DOCKETED	
Docket Number:	07-AFC-05C
Project Title:	Ivanpah Solar Electric Generating System (Compliance)
TN #:	235407
Document Title:	IVANPAH SOLAR ELECTRIC GENERATING SYSTEM 2018- 2019 AVIAN & BAT MONITORING PLAN
Description:	N/A
Filer:	Joe Douglas
Organization:	California Energy Commission
Submitter Role:	Energy Commission
Submission Date:	10/23/2020 12:07:24 PM
Docketed Date:	10/23/2020



IVANPAH SOLAR ELECTRIC GENERATING SYSTEM AVIAN & BAT MONITORING PLAN

2018 - 2019 Annual Report



Prepared for: **Solar Partners I, II, and VIII** 100302 Yates Well Road Nipton, CA 92364



Prepared by:
Western EcoSystems
Technology, Inc.

January 2020

Table of Contents

Section 1.0 Introduction	4
1.1 Project Background	4
1.2 Monitoring Plan Overview and Goals	4
1.3 Purpose of This Report	5
Section 2.0 Methods	7
2.1 Facility Monitoring	7
2.1.1 Standardized Searches	7
2.1.1.1 Areas Surveyed	7
2.1.1.2 Search Frequency and Timing	7
2.1.1.3 Search Methods	7
2.1.4 Incidental Reporting	8
Section 3.0 Monitoring Results	10
3.1 Summary of Avian Detections	10
3.1.1 Spatial Patterns of Detections	16
3.1.2 Temporal Patterns of Detections	17
3.1.2 Summary of Bat Detections	18
Section 4.0 Comparison to Fatality Index	19
4.1 Fatality Index Comparison	19
Section 5.0 Framework for Management and Risk Response	20
5.1 Comparison to the Fatality Index	20
5.2 Assessment of Potential Effects to National and Regional Populations	20
5.3 Assessment of Effects to Local Populations	21
5.4 Assessment of Effects to Special Status Species	22
Section 6.0 Recommendations	24
Section 9.0 Literature Cited	25
Figures	
Figure 1. Ivanpah Vicinity Map.	6
Figure 2. Locations of Detections, by Cause, within Solar Units	16
Figure 3. Number of Detections on Each Survey Date, 2018 – 2019 Monitoring Year	17
Figure 4. Total number of detections in the tower area during year 5 (348) relative to the fatality	index 19

Tables

Table 1. Number of Individual Bird Detections, by Species, 2018 – 2019 Monitoring Year	11
Table 2. Number of detections, occurrence at the Project, and population estimates for the top 10 specie	es
detected at the Project	21
$ Table \ 3. \ Number \ of \ Detections \ of \ Locally \ Breeding \ Species \ During \ the \ 2018-2019 \ Monitoring \ Year. \dots \ Table \ 3. \ Number \ of \ Detections \ of \ Locally \ Breeding \ Species \ During \ the \ 2018-2019 \ Monitoring \ Year. \dots \ Table \ 3. \ Number \ of \ Detections \ of \ Locally \ Breeding \ Species \ During \ the \ 2018-2019 \ Monitoring \ Year. \dots \ \ Table \ 3. \ Number \ of \ Detections \ of \ Locally \ Breeding \ Species \ During \ the \ 2018-2019 \ Monitoring \ Year. \dots \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	22
Table 4. Detections of Sensitive Species during the 2018 – 2019 Monitoring Year	23

Appendices

Appendix A. Individual Avian Detections.

Section 1.0 Introduction

1.1 Project Background

The Ivanpah Solar Electric Generating System (referred to in this report as "Ivanpah" or "Project") consists of three solar power electrical generating facilities (Units 1, 2, and 3) with a combined net capacity of 377 megawatts. Each unit includes a central power tower with an air-cooled condenser (ACC) and associated electrical generating equipment, surrounded by a heliostat array that reflects sunlight to a boiler at the top of the power tower. Ivanpah is located on approximately 1,457 hectares (3,600 acres) of Bureau of Land Management (BLM) land west of Interstate 15 near the town of Nipton in San Bernardino County, California (Figure 1). Construction was initiated in 2010 and completed in late 2013.

1.2 Monitoring Plan Overview and Goals

An Avian & Bat Monitoring and Management Plan (Plan) was prepared by the Project proponents in collaboration with the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), California Energy Commission (CEC), and Bureau of Land Management (BLM) to guide comprehensive monitoring of impacts to birds and bats associated with the operation of the Project. In December 2017, the TAC approved the field methods described in Revision 14 of the Plan (2017), which provides a framework for comparing detections in the tower area of all three units to baseline levels of mortality observed during the first four years of standardized monitoring.

Specifically, the Plan (2017) details the surveys, data analysis and reporting processes that will be implemented by Ivanpah in collaboration with the USFWS, CDFW, CEC, and BLM and provides the following goals and objectives as excerpted from the Plan (2017):

Plan Goals

- 1. Assess levels of mortality: Detections (i.e., fatalities or injuries) documented and an annual assessment of the level of mortality will be determined and provided consistent with the "high, medium and low" framework as described in Section 5.3.
- Provide a Framework for Management and Response to Risks: The designation and description of the functioning of the TAC provides a management and decision framework for the identification and implementation of potential adaptive management measures.

Plan Objectives

The first two years of monitoring documented that the mortality associated with the perimeter fences, transmission lines, and offsite transects was less than 5 detections per season. Additionally, the patterns associated with avian use have been consistent over the seasons and documented in the annual reports. During the third and fourth year of monitoring, consistent patterns of mortality associated with the tower areas and heliostat areas were documented. Therefore, as revised, this Plan has the following objectives:

1. Document patterns of avian and bat mortality and injury at the facility.

- 2. Provide quantitative and qualitative information for developing and implementing adaptive management responses commensurate with identified impacts.
- 3. Provide a framework for the TAC to jointly review, characterize, and recommend responses, based on monitoring results, to the appropriate lead agency representatives.

As approved by the TAC, the revised Plan (2017) continues to: 1) satisfy the BLM Right-of-Way (ROW) Permit requirement that the Project proponent develop an avian plan as well as a Migratory Bird Treaty Act (MBTA) Conservation Agreement; 2) satisfy the requirements for the Avian & Bat Monitoring and Management Plan approved by the CEC for Ivanpah per CEC Condition of Certification BIO-21; and 3) achieve the avian and bat protection objectives of the USFWS in relation to the MBTA, Bald and Golden Eagle Protection Act (Eagle Act), and Federal Endangered Species Act (ESA), including preparing written records of the actions that have been taken to avoid, minimize, and compensate for potential adverse impacts to avian and bat species. By developing a proactive management plan in close consultation with the USFWS and other relevant state and federal agencies, Project proponents can effectively comply with the intent of the federal MBTA, Eagle Act, ESA, and relevant state regulations (USFWS 2012).

1.3 Purpose of This Report

This report provides a summary of the detections (by cause and location for known and unknown cause according to the biologically informed seasons (16 December 2018 – 15 December 2019) as described in the 2014 – 2015 Annual Report (WEST 2016), and further described in Section 2.1.5. Biologically informed seasons are defined in this report as winter (15 December 2018 – 20 March 2019), spring (21 March – 25 May 2019), summer (26 May – 17 August 2019), and fall (18 August – 15 December 2019), and are collectively referred to as the 2018 – 2019 monitoring year or year 6 throughout this report.

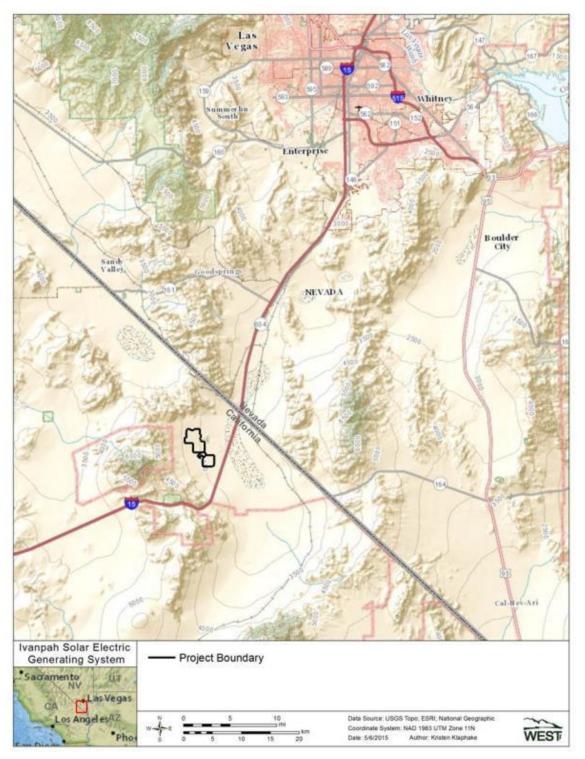


Figure 1. Ivanpah Vicinity Map.

Section 2.0 Methods

The Plan (2017) describes the methods by which monitoring and certain analyses, including comparison of detections the fatality index based on the first four years of monitoring, will occur. Below is an abridged description of the 2017 methods and subsequent modifications approved by the TAC.

2.1 Facility Monitoring

This section describes areas surveyed, the frequency and timing of the searches, and the methods by which standardized searches were conducted to identify dead/injured birds and bats (hereafter detections) at the Project. This section also describes the methods for conducting carcass removal and searcher efficiency trials; how data were reported and analyzed for incidental detections; and the methods for producing fatality estimates for the Project.

2.1.1 Standardized Searches

2.1.1.1 Areas Surveyed

Per the Plan (2017), monitoring was conducted in the "tower area", defined as the power block (the area consisting of the tower, the ACC unit, the associated control building, and immediately adjacent areas defined by the ring road and berm/slopes surrounding these facilities) and inner high-density (HD) heliostats surrounding each power block.

2.1.1.2 Search Frequency and Timing

Standardized searches occurred at each unit on a 21-day interval in summer and winter seasons, with a 7-day interval in the spring and fall seasons until December 31, 2017. With approval from the TAC on December 21, 2017, standardized search frequency was undertaken at each unit on a 14-day interval beginning January 14, 2018 as per Revision 14 of the Plan (2017)

2.1.1.3 Search Methods

Biologists performed surveys in the tower area. Standardized walking surveys for fatalities were performed by biologists approved by CEC and BLM, in accordance with the methods outlined in the Plan (2017). Surveys were conducted approximately every 14 days, resulting in 24-26 surveys of the power block, ACC, and inner HD heliostats at each of the three units. Variability in search schedule visits was due to operational maintenance and weather conditions. Within the power block, biologists or operations staff walked through and around the power tower and ACC unit searching for dead and injured birds and bats and walked transects through the gravel surrounding the structures to achieve 100% coverage within physically accessible areas. Within the inner HD heliostats surrounding each power block, biologists or operations personnel walked transects to ensure 100% coverage. Thus, the tower area, comprising the area within 260 m of each tower, was completely covered during each survey, excepting any areas that were physically inaccessible or unsafe to survey. Inaccessible areas were, to the extent possible, scanned using binoculars.

Carcass and Feather Spot Examination. Every carcass and feather spot were examined visually by a biologist approved by the CEC and BLM for evidence of singeing or collision. Singeing to feathers can

occur when a bird enters the flux around the power tower. When no obvious evidence of singeing or collision was evident to the naked eye, the carcass or feather spot was then examined using an AmScope SE306R-AZ-E2 20X-40X-80X Digital Binocular Stereo Microscope. When singed detections involving carcasses (as opposed to only feather spots) were found, the singeing was assigned a grade based on Kagan et al. (2014), as follows.

- Grade 1 curling of less than 50% of the flight feathers
- Grade 2 curling of 50% or more of the flight feathers
- Grade 3 curling and visible charring of contour feathers

Kagan et al. (2014) originally found no singeing of contour feathers in the absence of curling of 50% or more of the flight feathers. In contrast, we have found singeing of contour feathers with curling of less than 50% of flight feathers, and in the absence of curling or singeing of any flight feathers. We therefore assigned grade 3 independent of grades 1 and 2.

