal Road, but it was relatively minor due to distance (approximately 300 feet away) and elevation (the river is approximately 40 feet below the grade of the roadway in this area).
20	9/18/99	11:15	Cascades Dam (approximately 500 feet east of dam along river area that is calm due to impoundment from the dam).	48.5	The river was calm in this area, people were fishing nearby, and some noise was attributable to their activities. Maximum noise level of 62.5 dBA was due to a bus on Northside Drive.
21	9/18/99	12:00	Swinging Bridge.	49.5	River was generally calm in this area. Visitors using the bridge or wading or skipping stones were the greatest sources of noise.
22	9/18/99	12:30	Sentinel Bridge.	58.5	Substantial amount of visitor-related noise was observed in this area. Vehicular traffic on bridge added to the level, but speeds were generally slow (10-15 mph). Idling tour buses also contributed to background noise level. Maximum noise level of 76.5 dBA was associated with tour buses that use the bridge.
23	9/18/99	14:40	Happy Isles.	59.0	Most of the noise was from people using the trails and facilities nearby.

TABLE F-1: SUMMARY OF NOISE MEASUREMENTS (CONTINUED)

#	Date	Time	Location	Background Level (dBA)	Description of Sound / Noise Sources
24	9/18/99	19:45	Midway between the river and main access road to the Upper Pines Campground.	55.0	Noise was generally from the campground and includes people talking (and yelling), generators from recreational vehicles, and moving vehicles.
25	9/19/99	6:00	Same location as #24.	32.0	No human-caused noise sources were discernible at the time this measurement was taken.
26	9/19/99	10:30	In the middle of the old Wawona Bridge.	49.5	Most of the noise was associated with the use of the Wawona General Store across the roadway (i.e., people talking or yelling, buses idling, vehicular traffic noise). Maximum noise level of 58.5 dBA was associated with a truck crossing the replacement bridge.
27	9/19/99	10:45	Along South Fork approximately 100 feet west of the covered bridge near the Pioneer History Center in Wawona.	44.0	River sounds were noticeable with a few minor rapids and cascades. Other sources of noise included people using the history center and horses and stagecoach crossing the covered bridge.

NOTE: See Figure F-1 for a map showing the locations of the noise measurement sites.

