



LSA ASSOCIATES, INC.

PACIFIC CENTER

703 PALOMAR AIRPORT RD., SUITE 260
CARLSBAD, CALIFORNIA 92011

760.931.5471 TEL
760.918.2458 FAX

BERKELEY

FT. COLLINS
IRVINE

FRESNO

PALM SPRINGS
PT. RICHMOND

RIVERSIDE

ROCKLIN

SAN LUIS OBISPO
SOUTH SAN FRANCISCO

April 21, 2011

Edalia Olivo-Gomez
Senior Environmental Specialist
San Diego Gas & Electric
8315 Century Park Court, CP21E
San Diego, CA 92123-1548

Subject: Spring Avian Point-Count Survey Results
Ocotillo Sol Project
Imperial County, California (LSA Project No. SGE0905)

Dear Ms. Olivo-Gomez:

LSA Associates, Inc. (LSA) is providing this letter report to document the results of spring avian point-count surveys at the Ocotillo Sol Project site in Imperial County, California. This report follows the previously submitted winter avian point-count survey report dated February 22, 2011.

METHODS

The spring point-count surveys were conducted in accordance with the Bureau of Land Management’s “BLM Solar Facility Point Count Protocol” (dated March 2009). LSA biologists Mark Billings and Dan Rosie conducted four surveys during the spring (March and April). Dates, times, and weather conditions of these surveys are provided in Table A. The survey utilized a single transect consisting of eight point-count stations, with adjacent stations separated by 250 meters (820 feet; see attached Figure 1). The transect was located so as to provide a representative sampling of the project site. Habitat value throughout the project site was fairly uniform. The surveys were conducted one day a week for four consecutive weeks. During each survey, each point-count station was monitored for 10 minutes, and birds observed within a radius of 100 meters (330 feet) of the station over the 10-minute period were counted.

Table A: Survey Schedule and Conditions

Date 2011	Time	Weather
March 2	0730–1130	Cool–warm, mostly clear, light wind–calm
March 11	0725–1120	Mild–warm, clear, calm
March 18	0720–1130	Cool–warm, mostly overcast, calm–light wind
March 25	0800–1130	Mild–warm, mostly clear, light wind

RESULTS

Two hundred-ninety-four birds, comprising 23 species, were detected during the surveys (Table B). Bird observations were more or less uniform across the site, both in species composition and in numbers of individuals (Table C).

Table B: Survey Summary (Number of Individuals Observed by Date)

Species	3/2	3/11	3/18	3/25	Total
cliff swallow (<i>Petrochelidon pyrrhonota</i>)	0	3	38	12	53
white-crowned sparrow (<i>Zonotrichia leucophrys</i>)	10	0	25	5	40
house finch (<i>Carpodacus mexicanus</i>)	7	9	2	15	33
European starling (<i>Sturnus vulgaris</i>)	20	0	0	8	28
yellow-rumped warbler (<i>Dendroica coronata</i>)	8	4	6	9	27
rock pigeon (<i>Columba livia</i>)	0	7	12	5	24
Swainson's hawk (<i>Buteo swainsoni</i>)	3	11	0	0	14
Eurasian collared-dove (<i>Streptopelia decaocto</i>)	2	4	1	5	12
horned lark (<i>Eremophila alpestris</i>)	2	1	2	6	11
barn swallow (<i>Hirundo rustica</i>)	0	10	0	0	10
tree swallow (<i>Tachycineta bicolor</i>)	0	8	0	0	8
western kingbird (<i>Tyrannus verticalis</i>)	0	0	6	1	7
Say's phoebe (<i>Sayornis saya</i>)	3	2	0	1	6
American kestrel (<i>Falco sparverius</i>)	1	1	1	1	4
blue-gray gnatcatcher (<i>Poliophtila caerulea</i>)	1	0	2	0	3
common raven (<i>Corvus corax</i>)	1	0	2	0	3
turkey vulture (<i>Cathartes aura</i>)	1	2	0	0	3
warbling vireo (<i>Vireo gilvus</i>)	0	0	1	2	3
black phoebe (<i>Sayornis nigricans</i>)	0	0	1	0	1
Brewer's sparrow (<i>Spizella breweri</i>)	0	0	1	0	1
hummingbird (<i>Trochilidae</i> sp.)	0	0	1	0	1
lesser goldfinch (<i>Spinus psaltria</i>)	0	0	1	0	1
orange-crowned warbler (<i>Oreothlypis celata</i>)	0	0	1	0	1
Total	59	62	103	70	294