When a carcass was detected, biologists looked for evidence of collision, including obvious physical trauma or detection adjacent to a heliostat with a bird-strike imprint, smudge mark, and/or feathers on or near the surface of the mirror. If there was no evidence of collision or singeing (e.g., charring, curling, or melting of feathers), as confirmed through microscopic examination, the cause of injury or fatality was listed as "unknown".

For the purpose of these surveys, feather spots were considered detections when they met the following definition:

At least two or more primary flight feathers, 5 or more tail feathers, or 10 or more feathers of any type concentrated together in an area 1-m² or smaller (Smallwood 2007), without any bone, beak, or significant amounts of flesh or skin.

In some cases, an individual detection was broken up into aggregations of feathers that would meet the criteria for a feather spot, but with pieces of the carcass that contained bone or significant amounts of flesh or skin also present. In these cases, the detection was categorized as a partial carcass (rather than a feather spot), per the "feather spot" definition above.

2.1.4 Incidental Reporting

All incidental detections are reported in the Special Purpose Utility (SPUT) permit database as per the requirements of the USFWS. Incidental detections are those discovered outside standardized search areas or are found within search areas but not during standardized searches. Detections at locations not searched under the Plan (2017) such as the heliostat area or fenceline are also considered incidental detections for this report. These detections are reported in accordance with the facility's Wildlife Incident Reporting System (described in Section 3.4 of the Plan) and are considered "incidental" detections.

Biologically Informed Seasons. In an effort to address the annual variation in migration seasons for non-resident birds, a stepwise, data-driven process was used to define biologically informed seasons in association with the 2014 – 2015 Annual Report. As described in that report, all bird species found as detections at Ivanpah were categorized as resident or non-resident. Resident species were defined as those that occur year-round, such as a black-throated sparrow. These species would be expected to have a more similar fatality risk profile year-round than non-resident species. Non-resident species were defined as either those that are transient (e.g., passing through the area during migration such as yellow-rumped warbler) or seasonal resident (e.g., those species that migrate into the areas to overwinter or breed on an annual basis such as tree swallow) and therefore would be expected to have periodic risk. Based on the dates of non-resident species observed in the Year 1 data, and supported by observations in subsequent years, a decision was made to use December 15 as the end of fall migration for the purposes of comparing seasonal fatality data among years.

Section 3.0 Monitoring Results

3.1 Summary of Avian Detections

During the 2018 – 2019 monitoring year, a total of 358 avian detections (including injured birds and incidentals) of 62 identified species and 71 identifiable species groups (Table 1) were recorded. Three-hundred-forty-eight (348) detections occurred in the tower area, and 10 were detected incidentally outside of the tower area. Of the 10 detections outside of the tower area, 3 showed signs of singeing, 1 showed signs of collision, and for the remaining six detections, the cause could not be determined (Figure 2). The three singed detections outside the tower area were a cliff swallow, a white-faced ibis, and an American pipit, with the cliff swallow and American pipit found alive.

There were 144 feather spots/partial carcasses in the tower areas of all three units, which accounted for 41.1% of detections in those searched areas. Evidence of singeing was noted through direct and microscopic examination on 53 of these 144 feather spots; evidence of collision (i.e., an impact imprint on a nearby mirror) was noted in the case of one feather spot. One feather spot was associated with an entrapped bird. Otherwise, the causes of the feather spots for the other 33 detections are unknown. These values are consistent with ranges found in previous annual assessments.

Table 1. Number of Individual Bird Detections, by Species, 2018 – 2019 Monitoring Year.

Ide	Identification and Status						Type of Detections Source and Cause of Detections				
Species	Scientific Name	Local Breeder	Status*	Total Detections	Injuries	Fatalities	Tower Area	Other Project Lands	Singed/Collision/Other	Unknown	
Unidentified bird (small)	unidentified	NA		56	0	56	56	0	24/1/2	29	
yellow warbler	Setophaga petechia	No	SSC, BCC	50	0	50	50	0	41/0/2	7	
mourning dove	Zenaida macroura Haemorhous	Yes		22	0	22	20	2	3/3/0	16	
house finch	mexicanus	Yes		15	2	13	15	0	12/0/0	3	
northern rough-winged swallow	Stelgidopteryx serripennis	No		15	0	15	15	0	11/0/0	4	
yellow-rumped warbler	Setophaga coronata	No		13	0	13	13	0	13/0/0	0	
cliff swallow	Petrochelidon pyrrhonota	No		12	1	11	11	1	11/0/0	1	
tree swallow	Tachycineta bicolor	No		12	0	12	12	0	12/0/0	0	
unidentified warbler	unidentified	NA		11	0	11	11	0	7/0/0	4	
northern mockingbird	Mimus polyglottos	Yes		8	0	8	7	1	1/0/0	7	
barn swallow	Hirundo rustica Amphispiza	No		7	0	7	7	0	6/0/0	1	
black-throated sparrow	bilineata	Yes		7	1	6	7	0	6/0/0	1	
unidentified sparrow	unidentified	NA		7	0	7	7	0	2/0/0	5	
unidentified swallow	unidentified	NA		7	0	7	7	0	4/0/0	3	
blue-gray gnatcatcher	Polioptila caerulea	No		6	0	6	6	0	6/0/0	0	

Ide	Туре	of Detecti	ons	Source and Cause of Detections						
Species	Scientific Name	Local Breeder	Status*	Total Detections	Injuries	Fatalities	Tower Area	Other Project Lands	Singed/Collision/Other	Unknown
verdin	Auriparus flaviceps Selasphorus	Yes		6	1	5	6	0	4/1/0	1
calliope hummingbird	calliope	Yes		5	0	5	5	0	5/0/0	0
brown-headed cowbird	Molothrus ater Chordeiles	No		4	0	4	4	0	3/0/0	1
lesser nighthawk	acutipennis	No		4	0	4	4	0	0/0/0	4
Lincoln's sparrow	Melospiza lincolnii	No		4	0	4	4	0	1/2/0	1
MacGillivray's warbler	Geothlypis tolmiei	No		4	0	4	4	0	3/0/0	1
unidentified gnatcatcher unidentified	Polioptila spp.	NA		4	0	4	4	0	4/0/0	0
hummingbird	unidentified	NA		4	0	4	4	0	4/0/0	0
American pipit	Anthus rubescens	No		3	1	2	2	1	2/0/0	1
common raven	Corvus corax	Yes		3	2	1	3	0	2/0/0	1
Costa's hummingbird	Calypte costae Quiscalus	Yes	ВСС	3	0	3	3	0	3/0/0	0
great-tailed grackle	mexicanus	No		3	0	3	3	0	1/0/0	2
lazuli bunting	Passerina amoena Setophaga	No		3	0	3	3	0	3/0/0	0
Townsend's warbler	townsendi Zonotrichia	No		3	0	3	3	0	3/0/0	0
white-crowned sparrow	leucophrys Polioptila	No		3	0	3	3	0	0/0/0	3
black-tailed gnatcatcher black-throated gray	melanura Setophaga	Yes		2	0	2	2	0	2/0/0	0
warbler	nigrescens	No		2	0	2	2	0	2/0/0	0

lde	Туре	of Detecti	ons	Source and Cause of Detections						
Species	Scientific Name	Local Breeder	Status*	Total Detections	Injuries	Fatalities	Tower Area	Other Project Lands	Singed/Collision/Other	Unknown
Bullock's oriole	Icterus bullockii Campylorhynchus	No		2	0	2	2	0	2/0/0	0
cactus wren	brunneicapillus	Yes		2	0	2	2	0	0/0/0	2
cinnamon teal	Anas cyanoptera	No		2	0	2	2	0	1/0/0	1
lesser goldfinch	Spinus psaltria	No		2	0	2	2	0	1/0/0	1
ruby-crowned kinglet	Regulus calendula	No		2	0	2	2	0	2/0/0	0
rufous hummingbird	Selasphorus rufus Contopus	No		2	0	2	2	0	2/0/0	0
western wood-pewee	sordidulus	No		2	0	2	2	0	1/0/0	1
white-faced ibis	Plegadis chihi	No		2	0	2	1	1	2/0/0	0
Wilson's warbler	Cardellina pusilla Recurvirostra	No		2	0	2	2	0	2/0/0	0
American avocet	americana	No		1	0	1	0	1	0/0/0	1
Anna's hummingbird	Calypte anna	No		1	0	1	1	0	1/0/0	0
bank swallow	Riparia riparia	Yes	ST	1	0	1	1	0	1/0/0	0
black-chinned	Archilochus									
hummingbird	alexandri	Yes		1	0	1	1	0	1/0/0	0
Brewer's sparrow	Spizella breweri	Yes		1	0	1	1	0	1/0/0	0
chipping sparrow	Spizella passerina	No		1	0	1	1	0	1/0/0	0
eared grebe	Podiceps nigricollis	No		1	0	1	1	0	0/0/0	1
European starling	Sturnus vulgaris Zonotrichia	Yes		1	0	1	1	0	1/0/0	0
golden-crowned sparrow	atricapilla	No		1	0	1	1	0	0/0/0	1
greater roadrunner	Geococcyx californianus	Yes		1	0	1	0	1	0/0/0	1

Ide	Identification and Status						Source and Cause of Detections					
Species	Scientific Name	Local Breeder	Status*	Total Detections	Injuries	Fatalities	Tower Area	Other Project Lands	Singed/Collision/Other	Unknown		
la di sa a mari	Chondestes	NI-		4	0	4	1	0	4/0/0	•		
lark sparrow	grammacus	No		1	0	1	1	0	1/0/0	0		
least sandpiper	Calidris minutilla	No		1	0	1	1	0	1/0/0	0		
loggerhead shrike	Lanius ludovicianus	Yes	SSC SSC,	1	0	1	1	0	0/0/0	1		
Lucy's warbler	Leiothlypis luciae Leiothlypis	No	BCC	1	0	1	1	0	1/0/0	0		
Nashville warbler	ruficapilla	No		1	0	1	1	0	1/0/0	0		
northern flicker	Colaptes auratus	Yes		1	0	1	1	0	0/1/0	0		
orange-crowned warbler	Leiothlypis celata	No		1	0	1	1	0	1/0/0	0		
pine siskin	Spinus pinus Sphyrapicus	No		1	0	1	1	0	1/0/0	0		
red-naped sapsucker	nuchalis	No		1	0	1	1	0	1/0/0	0		
rock pigeon	Columba livia	Yes		1	0	1	1	0	0/1/0	0		
ruddy duck	Oxyura jamaicensis	No		1	0	1	0	1	0/0/0	1		
unidentified blackbird	unidentified	NA		1	0	1	1	0	0/0/0	1		
unidentified large bird	unidentified	NA		1	0	1	1	0	0/0/1	0		
unidentified teal	Anas spp.	NA		1	0	1	1	0	0/0/0	1		
unidentified waterfowl	unidentified	NA		1	0	1	1	0	0/0/0	1		
unidentified woodpecker	unidentified	NA		1	0	1	1	0	0/0/0	1		
varied thrush	Ixoreus naevius	No		1	0	1	1	0	0/0/0	1		
Vaux's swift	Chaetura vauxi	Yes	SSC	1	0	1	1	0	0/0/0	1		

lo	dentification and Status		Туре	of Detecti	ons		Source and Cause of Detections			
Species	Scientific Name	Local Breeder	Status*	Total Detections	Injuries	Fatalities	Tower Area	Other Project Lands	Singed/Collision/Other	Unknown
	Tachycineta									
violet-green swallow	thalassina	No		1	0	1	1	0	1/0/0	0
warbling vireo	Vireo gilvus	No		1	0	1	1	0	1/0/0	0
western meadowlark	Sturnella neglecta	Yes		1	0	1	0	1	0/0/0	1
	Tringa									
willet	semipalmata	No		1	0	1	1	0	1/0/0	0
Total	NA	NA		358	8	350	348	10	230/9/5	114

^{*} SSC = California species of special concern, ST = State threatened, BCC = USFWS bird of conservation concern for BCR 33, FP= California fully protected species.

^{*} SSC = California species of special concern, ST = State threatened, BCC = USFWS bird of conservation concern for BCR 33, FP= California fully protected species.