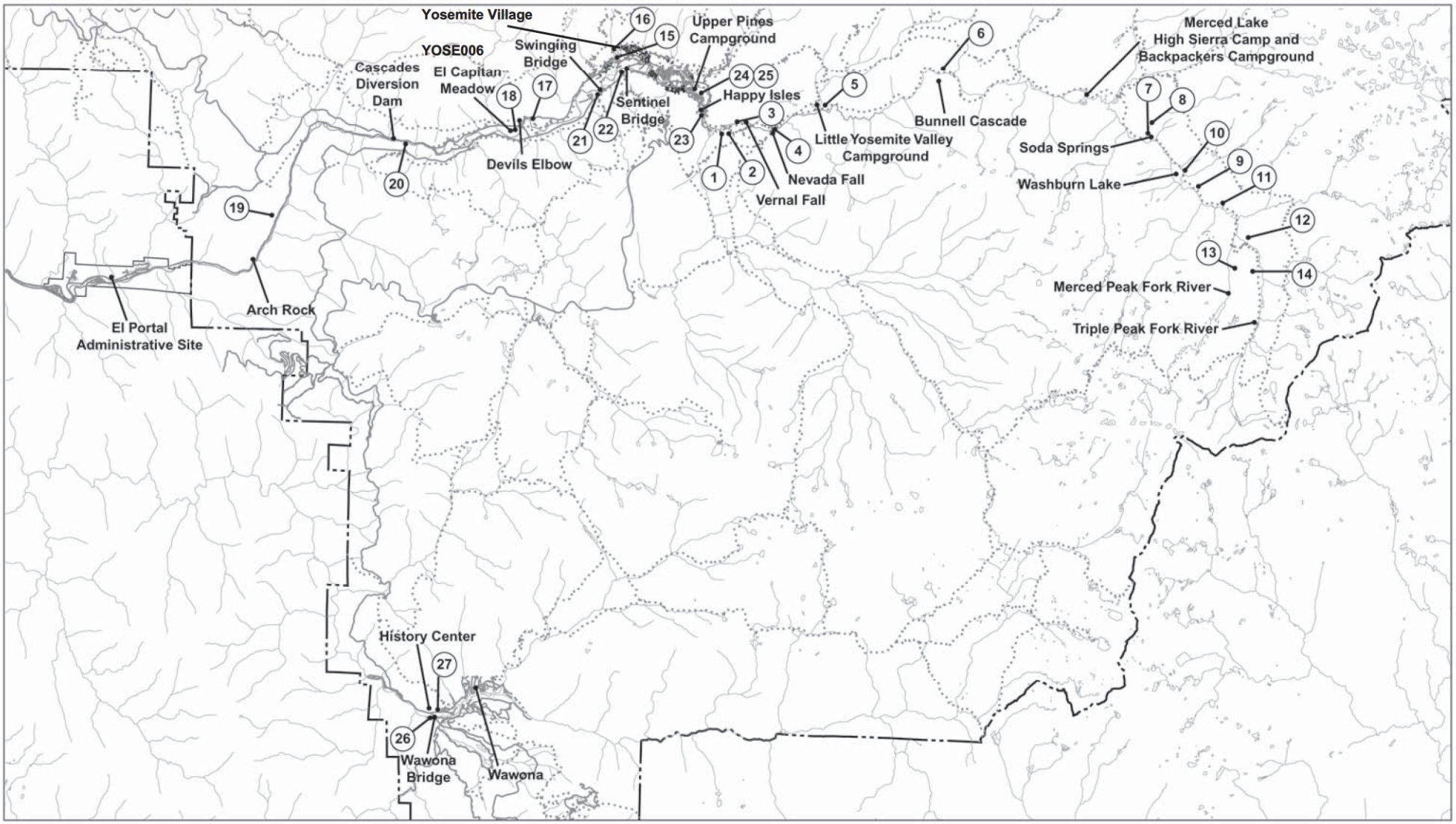
TABLE F-2: SUMMARY OF NOISE MEASUREMENTS

Site #	Year	Location – Habitat Type	Measured Median Noise Level, dB L50 Daytime/Nighttime
YOSE001	2005	White Wolf – Red fir forest	27.7/26.0
YOSE002	2005	Tuolumne Meadows – Meadow/lake open area below treeline	34.7/34.7
YOSE003	2005	Snow Flats – Subalpine/lodgepole	29.3/18.2
YOSE004	2005	Granite Lakes – Alpine tundra	27.5/20.1
YOSE005	2006	Lyell Winter Site – Meadow/lake open area below treeline	27.1/22.4
YOSE006*	2006	Yosemite Village – Developed concession area	51.6/48.0
YOSE007	2006	Hodgdon Meadow – Dense mixed conifer	28.5/18.7
YOSE008	2006	Sentinel Rock – Upper vertical canyon	31.9/29.3
YOSE009	2006	Ostrander Lake Trail – Dense lodgepole	28.6/21.3
YOSE011	2006	Olmstead Point – Vertical canyon/open lodgepole	34.6/21.3

NOTE: See Figure F-1 for a map showing the locations of the noise measurement sites.

* Site YOSE006 is the only 2005-2006 acoustical monitoring site within the Merced River Wild and Scenic River Corridor, and therefore is the only such site depicted on Figure F-1.

SOURCE: Yosemite National Park Acoustic Monitoring Report, 2005 & 2006.



n Noise Measurement Locations

Rivers and Creeks

Trails

Boundary

Roads

1 0 1 2 Miles

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Figure F-1
Noise Measurement Locations

Draft Merced Wild and Scenic River
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