Table C: Detailed Survey Results (Number of Individuals Observed by Date and Point)

Point	March 2	March 11	March 18	March 25
1	common raven (1) European starling (6) house finch (1) white-crowned sparrow (10) yellow-rumped warbler (8)	house finch (3) turkey vulture (1)	blue-gray gnatcatcher (2) Brewer's sparrow (1) cliff swallow (8) Eurasian collared-dove (1) horned lark (1) lesser goldfinch (1) orange-crowned warbler (1) warbling vireo (1) western kingbird (6) white-crowned sparrow (20)	cliff swallow (2) house finch (2) western kingbird (1) white-crowned sparrow (2) yellow-rumped warbler (3)
2	European starling (6) Say's phoebe (1)	Eurasian collared-dove (2) house finch (1) Swainson's hawk (11) turkey vulture (1)	cliff swallow (3) house finch (1) hummingbird sp. (1) rock pigeon (10) yellow-rumped warbler (1)	house finch (2) yellow-rumped warbler (1)
3	Eurasian collared-dove (1) European starling (4) horned lark (1)	rock pigeon (4) tree swallow (8) yellow-rumped warbler (2)	black phoebe (1) cliff swallow (6) house finch (1) rock pigeon (2) yellow-rumped warbler (3)	cliff swallow (5) Eurasian collared-dove (3) house finch (4) Say's phoebe (1) warbling vireo (1)
4	American kestrel (1) blue-gray gnatcatcher (1) Eurasian collared-dove (1) European starling (4) house finch (1)	American kestrel (1) cliff swallow (1) Eurasian collared-dove (1) house finch (1) rock pigeon (3)	American kestrel (1) common raven (2)	Eurasian collared-dove (2) European starling (8) horned lark (2) rock pigeon (5)
5	house finch (1)	barn swallow (2) house finch (1)	cliff swallow (15)	horned lark (3) yellow-rumped warbler (1)
6	house finch (2) Swainson's hawk (3) turkey vulture (1)	barn swallow (3) house finch (1) Say's phoebe (2)	cliff swallow (3) yellow-rumped warbler (2)	cliff swallow (2) house finch (3) yellow-rumped warbler (1)
7	house finch (2) Say's phoebe (2)	cliff swallow (1) horned lark (1) house finch (1) yellow-rumped warbler (1)	cliff swallow (1) horned lark (1) white-crowned sparrow (5)	cliff swallow (3) house finch (1) yellow-rumped warbler (1)

Point	March 2	March 11	March 18	March 25
8	horned lark (1)	barn swallow (5) cliff swallow (1) Eurasian collared-dove (1) house finch (1) yellow-rumped warbler (1)	cliff swallow (2)	American kestrel (1) horned lark (1) house finch (3) warbling vireo (1) white-crowned sparrow (3) yellow-rumped warbler (2)

The only special-status species observed during the spring point-count surveys was Swainson’s hawk (*Buteo swainsoni*), categorized as Threatened by the California Department of Fish and Game. Swainson’s hawks were observed flying north over the project site during the peak of their northbound migration.

Please contact me or Mike Trotta at (760) 931-5471 if you have any questions about this letter report.

Sincerely

LSA ASSOCIATES, INC.



Mark Billings
Biologist

Attachment: Figure 1: Avian Point-Count Survey Map

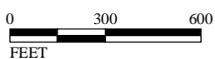


LSA

FIGURE 1

LEGEND

-  Impact Area plus Buffer
-  Existing SDG&E Imperial Valley Substation
-  Point-Count Transect
-  Point Count (with ID)
-  Point Count 100m Radius



SOURCE: Bing Maps (2008)

R:\SGE0905\GIS\Transects.mxd (1/12/2011)

*San Diego Gas & Electric Company
Ocotillo Sol Project
Imperial County, California
Avian Point-Count Survey Map*