3.1.1 Spatial Patterns of Detections

During the 2018 - 2019 monitoring year, 348 detections were found in the tower area with 103 (29.6%) in Unit 1, 102 (29.3%) in Unit 2, and 143 (41.1%) in Unit 3. Of the tower area detections, 227 (65.2%) showed signs of singed feather damage, 8 (2.3%) showed signs of collision, 5 (1.4%) were attributed to entrapment, and cause could not be determined for 108 (31.0%). Results from the 2018 - 2019 monitoring year are consistent with previous years.

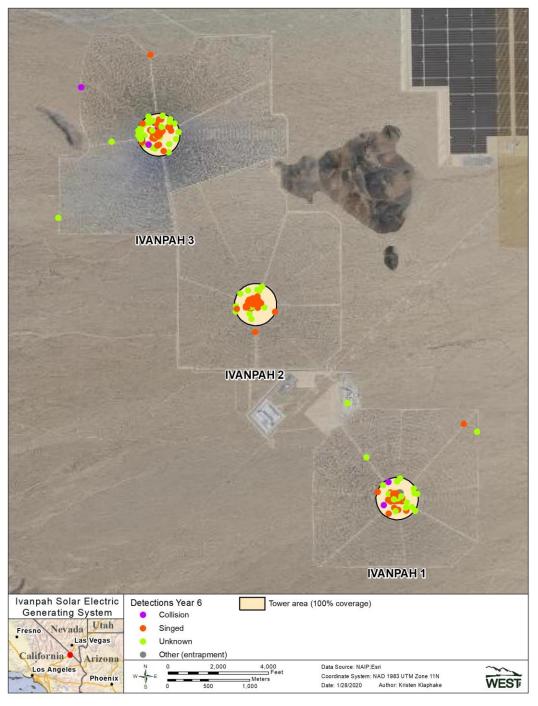


Figure 2. Locations of Detections, by Cause, within Solar Units.

3.1.2 Temporal Patterns of Detections

The number of detections reported per day varied during the 2018 – 2019 monitoring year. The number of detections per day represents the accumulation of detections over the search interval minus those detected incidentally and removed between searches. Consistent with previous years, detections per day in the tower area showed a strong seasonal pattern with detections highest in the fall (Figure 3).

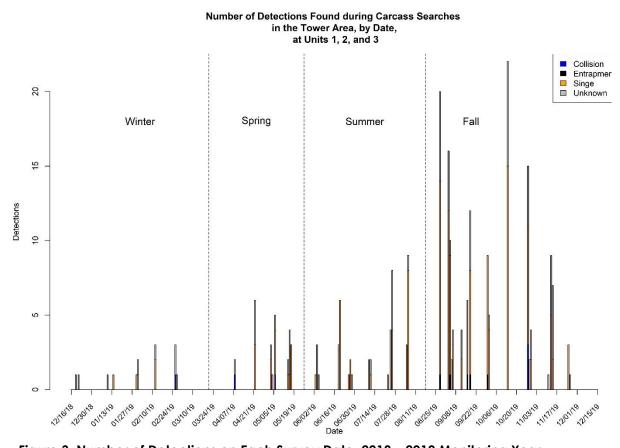


Figure 3. Number of Detections on Each Survey Date, 2018 – 2019 Monitoring Year.

3.1.2 Summary of Bat Detections

Three bats representing one species and one unidentified species were detected as fatalities during the 2018 – 2019 monitoring year. The fatalities comprised two Mexican free-tailed bats (*Tadarida brasiliensis*), and one unidentified bat. All bats were found in the power block, with one Mexican free-tailed bat and the unidentified bat found in unit 1, and the other Mexican free-tailed bat found in unit 3. Given the few detections of bats, they are not discussed further.

Section 4.0 Comparison to Fatality Index

This section utilizes the detection data as described in Section 3 to evaluate the potential for impacts in accordance with the modified Plan (2017). Detection data from the tower area for year 5 are compared to the fatality index model developed in the Plan (2017) to determine if the results of monitoring are consistent with previous years of intensive monitoring in the tower area of all three units.

4.1 Fatality Index Comparison

There was a total of 348 detections (resulting from fatality searches or incidental detection) in the tower area during the 2018 – 2019 monitoring year. The fatality index model developed in the Plan (2017) predicted that the number of detections resulting from operations monitoring should be, on average, 504, and be between 276 and 746 detections to be 90% confident that the results of fatality monitoring were consistent with the first four years of monitoring. Since the total for year 6 is well within the 90% prediction interval (276-746), the overall number of fatalities in year 6 is consistent with the first four years of monitoring (Figure 4).

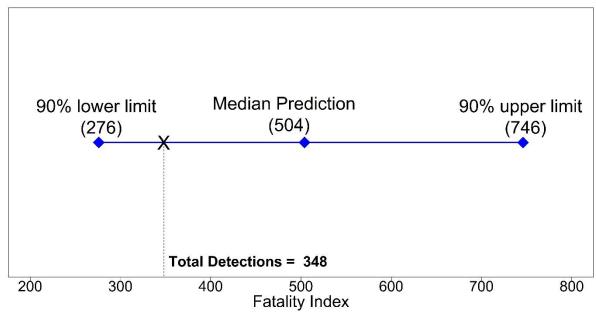


Figure 4. Total number of detections in the tower area during year 6 (348) relative to the fatality index.

Section 5.0 Framework for Management and Risk Response

According to Section 5.3 of the Plan, migratory bird mortality at Ivanpah is categorized as high, medium, or low to provide an appropriate biological basis for TAC review and decision making, based on the following definitions:

- 1. "High: Estimated avian mortality or injury levels are facility-caused and likely to seriously and negatively affect local, regional, or national avian populations within a particular species or group of species."
- 2. "Medium: Estimated avian mortality or injury levels are facility-caused and have the potential to negatively affect local, regional, or national populations within a particular avian species or group of species."
- 3. "Low: Estimated avian mortality or injury levels that have minimal or no potential to negatively affect local, regional, or national populations within a particular species or group of species."

5.1 Comparison to the Fatality Index

As presented in ABMMP Rev 14 (Appendix D), the number of detections can be used to understand the potential effects of the facility on birds in the context of the first four years of monitoring through the fatality index. Typically, the number of detections provides little insight into potential population level effects because the fatality estimate is not known. However, in monitoring years 1 – 4 when fatality estimates were calculated, it was determined that in each year the facility had a low potential to impact each species or species group at the local, regional, or national scale. Thus, the range of values for the fatality index generated from the first four years of monitoring represents a range of values to have a low potential impact on populations (HTH 2015, WEST 2016, WEST 2017, WEST 2018).

The number of tower area detections in the 2018 - 2019 monitoring year (348) is below the median estimate of the fatality index (504) and within the 90% confidence limits of the fatality index (276 – 746). Total tower detections lower than the median fatality index but within the 90% confidence limits implies the number of detections found during the 2018 - 2019 monitoring falls on the lower end of the anticipated number of detections based on years 1 - 4, but is consistent with range of fatalities observed, and variability observed in searcher efficiency and carcass persistence during the intensive monitoring of years 1 - 4. Thus, the number of detections in the tower area is consistent with first four years of monitoring.

5.2 Assessment of Potential Effects to National and Regional Populations

As presented in ABMMP Rev 14 (Appendix D), species with more than 5 detections are evaluated for potential effects on the national or regional population. Factors established for evaluating potential population effects in ABMMP Rev 14 (Appendix D) include: species status, population size, and life history strategy. During the 2018 – 2019 monitoring year, one special status species, yellow warbler (California

species of special concern) had > 5 detections. However, when considering the scale of evaluation (national and regional) the 50 total detections represent 0.000125% and 0.009% of the national and regional, populations. Thus, mortality of yellow warblers at the Project has low potential to influence national and regional populations. Consistent with previous assessments, all of the remaining top ten species by total detections are not special status and have robust populations nationally and regionally (Table 2). Thus, there is low potential for mortality at the Project to have population level effects at the national and regional scale based on the species detected and the population sizes.

Table 2. Number of detections, occurrence at the Project, and population estimates for the top 10 species detected at the Project.

		Year 5	Population estimates from Partner in Flight Database			
Species	Occurrence at Project	Total detections	Regional (California)	National		
yellow warbler*	Uncommon spring migrant, common fall migrant	50	550,000	40,000,000		
mourning dove	Fall migrant, year round resident	22	4,400,000	130,000,000		
house finch	Year round resident	15	9,600,000	33,000,000		
northern rough-winged swallow	Spring and fall migrant	15	1,100,000	19,000,000		
yellow-rumped warbler	Spring and fall migrant	13	2,200,000	47,000,000		
cliff swallow	Spring and fall migrant	12	9,700,000	71,000,000		
tree swallow	Spring and fall migrant	12	400,000	8,700,000		
northern mockingbird	Year round resident	8	630,000	34,000,000		
barn swallow	Spring and fall migrant	7	570,000	40,000,000		
black-throated sparrow	Year round resident	7	2,700,000	31,000,000		

^{*} California species of special concern

5.3 Assessment of Effects to Local Populations

As presented in ABMMP Rev 14 (Appendix D), a decision framework is used to determine if a species is a local breeder near the Project. Following the decision framework, species with >5 detections were reviewed to determine, based on range maps, those that could breed locally in the vicinity of the Project. As per previous practice >5 detections are used as a threshold for analysis, consistent with four years of baseline quantitative assessments (HTH 2015, WEST 2016, WEST 2017, WEST 2018). Of the 12 species with > 5 detections, five were determined to be local breeders.

As per the ABMMP Rev 14 framework, the timing of the fatalities was reviewed to determine those that occurred during the species breeding season, based on information provided in species accounts at https://nrm.dfg.ca.gov/taxaquery/Default.aspx. This framework assumes that if a fatality is found during the breeding season and the fatality is of a locally breeding individual these detections are locally breeding species. Of the five locally breeding species, three had >5 detections during the breeding season: mourning

dove (20 detections), house finch (9 detections), and northern mockingbird (8 detections; Table 3). These species are consistent with those determined to be local breeders in previous annual assessments.

Table 3. Number of Detections of Locally Breeding Species During the 2018 – 2019 Monitoring Year.

	Start of breeding	End of breeding	Number of
Species	season	season	detections
Mourning dove	Late January	Late September	20
House finch	March	August	9
Northern mockingbird	Mid-February	Late September	8

Criteria established for evaluating the potential population effects in ABMMP Rev 14 (Appendix D) include: 1) species status, 2) population size, and 3) survival strategy. First, none of the three species are designated as special status species nor do any of these species have a special management designation in the Mojave Desert ecoregion. Second, the distribution of the species and overall population in the Mojave Desert in California and Nevada (Bird Conservation Region (BCR) 33) – obtained from the Partners in Flight database – was reviewed to determine the distribution and abundance in BCR 33. The mourning dove population estimate in BCR 33 is 4,700,000, the house finch population in BCR 33 is 3,300,000, the northern mockingbird population in BCR 33 is 320,0000. Thus, none of these locally breeding species are special status and all have a robust population that is not likely to be affected by local removal of individuals.

Third, examining the survival strategies of these species also lends weight to a low potential for impacts, Mourning dove, house finch, and northern mocking bird are short-lived and highly fecund, and populations of birds with these life history traits are more sensitive to fecundity than adult survival (Stahl and Oli 2006). In addition, these species all have a long breeding season that provides the opportunity for multiple breeding attempts to produce offspring that could be recruited into the local population. When these factors are evaluated together, there is a low potential for impacts from the Project to the population of locally breeding bird species as a result of the limited numbers of detections.

5.4 Assessment of Effects to Special Status Species

As presented in ABMMP Rev 14 (Appendix D), all special-status species are always considered for potential population level effects for any number of detections. Special status species recorded as detections included 50 yellow warblers (California species of special concern, BCR 33 bird of conservation concern), 3 Costa's hummingbirds (BCR 33 bird of conservation concern), 1 bank swallow (California state threatened), 1 Vaux's swifts (California species of special concern), 1 Lucy's warbler (California species of special concern, BCR 33 bird of conservation concern), and 1 loggerhead shrike (California species of special concern). The bank swallow, which is state listed as threatened is discussed further below. The yellow warbler was discussed earlier, and the remaining special status species had 3 or fewer detections. Considering the low number of fatalities coupled with the life-history strategy of high fecundity

and a short lifespan, the potential for population level impacts from these few detections does not rise above a "low" potential effect on a national, regional or local level.

Table 4. Detections of Sensitive Species during the 2018 – 2019 Monitoring Year.

Species	Status*	Fatalities	Injuries	Total
yellow warbler	SSC, BCC	50	0	50
Costa's hummingbird	BCC	3	0	3
bank swallow	ST	1	0	1
Vaux's swift	SSC	1	0	1
Lucy's warbler	SSC, BCC	1	0	1
Loggerhead shrike	SCC	1	0	1
Total	SSC	57	0	57

^{*}SSC = California species of special concern, ST = State threatened, BCC = USFWS bird of conservation concern for BCR 33, FP= California fully protected species.

Bank swallow is listed regionally in California due to a declining population throughout the state, and most bank swallows' nest along the Sacramento River and its tributaries (BSTAC 2013). An estimated 20,000 bank swallows occur regionally within California and an estimated 1,400,000 occur nationally in the United States (Partners in Flight Science Committee 2013). As the local area for the Project does not contain bank swallow nesting habitat, there is no local population for evaluation. The single detection recorded during the 2018 – 2018 monitoring year likely resulted from migrating individuals that could breed as far north as Alaska. The fatality of one bank swallow represents a very small proportion of the regional or national population; thus, the one bank swallow fatality during the 2018 – 2019 monitoring year does not rise above the "low" category, as loss of this magnitude would have a minimal effect on populations at all geographic scales (regional or national).

Section 6.0 Recommendations

Based on the results on the Year 6 monitoring, the following recommendations are provided.

1. Continue Implementation of the Approved Version of Revision 14 of the ABMMP. The tower area is the location of all known causes – singeing, collision, and entrapment in the ACC. Rev 14, which provides ongoing systematic surveys in the tower area, will provide data that will allow for continued annual risk analysis, adaptive management and a comparison in the trends in detections with Years 1 – 6.

Section 9.0 Literature Cited

- Avian & Bat Monitoring and Management Plan Ivanpah Solar Electric Generating System. November 2013.

 Available at http://docketpublic.energy.ca.gov/PublicDocuments/07-AFC-05C/TN20131520131122T160942IvanpahAvianMonitoringPlanrev12.PDF
- Avian & Bat Monitoring and Management Plan Ivanpah Solar Electric Generating System. November 2015.

 Available at http://docketpublic.energy.ca.gov/PublicDocuments/07-AFC-05C/TN207105 20151223T092433 Avian Bat Monitoring and Management Plan Nov 2015

 https://docketpublic.energy.ca.gov/PublicDocuments/07-AFC-05C/TN207105 20151223T092433 Avian Bat Monitoring and Management Plan Nov 2015

 https://docketpublic.energy.ca.gov/PublicDocuments/07-AFC-05C/TN207105 20151223T092433 Avian Bat Monitoring and Management Plan Nov 2015
- Bureau of Land Management (BLM) 2013. Final environmental impact statement / final environmental impact report. BLM/CA/PL-2015-001+1793.
- Kagan, R. A., T. C. Viner, P. W. Trail, and E. O. Espinoza. 2015. Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis. National Fish and Wildlife Forensics Laboratory.
- Manly, B. F. J. 1997. Randomization, Bootstrap, and Monte Carlo Methods in Biology. 2nd Edition. Chapman and Hall, London.
- Partners in Flight Science Committee 2013. Population Estimates Database, version 2013. Available at http://rmbo.org/pifpopestimates. Accessed on 14 January 2018.
- Sauer, J. R., J. E. Hines, J. E. Fallon, K. L. Pardieck, D. J. Ziolkowski, Jr., and W. A. Link. 2015. The North American Breeding Bird Survey, Results and Analysis 1966 - 2012. Version 02.19.2015 USGS Patuxent Wildlife Research Center, Laurel, MD
- Shuford, W. D. and Gardali, T., editors. 2008. California Bird Species of Special Concert: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Smallwood, K.S. 2007. Estimating wind turbine-caused bird mortality. Journal of Wildlife Management, 71, 2781-2791.
- Stahl, J. T., and M. K. Oli. 2006 Relative importance of avian life-history variables to population growth rate. Ecological Modelling 198:183-194.
- U.S. Fish and Wildlife Service (USFWS). 2012. Final Land-Based Wind Energy Guidelines. March 23. 82 pp. Available online at: http://www.fws.gov/windenergy/docs/WEGfinal.pdf.

Appendix A. Individual Avian Detections.

USFWS#	Common Name	Species Code	How Found	Detection Date	Collection Date	Condition	Time Since	Description of Carcass/Injury	Cause of Death/Injury	Burn Grade	Unit	Nearest Project	Coordinates	SPUT Revisions
U3FVV3#	Common Name	species code	now round	Date	Date	Condition	Death/Injury		Death/injury	Grade	Unit	Feature		Revisions
2010 524 15565	la a a a da a la milea	LOCII	Fatality Casuals	12/19/2018	12/10/2010	footbourset	1 2 davia	no evidence of collision or		NIA	2	II.alia.eee	-115.4847,	NIA
_2018_524_ISEGS	loggerhead shrike	LOSH	Fatality Search	12/19/2018	12/19/2018	feather spot	1-3 days	singe.	unknown	NA	3	Heliostat	35.5743	NA
2018 526 ISEGS	unidentified bird (small)	UNID	Fatality Search	12/21/2018	12/21/2010	feather spot	1 2 days	no evidence of collision or	unknown	NA	1	Heliestet	-115.4512, 35.5373	NA
2016_526_13563	umdentined bird (smail)	UNID	ratality Search	12/21/2016	12/21/2016	reather spot	1-3 days	singe. no evidence of collision or	ulikilowii	INA		Heliostat	-115.4513,	INA
2019 001 ISEGS	unidentified bird (small)	UNID	Fatality Search	1/10/2019	1/10/2019	feather spot	31-60 days	singe.	unknown	NA	1	Powerblock	35.5353	NA
2019_001_13E03	unidentined bird (smail)	ONID	ratanty Search	1/10/2019	1/10/2019	reactier spot	31-00 days	singe to wings, rectrices,	Scorched or	INA		FOWEIDIOCK	33.3333	INA
2019 002 ISEGS	harn swallow	BARS	Fatality Search	1/14/2019	1/14/2019	mummified	31-60 days	and head.	singed	1	2	ACC	-115.47, 35.5572	NA
2013_002_13203	Saili Swallow	<i>D</i> / (1/3)	ratancy Scaren	1,14,2013	1/14/2013	mammea	31 00 days	singe to all body parts with	Scorched or	-		nee	-115.4827,	1071
2019 003 ISEGS	unidentified swallow	UNSW	Incidental	1/15/2019	1/16/2019	mummified	31-60 days	tail singed off.	singed	1;3	3	Powerblock	35.5754	NA
	umacritimea swanow	0.1311	moraciitai	2/13/2013	1, 10, 2013	a	31 00 days	no evidence of collision or	3111860	1,0		1 GWEI DIGER	-115.4841,	
2019 004 ISEGS	unidentified sparrow	UNSP	Fatality Search	1/30/2019	1/30/2019	broken up	3-7 days	singe.	unknown	NA	3	Heliostat	35.5774	NA
	northern rough-winged			_, _, _,	_, _, _,			evidence of curling to flight	Scorched or					
2019 005 ISEGS		NRWS	Fatality Search	1/31/2019	1/31/2019	broken up	3-7 days	feathers.	singed	3	1	Powerblock	-115.451, 35.5348	NA
	golden-crowned		,	, ,	, ,		,	no evidence of collision or					-115.4728,	
2019 006 ISEGS	•	GCSP	Fatality Search	1/31/2019	1/31/2019	feather spot	1-3 days	singe.	unknown	NA	2	Heliostat	35.5564	NA
	·		•			dead-semi-	•	evidence of singe to head	Scorched or				-115.4516,	
2019_007_ISEGS	yellow-rumped warbler	YRWA	Incidental	2/11/2019	2/12/2019	fresh	3-7 days	and back.	singed	3	1	Powerblock	35.5351	NA
								evidence of singe to	Scorched or				-115.4703,	
2019_008_ISEGS	unidentified bird (small)	UNID	Fatality Search	2/12/2019	2/12/2019	feather spot	3-7 days	contour feathers.	singed	3	2	Powerblock	35.5566	NA
									Scorched or				-115.4705,	_
2019_009_ISEGS	unidentified bird (small)	UNID	Fatality Search	2/12/2019	2/12/2019	broken up	3-7 days	singe to tip of secondary.	singed	1	2	Powerblock	35.5566	NA
								no evidence of collision or					-115.4845,	
2019_010_ISEGS	unidentified bird (small)	UNID	Fatality Search	2/12/2019	2/12/2019	feather spot	3-7 days	singe.	unknown	NA	3	Heliostat	35.5744	NA
								evidence of collision with						
								broken tip of upper and					-115.4831,	
	northern flicker	NOFL	Fatality Search	2/26/2019	2/26/2019	mummified	8-14 days	lower mandible.	collision	NA	3	Powerblock	35.5753	NA
								no evidence of collision or					-115.4848,	
	unidentified bird (small)	UNID	Fatality Search	2/26/2019	2/26/2019	broken up	8-14 days	singe.	unknown	NA	3	Heliostat	35.5746	NA
2010 010 10500	unidentified		Iv. 6 I	2/25/2242	2/25/2242		4.0.1	no evidence of collision or			_		-115.4805,	
2019_013_ISEGS	woodpecker	UNWO	Fatality Search	2/26/2019	2/26/2019	feather spot	1-3 days	singe.	unknown	NA	3	Heliostat	35.5749	NA
2040 044 15565	taleattend leteralistad	LINDD	Estable Caracle	2/27/2010	2/27/2010	f	2.7.4	no evidence of collision or		N I A	4	11-1:	-115.4489,	N. A
	unidentified blackbird	UNBB	Fatality Search	2/27/2019	2/2//2019	feather spot dead-semi-	3-7 days	singe.	unknown Scorched or	NA	1	Heliostat	35.5356	NA
2010 015 ISEGS	western wood-pewee	WEWP	Incidental	3/5/2019	3/5/2019	fresh	3-7 days	singe on nape and retricies	singed	Unknown	2	Powerblock	-115.4701, 35.5566	NA
2019_013_13E03	western wood-pewee	VVLVVF	incidental	3/3/2019	3/3/2019	dead-semi-	3-7 days	singe on hape and retricles	Scorched or	OTINIOWIT		FOWEIDIOCK	-115.4701,	INA
2019 016 ISEGS	house finch	HOFI	Incidental	3/12/2019	3/12/2019		3-7 days	singe to central rectrices.	singed	3	2	Powerblock	35.5566	NA
	northern rough-winged		o.ac.ntai	5, 12, 2013	5, 12, 2013	0311	3 / 44/3	no evidence of collision or		<u> </u>		. OTTEL DIOCK	-115.4516,	
2019_017_ISEGS	0 0	NRWS	Incidental	3/18/2019	3/20/2019	mummified	31-60 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
				-,,	-,,			curling to all flight feathers,	Scorched or	*			-115.4702,	
2019_018_ISEGS	cliff swallow	CLSW	Incidental	4/1/2019	6/20/2019	alive-injured	0-0.33 days	singe to right side of breast.	singed	Unknown	2	Heliostat	35.5536	NA
				, , <u></u>	, , <u></u>	•		no evidence of collision or	<u>_</u>				-115.4711,	
2019_019_ISEGS	house finch	HOFI	Incidental	4/1/2019	6/20/2019	dead-fresh	0.33-1 days	singe.	unknown	NA	2	Powerblock	35.5565	NA
				. ,			,	<u> </u>						

USFWS #	Common Name	Species Code	How Found	Detection Date	Collection Date	Condition	Time Since Death/Injury	Description of Carcass/Injury	Cause of Death/Injury	Burn Grade	Unit	Project Feature	Coordinates	SPUT Revisions
							<u> </u>	curling to all flight feathers,	· · · ·					
						dead-semi-		singe to head, back, rump,	Scorched or				-115.4515,	
2019 020 ISEGS	yellow-rumped warbler	YRWA	Incidental	4/8/2019	4/1/2019	fresh	1-3 days	breast.	singed	2;3	1	Powerblock	35.5351	NA
	,			• •	•		•	no evidence of collision or		•				
2019 021 ISEGS	common raven	CORA	Fatality Search	4/8/2019	4/1/2019	broken up	8-14 days	singe.	unknown	NA	3	Powerblock	-115.4834, 35.575	NA
			•	• •	•	•	•	imprint on heliostat					,	
								matching size and shape of					-115.4834,	
2019_022_ISEGS	rock pigeon	ROPI	Fatality Search	4/8/2019	4/8/2019	broken up	1-3 days	species.	collision	NA	3	Heliostat	35.5767	NA
						dead-semi-		singe to back, breast, face,	Scorched or				-115.4828,	
2019_024_ISEGS	yellow-rumped warbler	YRWA	Fatality Search	4/22/2019	4/8/2019		1-3 days	and all flight feathers.	singed	2;3	3	ACC	35.5758	NA
	· · · · · · · · · · · · · · · · · · ·		•	• •			•	no evidence of collision or		•				
2019 025 ISEGS	unidentified bird (small)	UNID	Fatality Search	4/22/2019	4/8/2019	broken up	3-7 days	singe.	unknown	NA	3	Powerblock	-115.483, 35.5756	NA
	,		,				,	no evidence of collision or					,	
2019_026_ISEGS	eared grebe	EAGR	Fatality Search	4/22/2019	4/22/2019	broken up	3-7 days	singe.	unknown	NA	3	Heliostat	-115.4836, 35.574	NA
			,		, ,		,	no evidence of collision or					-115.4801,	
2019 027 ISEGS	mourning dove	MODO	Fatality Search	4/22/2019	4/22/2019	broken up	3-7 days	singe.	unknown	NA	3	Heliostat	35.5757	NA
			ratant, ocaron	.,,	., ==, ====	5. 5. c. c. c. p	o r dayo	singe to leading edge of	Scorched or				-115.4525,	
2019 023 ISEGS	unidentified swallow	UNSW	Fatality Search	4/22/2019	6/20/2019	broken up	3-7 days	wing.	singed	Unknown	1	Powerblock	35.5353	NA
				,,==,====	5, = 5, = 5 = 5		5 : 55/5	curling to rectrices with	2823					
								most of tail singed off, all	Scorched or				-115.4811,	
2019 028 ISEGS	calliope hummingbird	CAHU	Fatality Search	4/22/2019	6/20/2019	dead-fresh	0-0.33 days	upperparts singed.	singed	1;3	3	Heliostat	35.5758	NA
2013_020_10200	camope naminingon a	6, 11.0	ratanty scaren	1,22,2013	0,20,2013	acaa ii csii	0 0.00 4475	no evidence of collision or	3111864	1,5		Tienostat	-115.4855,	
2019 029 ISEGS	mourning dove	MODO	Fatality Search	5/3/2019	1/22/2019	broken up	3-7 days	singe.	unknown	NA	3	Heliostat	35.5754	NA
2013_023_13E03	mourning dove	WIODO	ratanty Scarcii	3/3/2013	4/22/2013	отокен ир	J-7 day3	singe to upperparts and	Scorched or	IVA		Heliostat	-115.4815,	
2019 030 ISEGS	calliope hummingbird	CAHU	Fatality Search	5/3/2019	4/22/2019	dead-fresh	3-7 days	tail.	singed	1;3	3	Heliostat	35.5762	NA
2013_030_13203	camope naminingona	CAITO	ratanty Scaren	3/3/2013	4/22/2013	acaa iicsii	3 / days	curling to flight feathers	Jiligeu	1,3		Heliostat	33.3702	
						dead-semi-		with singe to contour	Scorched or					
2019 031 ISEGS	rufous hummingbird	RUHU	Fatality Search	5/3/2019	4/22/2019		3-7 days	feathers.	singed	1	2	Powerblock	-115.471, 35.5568	NA
			ratant, ocaron	3,3,202	., ==, ====	dead-semi-	o r days	singe to primary and tail	Scorched or					
2019_032_ISEGS	yellow-rumped warbler	YRWA	Fatality Search	5/4/2019	4/22/2019		1-3 days	feathers, crown and face.	singed	2	2	ACC	-115.4703, 35.557	NA
2013_032_13203	yellow rumped warbier	IIIWA	ratanty Scaren	3/4/2013	4/22/2013	dead-semi-	1 5 days	reathers, crown and race.	Scorched or			ACC	-115.4523,	- IVA
2019 033 ISEGS	lazuli hunting	LAZB	Incidental	5/6/2019	5/3/2019		3-7 days	singe to right side of face.	singed	3	1	Powerblock	35.5352	NA
2013_000_10200	iazan santing	<i></i>	moraciitai	3/0/2023	3/3/2013	11 0311	3 / days	curling to all flight feathers,	3111864			1 OWELDIOOK	33.3332	
	black-throated gray					dead-semi-		singe to head, back, and	Scorched or					
2019 034 ISEGS		BTYW	Fatality Search	5/6/2019	5/3/2019		1-3 days	rump.	singed	2;3	3	Powerblock	-115.4833, 35.575	NA
	unidentified							primaries and secondaries	Scorched or	,-				
2019_036_ISEGS		UNHU	Fatality Search	5/6/2019	5/3/2019	broken up	31-60 days	singed off.	singed	2	3	Powerblock	-115.483, 35.5756	NA
			ratant, ocaron	3, 3, 2023	3,3,2023	5. 5. 6. GP	0= 00 00,0	evidence of collision with	5860					
								imprint found on heliostat						
								matching size and shape of					-115.4534,	
2019 037 ISEGS	mourning dove	MODO	Fatality Search	5/6/2019	5/4/2019	feather spot	1-3 days	species.	collision	NA	1	Heliostat	35.5344	NA
_010_007_10100	oarimig dove		. atancy ocuren	3, 3, 2013	5/ 4/2013	reaction spot	uuyu	no evidence of collision or	5551011	1 1/7			-115.4503,	
2019 038 ISEGS	mourning dove	MODO	Fatality Search	5/6/2019	5/6/2010	feather spot	3-7 days	singe.	unknown	NA	1	Heliostat	35.5347	NA
2017_030_13103	mourning dove	141000	ratanty Jearch	3/0/2013	3/0/2019		J / uays	-		INA		richostat	33.3347	11/7
2010 025 15505	calliona humminahird	CVIII	Entality Sparch	E/E/2010	6/20/2010	dead-semi-	0.22.1 days	singe to all upperparts with	Scorched or	1.0	2	Dowarhlask	115 //02/ 25 575	NΙΛ
7012_022_I2EQ2	calliope hummingbird	CAHU	Fatality Search	5/6/2019	6/20/2019	11 511	0.33-1 days	tail singed off.	singed	1;3	3	Powerblock	-115.4834, 35.575	INA
2010 020 15505	ruddy duak	BUDU	Incidontal	E /0 /2010	E /6 /2010	broken	2 7 days	no evidence of collision or	unknoven	NIA	0	Project	-115.4581,	NΙΛ
2019_039_ISEGS	ruday duck	RUDU	Incidental	5/8/2019	5/6/2019	broken up	3-7 days	singe.	unknown	NA	0	Structure	35.5457	NA

												Nearest		
				Detection	Collection		Time Since	Description of	Cause of	Burn		Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
						dead-semi-		no evidence of collision or					-115.4705,	
2019_040_ISEGS	unidentified warbler	UNWA	Incidental	5/8/2019	5/6/2019	fresh	8-14 days	singe.	unknown	NA	2	Powerblock	35.5565	NA
						dead-semi-		no evidence of collision or					-115.4408,	
2019_041_ISEGS	mourning dove	MODO	Incidental	5/8/2019	5/6/2019	fresh	1-3 days	singe.	unknown	NA	1	Heliostat	35.5423	NA
								evidence of curling to flight						
						dead-semi-		feathers, singe to top of	Scorched or				-115.4705,	
2019_042_ISEGS	Wilson's warbler	WIWA	Incidental	5/11/2019	5/6/2019	fresh	3-7 days	head.	singed	2;3	2	Powerblock	35.5565	NA
								no evidence of collision or					-115.4845,	
2019 043 ISEGS	mourning dove	MODO	Fatality Search	5/15/2019	5/6/2019	broken up	1-3 days	singe.	unknown	NA	3	Heliostat	35.5744	NA
			,	, ,	, ,	'	,	evidence of singe to	Scorched or					_
2019 044 ISEGS	great-tailed grackle	GTGR	Fatality Search	5/15/2019	5/8/2019	broken up	8-14 days	feathers of tibia.	singed	3	3	Heliostat	-115.483, 35.5742	NA
	Breat tanea Brasine		· utunty court	3/ 23/ 2323	3,3,2023	этомон ар	0 = 1 00 70	no evidence of collision or	5850				-115.4835,	
2019_045_ISEGS	mourning dove	MODO	Fatality Search	5/16/2019	5/8/2019	broken up	8-14 days	singe.	unknown	NA	3	Powerblock	35.5754	NA
2013_043_13203	mourning dove	WODO	ratanty Scaren	3/10/2013	3/0/2013	ы окси ир	O 14 days	no evidence of collision or	dikilowii	14/4		TOWEIDIOCK	-115.4826,	
2019_046_ISEGS	mourning days	MODO	Fatality Search	5/16/2019	5/8/2019	brokon un	3-7 days		unknown	NΙΔ	3	Powerblock	35.5752	NA
2019_040_13EG3	mourning dove	MODO	ratality Search	5/10/2019	5/6/2019	broken up	5-7 uays	singe.	ulikilowii	NA	3	Powerblock		INA
2040 047 15565		14000	5 . I'' 6 . I	E /4 C /2 24 2	5 /4 4 /2 O4 O		271	no evidence of collision or			2	5 11 1	-115.4836,	
2019_047_ISEGS	mourning dove	MODO	Fatality Search	5/16/2019	5/14/2019	broken up	3-7 days	singe.	unknown	NA	3	Powerblock	35.5757	NA
								singe to body with flight	Scorched or				-115.4839,	
2019_048_ISEGS	barn swallow	BARS	Fatality Search	5/16/2019	5/15/2019	broken up	1-3 days	feathers singed off.	singed	2;3	3	Powerblock	35.5759	NA
								curling to primaries and						
						dead-semi-		rectrices and singe to	Scorched or				-115.4715,	
2019_051_ISEGS	yellow-rumped warbler	YRWA	Fatality Search	5/17/2019	5/15/2019	fresh	3-7 days	contour feathers.	singed	3	2	Powerblock	35.5564	NA
								curling to all flight feathers						
								with many singed off, singe	Scorched or					
2019_049_ISEGS	lazuli bunting	LAZB	Fatality Search	5/17/2019	6/20/2019	dead-fresh	0.33-1 days	to contour feathers.	singed	3	2	ACC	-115.4704, 35.557	NA
								singe to right wing						
								primaries, rects, and top of	Scorched or					
2019_050_ISEGS	yellow warbler	YWAR	Fatality Search	5/17/2019	6/26/2019	mummified	8-14 days	head.	singed	1;3	2	ACC	-115.4704, 35.557	NA
								no evidence of collision or					-115.4705,	
2019 052 ISEGS	varied thrush	VATH	Incidental	5/17/2019	6/26/2019	mummified	8-14 days	singe.	unknown	NA	2	Powerblock	35.5567	NA
					• •		•	no evidence of collision or					-115.4516,	
2019 053 ISEGS	Vaux's swift	VASW	Incidental	5/28/2019	6/27/2019	dead-fresh	0.33-1 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
				5, 25, 2525	-,,	dead-semi-			Scorched or				-115.4706,	
2019 055 ISEGS	vellow warbler	YWAR	Incidental	5/31/2019	5/16/2019		1-3 days	singe to right side of rump.	singed	3	2	Powerblock	35.5567	NA
								curling to rectrices, singe to						
								all of dorsal side of body,	Scorched or				-115.4705,	
2019 05/ ISEGS	Anna's hummingbird	ANHU	Incidental	5/31/2019	6/27/2019	dead-fresh	0.33-1 days	top of head.	singed	1;3	2	Powerblock	35.5564	NA
2013_034_13L03	Aillia 3 Haillillingbira	ANTO	incidental	3/31/2013	0/27/2013	ucau-iresii	0.55-1 days	curling to flight feathers,	Scorched or	1,5		TOWEIDIOCK	33.3304	IVA
2010 056 15565	unidentified hird (small)	LINID	Fatality Coard	6/2/2010	F/16/2010	hrakan un	0 14 days	singe to contour feathers.		1.2	1	Dowerblock	115 4510 25 525	NIA
2019_050_15EG5	unidentified bird (small)	UNID	Fatality Search	6/3/2019	5/16/2019	broken up	8-14 days		singed	1;3	1	Powerblock	-115.4519, 35.535	IVA
2040 057 15565		\4/5\4/D		6/4/2040	E /4.6./2040	dead-semi-	271	no evidence of collision or			2	5 11 1	-115.4704,	
7019_05/_ISEGS	western wood-pewee	WEWP	Incidental	6/4/2019	5/16/2019	iresn	3-7 days	singe.	unknown	NA	2	Powerblock	35.5567	NA
					- 4.			no evidence of collision or					-115.4833,	
2019_058_ISEGS	unidentified waterfowl	UNWF	Fatality Search	6/4/2019	5/16/2019	broken up	8-14 days	singe.	unknown	NA	3	Heliostat	35.5739	NA
								no evidence of collision or					-115.4853,	
2019_059_ISEGS	mourning dove	MODO	Fatality Search	6/4/2019	5/17/2019	broken up	8-14 days	singe.	unknown	NA	3	Heliostat	35.5756	NA
								no evidence of collision or						
2019_060_ISEGS	barn swallow	BARS	Fatality Search	6/4/2019	5/17/2019	broken up	8-14 days	singe.	unknown	NA	3	Powerblock	-115.483, 35.5758	NA

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury		Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
2019_061_ISEGS	yellow warbler	YWAR	Fatality Search	6/5/2019	5/17/2019	broken up	8-14 days	no evidence of collision or singe.	unknown	NA	2	Powerblock	-115.4704, 35.5566	NA
2019_001_13L03	yellow warbiel	IVVAIN	ratality Search	0/3/2019	3/17/2019	ыокен ир	0-14 uays	primaries, secondaries, and	UIKIIOWII	IVA		rowerblock	33.3300	INA
								retricies singed. left side of	Scorched or				-115.4714,	
2019_062_ISEGS	cliff swallow	CLSW	Incidental	6/7/2019	6/28/2019	dead-fresh	0-0.33 days	face singed and swollen.	singed	1;3	2	Powerblock	35.5563	NA
								whole carcass with imprint					-115.4527,	
2019_063_ISEGS	mourning dove	MODO	Incidental	6/12/2019	7/9/2019	dead-fresh	0.33-1 days	on heliostat.	collision	NA	1	Heliostat	35.5369	NA
								partial left and right wings. 10+ body feathers. no evidence of collision or					-115.4844,	
2019_064_ISEGS	mourning dove	MODO	Incidental	6/13/2019	5/17/2019	broken up	3-7 days	singe.	unknown	NA	3	Heliostat	35.5767	NA
								whole carcass. all flight feathers singed or curled. head, nape, and back	Scorched or				-115.4515,	
2019_065_ISEGS	cliff swallow	CLSW	Incidental	6/13/2019	5/28/2019	dead-fresh	3-7 days	singed.	singed	2;3	1	Powerblock	35.5348	NA
	unidentified hummingbird	UNHU	Incidental	6/13/2019	5/31/2019	dead-semi- fresh	1-3 days	whole carcass. singe on head, rump, and flanks. flight feathers curled.	Scorched or singed	2;3	1	Powerblock	-115.4521, 35.5348	NA
		011110	moraciicai	0,13,2013	3/31/2013		10 00/0	whole carcass. all flight	3.118.00			TOWERDIOCK	33.33 10	
						dead-semi-		feathers singed. all	Scorched or					
2019_067_ISEGS	tree swallow	TRES	Incidental	6/17/2019	5/31/2019	fresh	3-7 days	upperparts singed.	singed	2;3	1	Powerblock	-115.4528, 35.535	NA
2012 252 15505			5 . 10 . 6 . 1	5/10/2010	c /2 /2242			partial left and right wings. no evidence of collision or					-115.4815,	
_2019_068_ISEGS	mourning dove	MODO	Fatality Search	6/19/2019	6/3/2019	broken up	3-7 days	singe	unknown	NA	3	Heliostat	35.5735	NA
2019_069_ISEGS	mourning dove	MODO	Fatality Search	6/19/2019	6/4/2019	broken up	3-7 days	partial left and right wings. no evidence of collision or singe	unknown	NA	3	Heliostat	-115.4807, 35.5766	NA
	-					·	·	broken up carcass consisting of partial body, left & right wings, and head. no evidence of						
	great-tailed grackle	GTGR	Fatality Search	6/19/2019	6/4/2019	broken up	8-14 days	collision or singe.	unknown	NA	3	Heliostat	-115.483, 35.5766	NA
_2019_072_ISEGS	mourning dove	MODO	Incidental	6/19/2019	6/4/2019	dead-fresh	3-7 days	whole carcass. ant scavenged carcass close to heliostat with no imprint. possible collision.	collision	NA	3	Heliostat	-115.4931, 35.5807	NA
						dead-semi-		whole carcass. primaries and secondaries curled.	Scorched or				-115.4702,	
2019_073_ISEGS	verdin	VERD	Incidental	6/19/2019	6/4/2019	fresh	3-7 days	singe on head and nape.	singed	2;3	2	ACC	35.5569	NA
2010 071 15505	vollow warblar	VMAD	Incidental	6/10/2010	7/10/2010	doad frack	0 22 1 40.00	whole carcass. singe on rump and flanks.	Scorched or	2	2	۸۲۲	-115.4705,	NΑ
2019_071_ISEGS	yellow warbier	YWAR	Incidental	6/19/2019	//10/2019	dead-fresh	0.33-1 days	whole carcass minus top of	singed	3	2	ACC	35.5569	NA
								head and wings. flight feathers curled and singed.						
								back, rump, and flanks	Scorched or				-115.4831,	
2019_075_ISEGS	unidentified bird (small)	UNID	Fatality Search	6/20/2019	6/5/2019	mummified	31-60 days	singed.	singed	2;3	3	ACC	35.5758	NA
2019_076_ISEGS	verdin	VERD	Fatality Search	6/20/2019	6/7/2019	dead-semi- fresh	3-7 days	whole carcass. curled body feathers on back of head.	Scorched or singed	3	1	ACC	-115.4518, 35.5358	NA

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
								whole carcass. all flight	Carrabad an				445 4020	
2019 077 ISEGS	unidentified warbler	UNWA	Estality Sparch	6/20/2019	6/12/2010	mummified	8-14 days	feathers curled. head, rump, and flanks singed.	Scorched or	2;3	3	Powerblock	-115.4828, 35.5755	NA
2019_077_13EG3	unidentined warbier	UNWA	Fatality Search	6/20/2019	6/12/2019	mummeu	6-14 uays	whole carcass. with singe	singed Scorched or	2,3	3	Powerblock	-115.4828,	INA
2019 078 ISEGS	calliope hummingbird	CAHU	Fatality Search	6/20/2019	6/13/2019	mummified	31-60 days	on primaries.	singed	1	3	Powerblock	35.5755	NA
2013_070_13203	camope naminingona	CAITO	ratancy Scarcii	0/20/2013	0/13/2013	mammica	31 00 day3	broken up carcass	Sirigeu	-		TOWEIDIOCK	33.3733	IVA
								consisting of partial left						
								wing. tips of primaries	Scorched or				-115.4511,	
2019_079_ISEGS	unidentified warbler	UNWA	Fatality Search	6/20/2019	6/13/2019	broken up	3-7 days	singed.	singed	1	1	Powerblock	35.5354	NA
								broken up carcass						
								consisting of a partial left	Scorched or				-115.4516,	
2019_080_ISEGS	unidentified warbler	UNWA	Fatality Search	6/20/2019	6/13/2019	broken up	8-14 days	wing. secondaries singed.	singed	1	1	Powerblock	35.5351	NA
								injured bird which was						
								captured on site. heavy						
								amount of singe on all flight					-115.4511,	
2019_074_ISEGS		CORA	Incidental	6/20/2019	7/10/2019	alive-injured	0-0.33 days	feathers and body.	singed	Unknown	1	Powerblock	35.5354	NA
	unidentified			- 1 1	_ / /	dead-semi-		whole carcass. tail feathers	Scorched or		_			
2019_081_ISEGS	hummingbird	UNHU	Fatality Search	6/26/2019	7/10/2019	fresh	0.33-1 days	with curl and singe.	singed	Unknown	3	Powerblock	-115.483, 35.5754	NA
								the bird had noticeable	Coorebadar				115 4701	
2019 082 ISEGS	common raven	CORA	Incidental	6/26/2019	7/11/2019	alive-injured	0-0.33 days	singe to most of its feathers.	Scorched or singed	2;3	2	Powerblock	-115.4701, 35.5566	NA
2019_082_13LG3	Common raven	CONA	incidental	0/20/2019	7/11/2019	anve-injureu	0-0.33 days	whole carcass. all flight	Sirigeu	2,3		rowerblock	33.3300	IVA
						dead-semi-		feather curled with singe.	Scorched or				-115.4699,	
2019_083_ISEGS	cliff swallow	CLSW	Fatality Search	6/27/2019	6/18/2019	fresh	3-7 days	forehead and rump singed.	singed	2;3	2	ACC	35.5562	NA
	ciiii swaiicw	02011	ratancy scarcin	0,2,,2013	0,10,2013	11 0311	3 / 44/3	whole carcass. all flight	311864	2,3		7.00	33.3302	
						dead-semi-		feather curled with singe.	Scorched or					
2019_084_ISEGS	cliff swallow	CLSW	Fatality Search	6/27/2019	6/19/2019	fresh	8-14 days	forehead and rump singed.	singed	2;3	2	ACC	-115.4699, 35.557	NA
				-, ,	-, -, -			whole carcass. all flight	- 0	,-			,	-
						dead-semi-		feathers curled. head,	Scorched or				-115.4516,	
2019_085_ISEGS	barn swallow	BARS	Fatality Search	6/28/2019	6/19/2019	fresh	3-7 days	rump, and flanks singed.	singed	2;3	1	ACC	35.5355	NA
								curling to rectrices and						
								right wing, singe to right						
								side of face, nape, and	Scorched or				-115.4706,	
2019_086_ISEGS	black-throated sparrow	BTSP	Incidental	7/9/2019	7/11/2019	alive-injured	0-0.33 days	axillary.	singed	2;3	2	Powerblock	35.5571	NA
				-4.0400.0				no evidence of collision or			_		-115.4835,	
	unidentified bird (small)	UNID	Fatality Search	7/10/2019	6/19/2019	broken up	8-14 days	singe.	unknown	NA	3	Powerblock	35.5758	NA
2010 000 15565		LINID	Fatality Carrel	7/40/2040	C /4 O /2 O 4 O	le me la comunica	2.7.4	no evidence of collision or		81.6	2	Danisa da la ali	445 402 25 5752	N.1.0
2019_089_15EG5	unidentified bird (small)	UNID	Fatality Search	7/10/2019	6/19/2019	broken up	3-7 days	singe.	unknown	NA	3	Powerblock	-115.483, 35.5752	NA
								curling to all flight feathers,	Casuahadau					
2019_088_ISEGS	house finch	HOFI	Incidental	7/10/2019	7/11/2010	dead-fresh	0.33-1 days	singe to breast, top of head, coverts, and back.	Scorched or	2.2	3	Powerblock	-115.483, 35.5754	NIA
2015_000_13E03	HOUSE HHUH	11011	incidental	//10/2019	//11/2019	ucau-11es11	0.33-1 uays	no evidence of collision or	singed	2;3	Э	r OWEI DIOCK	-113.403, 33.3734	INA
2019_090_ISEGS	mourning dove	MODO	Fatality Search	7/11/2019	6/19/2019	broken up	8-14 days	singe.	unknown	NA	3	Heliostat	-115.4852, 35.575	NA
2017_070_13103	mourning dove	111000	ratanty Search	, , 11, 2013	0/ 13/ 2013	STORELL UP	O I T GUYS	curling to primaries and	JIMIOWII	INA		Henostat	113.4032, 33.373	1471
						dead-semi-		rectrices, singe to head and	Scorched or					
2019_091_ISEGS	cliff swallow	CLSW	Fatality Search	7/11/2019	6/19/2019		3-7 days	back.	singed	2;3	2	ACC	-115.4697, 35.557	NA
	- : =::=::=::*	<- 	,	., ==, ====	=, ==, ====	****				_,-	_		, , , , , , , , , , , , , , , , , ,	

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	-	Death/Injury	Grade	Unit	•	Coordinates	Revisions
							2000,ju y	curling to right flight	2000,, u y	<u> </u>	• • • • • • • • • • • • • • • • • • • •			
						dead-semi-		feathers, singe to coverts,	Scorched or				-115.4525,	
2019_092_ISEGS	blue-gray gnatcatcher	BGGN	Incidental	7/11/2019	6/20/2019	fresh	1-3 days	back, and head.	singed	1;3	1	Powerblock	35.5356	NA
						dead-semi-		singe to left side of face	Scorched or				-115.4702,	
2019_093_ISEGS	black-throated sparrow	BTSP	Incidental	7/14/2019	7/14/2019	fresh	1-3 days	and upper breast.	singed	3	2	Powerblock	35.5568	NA
						dead-semi-		all flight feathers curled,	Scorched or				-115.4708,	
2019_094_ISEGS	cliff swallow	CLSW	Incidental	7/14/2019	7/14/2019	fresh	3-7 days	singe to coverts.	singed	2;3	2	Powerblock	35.5567	NA
•								flight feathers in both						
						dead-semi-		wings curled, singe to top	Scorched or				-115.4826,	
_2019_095_ISEGS	cliff swallow	CLSW	Incidental	7/15/2019	7/15/2019	fresh	1-3 days	of head and coverts.	singed	2;3	3	ACC	35.5758	NA
						dead-semi-		no evidence of collision or					-115.4521,	
2019_096_ISEGS	cliff swallow	CLSW	Incidental	7/21/2019	7/22/2019	fresh	1-3 days	singe.	unknown	NA	1	Powerblock	35.5349	NA
								no evidence of collision or					-115.4891,	
2019_097_ISEGS	northern mockingbird	NOMO	Incidental	7/22/2019	7/22/2019	broken up	3-7 days	singe.	unknown	NA	3	Heliostat	35.5747	NA
								all flight feathers curled,						
						dead-semi-		singe to head, throat, and	Scorched or					
2019_098_ISEGS	rufous hummingbird	RUHU	Fatality Search	7/23/2019	8/6/2019		1-3 days	back.	singed	2;3	3	ACC	-115.483, 35.5758	NA
				- 1 1	- 1 1	dead-semi-		flight feathers curled, singe	Scorched or		_		-115.4829,	
	black-throated sparrow	BTSP	Incidental	7/23/2019	7/23/2019	fresh	1-3 days	to head.	singed	2;3	3	Powerblock	35.5756	NA
								no evidence of collision or			_		-115.4708,	
2019_100_ISEGS	unidentified bird (small)	UNID	Fatality Search	7/25/2019	7/25/2019	broken up	3-7 days	singe.	unknown	NA	2	Heliostat	35.5551	NA
								no evidence of collision or			_			
	northern mockingbird	NOMO	Fatality Search	7/25/2019	7/25/2019	broken up	1-3 days	singe.	unknown	NA	2	Heliostat	-115.471, 35.5556	NA
2242 422 42522			5 . II. 6 . I	7/25/2242	7/25/2242		0.44	no evidence of collision or			_		-115.4847,	
2019_102_ISEGS	northern mockingbird	NOMO	Fatality Search	7/25/2019	7/25/2019	·	8-14 days	singe.	unknown	NA	3	Heliostat	35.5753	NA
2040 402 15565		110110	5 1 12 6 1	7/25/2010	7/25/2040	dead-semi-	0.44	no evidence of collision or			2		-115.4692,	
2019_103_ISEGS	northern mockingbird	NOMO	Fatality Search	7/25/2019	7/25/2019	fresh	8-14 days	singe.	unknown	NA	2	Heliostat	35.5586	NA
2040 404 15565		DTCD		7/25/2010	7/25/2040		0.44	no evidence of collision or			2	5 11 1	-115.4827,	
2019_104_ISEGS	black-throated sparrow	BTSP	Incidental	7/25/2019	7/25/2019		8-14 days	singe.	unknown	NA	3	Powerblock	35.5753	NA
2010 105 15565	black-throated sparrow	DTCD	Fatality Coard	7/26/2010	7/26/2010	dead-semi-	2.7 days	all flight feathers singed off,	Scorched or	2.2	1	ACC	-115.4514,	NIA
2019_105_13EG3	black-tilroated sparrow	BTSP	Fatality Search	7/26/2019	7/26/2019	fresh	3-7 days	singe to top of head, back.	singed	2;3		ACC	35.5356	NA
						المصمل مصمد:		all flight feathers singed off,	Caanah aal an				115 4510	
2019 106 ISEGS	house finch	HOFI	Eatality Soarch	7/26/2019	7/26/2019	dead-semi-	3-7 days	singe to top of head, back,	Scorched or	2.2	1	۸۵۵	-115.4518,	NIA
2019_106_15EG5	nouse finch	погі	Fatality Search	7/20/2019	7/26/2019	fresh	3-7 days	breast.	singed	2;3	1	ACC	35.5356	NA
						dead-semi-		all flight feathers singed off,	Scorched or				115 4517	
2019 107 ISEGS	cinnamon toal	CITE	Fatality Search	7/26/2019	7/26/2019		1-3 days	singe to top of head, sides of face, back, breast.	singed	2;3	1	ACC	-115.4517, 35.5354	NA
2019_107_13E03	Cillianion teal	CITE	ratality Search	7/20/2019	7/20/2019	116311	1-5 days	no evidence of collision or	Siligeu	2,3	т	ACC	-115.4517,	- IVA
2019_108_ISEGS	unidentified swallow	UNSW	Fatality Search	7/26/2019	7/26/2019	feather spot	3-7 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
2013_100_13203	amachinea swanow	ONSV	ratanty Scaren	7/20/2013	7/20/2013	reather spot	3 7 days	no evidence of collision or	dikilowii	IVA		TOWEIDIOCK	-115.4517,	- IVA
2019 109 ISEGS	northern mockingbird	NOMO	Fatality Search	7/26/2019	7/26/2019	feather spot	3-7 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
2017_107_13103	northern mockingbild	110.110	ratality Search	, , 20, 2013	1,20,2013	reaction spot	J / duys	no evidence of collision or	ATTICITY WITH	1973		1 OWEI DIOCK	-115.4517,	1771
2019 110 ISEGS	unidentified swallow	UNSW	Fatality Search	7/26/2019	7/26/2019	feather spot	3-7 days	singe.	unknown	NA	1	Powerblock	35.5353	NA
	a.nacminea swanow	3.13.17	. acamer ocaren	,,20,2013	., 20, 2013	dead-semi-	3 , days	all flight feathers singed off,	Scorched or	. 47.1		. OTTE: BIOCK	-115.4513,	
2019_111_ISEGS	unidentified swallow	UNSW	Fatality Search	7/26/2019	7/26/2019		3-7 days	singe to head, back, breast.	singed	2;3	1	ACC	35.5358	NA
			. atamey ocurren	., 20, 2013	.,20,2013			no evidence of collision or	3 004	_,5			-115.4517,	
2019 112 ISEGS	unidentified bird (small)	UNID	Fatality Search	7/26/2019	7/26/2019	feather spot	3-7 days	singe.	unknown	NA	1	Powerblock	35.5353	NA
2015_112_15205	aac.itanca bira (siriali)	35	. acancy ocuron	., 20, 2013	., 20, 2013	.cather spot	5 . aays		J	. */ \	-	. O.I.C. DIOCK	33.3333	. ** `

				5	6 II .:		- : 6:			_		Nearest		CD1.17
				Detection	Collection		Time Since	Description of	Cause of	Burn		Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury		Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
	northern rough-winged					dead-semi-		curling to all flight feathers,	Scorched or					
_2019_113_ISEGS	swallow	NRWS	Incidental	7/31/2019	8/1/2019	fresh	3-7 days	singe to nape.	singed	3	1	Powerblock	-115.4519, 35.535	NA
								curling to all flight feathers,	Scorched or				-115.4704,	
2019_114_ISEGS	verdin	VERD	Incidental	8/1/2019	8/1/2019	dead-fresh	0.33-1 days	singe to contour feathers.	singed	3	2	Powerblock	35.5565	NA
						dead-semi-		singe to head and neck	Scorched or				-115.4813,	
2019 115 ISEGS	willet	WILL	Fatality Search	8/5/2019	8/5/2019	fresh	0.33-1 days	feathers.	singed	3	3	Heliostat	35.5762	NA
				5/5/2525	2/2/222	dead-semi-		curling to all flight feathers,	Scorched or				-115.4827,	
2019 116 ISEGS	vellow warhler	YWAR	Fatality Search	8/5/2019	8/5/2019		1-3 days	singe to neck and head.	singed	2	3	Heliostat	35.5771	NA
2013_110_13103	yellow warbiel	IVVAIL	ratanty Scarcii	8/3/2013	8/3/2013	110311	1-5 days					Heliostat	33.3771	IN/A
2040 447 15565		14000	Fatality Carrel	0/5/2010	0/5/2040	la made a mercer	0.44 -1	curling to primary flight	Scorched or	4	2	11-1:	445 405 25 5746	NI A
2019_117_ISEGS	mourning dove	MODO	Fatality Search	8/5/2019	8/5/2019	broken up	8-14 days	feathers.	singed	1	3	Heliostat	-115.485, 35.5746	NA
								all flight feathers curled,						
								singe to coverts and all of	Scorched or					
	tree swallow	TRES	Incidental	8/6/2019	8/6/2019	dead-fresh	0.33-1 days	dorsal side.	singed	2;3	3	Powerblock	-115.4836, 35.575	NA
								singe to primaries and	Scorched or				-115.4698,	
2019_119_ISEGS	tree swallow	TRES	Fatality Search	8/6/2019	8/6/2019	mummified	8-14 days	secondaries.	singed	1	2	ACC	35.5569	NA
								curling to all flight feathers,	Scorched or				-115.4828,	
2019 120 ISEGS	tree swallow	TRES	Fatality Search	8/6/2019	8/6/2019	dead-fresh	0.33-1 days	singe to top of head.	singed	2;3	3	ACC	35.5757	NA
			<i>,</i>	, , , , , , , , , , , , , , , , , , ,	, ,		,	curling to all flight feathers,		· · · · · · · · · · · · · · · · · · ·				
						dead-semi-		singe to head, back, and	Scorched or					
2019_121_ISEGS	Lucy's warbler	LUWA	Fatality Search	8/6/2019	8/6/2019	fresh	1-3 days	nape.	singed	2;3	2	ACC	-115.47, 35.5569	NA
	Lucy 5 Warbier	2011/1	ratanty scaren	0,0,2013	0,0,2023	dead-semi-	10 4475	curling to all flight feathers,	Scorched or	2,3		7.00	113.17, 33.3303	
2019_122_ISEGS	vollow warhlor	YWAR	Eatality Sparch	8/6/2019	8/6/2019		3-7 days			2.2	2	۸۵۵	115 4600 25 557	NA
2019_122_13EG3	yellow warbiel	TWAN	Fatality Search	6/0/2019	8/0/2019	fresh	5-7 uays	singe to head and nape.	singed	2;3	2	ACC	-115.4699, 35.557	IVA
2010 100 10500			II. C . I	0.15.10.01.0	0/5/0040	dead-semi-	0.7.1	curling to secondaries and	Scorched or		_		445 47 05 557	
2019_123_ISEGS	•	YWAR	Fatality Search	8/6/2019	8/6/2019	fresh	3-7 days	rectrices, singe to rump.	singed	1;3	2	ACC	-115.47, 35.557	NA
	unidentified							all flight feathers curled,	Scorched or				-115.4512,	
2019_124_ISEGS	gnatcatcher	UNGN	Fatality Search	8/6/2019	8/6/2019	dead-fresh	0-0.33 days	singe to top of head.	singed	2;3	1	ACC	35.5354	NA
	northern rough-winged							curling to primaries and	Scorched or				-115.4699,	
2019_125_ISEGS	swallow	NRWS	Fatality Search	8/6/2019	8/6/2019	feather spot	3-7 days	secondaries.	singed	Unknown	2	Powerblock	35.5569	NA
								no evidence of collision or					-115.4708,	_
2019 126 ISEGS	unidentified bird (small)	UNID	Fatality Search	8/6/2019	8/6/2019	feather spot	1-3 days	singe.	unknown	NA	2	Powerblock	35.5563	NA
	·		·			•	•	curling to secondary flight	Scorched or				-115.4676,	
2019_127_ISEGS	mourning dove	MODO	Fatality Search	8/6/2019	8/6/2019	broken up	8-14 days	feathers.	singed	1	2	Heliostat	35.5558	NA
			· atanty coardi	0, 0, 2020	3, 3, 2020	<u> э. ө.кө.г а.р</u>	0 = 1 00 70		Scorched or					
2019_128_ISEGS	Bullock's oriole	BUOR	Incidental	8/8/2019	8/8/2019	dead-fresh	0-0.33 days	singe on right side of face.	singed	1;3	1	Powerblock	-115.4528, 35.535	NΔ
2013_120_13203	Bullock 3 officie	BOOK	meraentar	0,0,2013	0,0,2013	acaa iresii	0 0.55 4475	curling to flight feathers in	Siribed	1,3		TOWEIDIOCK	113.4320, 33.333	1471
	:					d = = d = = ==:			Casualsadau				115 4702	
2010 120 15565	unidentified	LINCN	lu ai da utal	0/11/2010	0/12/2010	dead-semi-	2.7.4	wings and rectrices, singe	Scorched or	2	2	Damadalaali	-115.4702,	NIA
2019_129_ISEGS	gnatcatcher	UNGN	Incidental	8/11/2019	8/12/2019	fresh	3-7 days	to top of head.	singed	3	2	Powerblock	35.5565	NA
								curling to primaries,						
						dead-semi-		secondaries, coverts, and	Scorched or				-115.4711,	
_2019_130_ISEGS	yellow warbler	YWAR	Incidental	8/11/2019	8/12/2019	fresh	3-7 days	tail, singe on head.	singed	2;3	2	Powerblock	35.5563	NA
								singe to flight feathers in						
								both wings and tail and	Scorched or				-115.4701,	
2019_131_ISEGS	yellow warbler	YWAR	Incidental	8/12/2019	8/12/2019	dead-fresh	0.33-1 days	head.	singed	2;3	2	Powerblock	35.5565	NA
								no evidence of singe or					-115.4709,	
2019_132_ISEGS	yellow warbler	YWAR	Incidental	8/12/2019	8/12/2019	dead-fresh	0.33-1 days	collision.	unknown	NA	2	Powerblock	35.5572	NA
- -				•	•		•							

USFWS#	Common Name	Species Code	How Found	Detection Date	Collection Date	Condition	Time Since Death/Injury	Description of Carcass/Injury	Cause of Death/Injury	Burn Grade	Unit	Nearest Project Feature	Coordinates	SPUT Revisions
								curling to primaries,						
								secondaries, rectrices, and						
2010 100 10500		\0.44A.D		0/10/2010	0/40/0040	dead-semi-	4.0.1	coverts, singe to head and	Scorched or	2.2			-115.4826,	
2019_133_ISEGS	yellow warbler	YWAR	Incidental	8/13/2019	8/13/2019	fresh	1-3 days	back.	singed	2;3	3	Powerblock	35.5755	NA
2019 134 ISEGS	vallavi varblar	VIA/A D	Incidental	8/13/2019	8/13/2019	dead-semi-	2.7 days	curling to flight feathers	Scorched or	2	3	Dowerblook	-115.4826 <i>,</i>	NIA
2019_134_13EG3	yellow warbiel	YWAR	Incidental	6/13/2019	0/15/2019	fresh	3-7 days	and tail, singe to head.	singed Scorched or	3	3	Powerblock	35.5757	NA
2019_135_ISEGS	vellow warbler	YWAR	Incidental	8/13/2019	8/13/2019	dead-fresh	0.33-1 days	curling to primaries and secondaries.	singed	1	3	ACC	-115.4825, 35.5757	NA
2019_135_13LG3	yellow warblet	TVVAIN	incidental	8/13/2019	8/13/2019	dead-resir	0.55-1 uays	no evidence of collision or	Siligeu	1		ACC	-115.4833,	IVA
2019 136 ISEGS	house finch	HOFI	Incidental	8/13/2019	8/13/2019		1-3 days	singe.	unknown	NA	3	Powerblock	35.5759	NA
2013_130_131.03	House Illien	11011	meiaentai	0/13/2013	0/13/2013	dead-semi-	1 3 days	curling to right wing flight	Scorched or	10/3		TOWEIDIOCK	-115.4524,	IVA
2019_137_ISEGS	vellow warbler	YWAR	Incidental	8/15/2019	8/15/2019		3-7 days	feathers.	singed	1	1	Powerblock	35.5351	NA
2013_137_102.03	yenow warbier		moracitai	0, 10, 2013	0,13,2013	dead-semi-	3 / 44/5	no evidence of collision or	3111 <u>B</u> Cu			. overbioek	-115.4832,	
2019_138_ISEGS	vellow warbler	YWAR	Incidental	8/16/2019	8/16/2019		3-7 days	singe.	unknown	NA	3	Powerblock	35.5751	NA
2013_100_10100	yellow warbier		moracitai	0, 10, 2013	0,10,2013	dead-semi-	3 7 days	no evidence of collision or	and the same of th			. overbioek	-115.4836,	
2019_139_ISEGS	lesser goldfinch	LEGO	Incidental	8/16/2019	8/16/2019		3-7 days	singe.	unknown	NA	3	Powerblock	35.5754	NA
				5, 25, 2525	5, = 5, = 5 = 5		2 : 5.0/5	curling to tail, singe on	Scorched or				-115.4835,	
2019 140 ISEGS	house finch	HOFI	Incidental	8/16/2019	8/16/2019	dead-fresh	0.33-1 days	belly.	singed	1;3	3	Powerblock	35.5756	NA
						dead-semi-	•	singe to both wings and	Scorched or	•			-115.4834,	
2019_141_ISEGS	tree swallow	TRES	Incidental	8/16/2019	8/16/2019		3-7 days	rectrices, head, and back.	singed	2;3	3	Powerblock	35.5757	NA
						dead-semi-	•	no evidence of singe or		•			-115.4826,	
2019_142_ISEGS	yellow warbler	YWAR	Incidental	8/16/2019	8/16/2019		1-3 days	collision.	unknown	NA	3	Powerblock	35.5756	NA
	•						•	no evidence of collision or					-115.4827,	
2019_143_ISEGS	cactus wren	CACW	Incidental	8/16/2019	8/16/2019	dead-fresh	0.33-1 days	singe.	unknown	NA	3	Powerblock	35.5751	NA
						dead-semi-			Scorched or				-115.4829,	
2019_144_ISEGS	cliff swallow	CLSW	Incidental	8/16/2019	8/16/2019	fresh	3-7 days	singe to primaries.	singed	1	3	ACC	35.5759	NA
								curling to flight feathers,	Scorched or					
2019_145_ISEGS	tree swallow	TRES	Incidental	8/17/2019	8/17/2019	dead-fresh	0-0.33 days	singe on right flank.	singed	3	3	Powerblock	-115.483, 35.5758	NA
								curling to flight feather in						
								wings with tail singed off,						
						dead-semi-		singe to nape and body	Scorched or					
2019_146_ISEGS	yellow warbler	YWAR	Incidental	8/17/2019	8/17/2019	fresh	3-7 days	feathers.	singed	3	3	ACC	-115.483, 35.5758	NA
						dead-semi-		singe to secondaries with	Scorched or				-115.4833,	
2019_147_ISEGS	Costa's hummingbird	COHU	Incidental	8/17/2019	8/17/2019	fresh	3-7 days	rectrices singed off.	singed	2	3	Powerblock	35.5757	NA
								curling to flight feathers,	Scorched or				-115.4835,	
2019_148_ISEGS	least sandpiper	LESA	Incidental	8/17/2019	8/17/2019	dead-fresh	0.33-1 days	singe to body feathers.	singed	1;3	3	Powerblock	35.5754	NA
								singe to rectrices, tertials,	Scorched or				-115.4708,	
2019_149_ISEGS	Costa's hummingbird	СОНИ	Incidental	8/17/2019	8/17/2019	dead-fresh	0.33-1 days	head, and back.	singed	2	2	Powerblock	35.5562	NA
						dead-semi-		no evidence of singe or					-115.4709,	
2019_150_ISEGS	cinnamon teal	CITE	Incidental	8/17/2019	8/17/2019	tresh	3-7 days	collision.	unknown	NA	2	Powerblock	35.5565	NA
								curling to tail and flight						
2040 454 :555	6. 1			0/1-1-1-	014-1		0.00 1.1	feathers in wings, singe to	Scorched or		_		445 45 55 555	
2019_151_ISEGS	house finch	HOFI	Incidental	8/17/2019	8/17/2019	dead-fresh	0.33-1 days	coverts and head.	singed	2;3	2	Powerblock	-115.47, 35.5566	NA
								curling to flight feathers in						
2040 452 1555	harring to the state of	DUCO	to all the t	0/47/0045	0/47/0045	4	0.33.4.1	wings and tail, singe to	Scorched or	2	•	David III I	445 400 05 555	NI A
2019_152_ISEGS	brown-headed cowbird	BHCO	Incidental	8/17/2019	8/17/2019	dead-fresh	0.33-1 days	body feathers.	singed	3	3	Powerblock	-115.483, 35.5752	NA

LICENIC #	Common Name	Canada Cada	Have Farmed	Detection	Collection	Condition	Time Since	Description of	Cause of	Burn	11	Nearest Project	Coordinates	SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury curling to tail, primaries,	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
						dead-semi-		secondaries, and coverts.,	Scorched or				-115.4829,	
2019 153 ISEGS	yellow warbler	YWAR	Incidental	8/17/2019	8/17/2019	fresh	1-3 days	singe to back and head.	singed	2;3	3	Powerblock	35.5752	NA
	northern rough-winged				-, ,	dead-semi-		0 0 11 11 11 11 11 11 11 11 11 11 11 11	Scorched or	,-			-115.4827,	
2019_154_ISEGS	9 9	NRWS	Incidental	8/18/2019	8/19/2019		1-3 days	singe to head.	singed	1	3	Powerblock	35.5754	NA
							-	singe to tail, head, and	Scorched or				-115.4827,	
_2019_155_ISEGS	tree swallow	TRES	Incidental	8/18/2019	8/19/2019	dead-fresh	0.33-1 days	back.	singed	2;3	3	Powerblock	35.5754	NA
						dead-semi-		singe to head, wings, and	Scorched or				-115.4519,	
2019_156_ISEGS	lark sparrow	LASP	Incidental	8/21/2019	8/22/2019	fresh	3-7 days	rects.	singed	1;3	1	Powerblock	35.5348	NA
								curling to flight feathers,						
				- 1 1	- 1 1	dead-semi-		singe to wings and body	Scorched or					
2019_157_ISEGS	white-faced ibis	WFIB	Incidental	8/22/2019	8/22/2019	fresh	3-7 days	feathers.	singed	2;3	1	Powerblock	-115.452, 35.5355	NA
2010 150 15505	northern rough-winged	NBMG		0/22/2010	0/22/2010	dead-semi-	4.2.1		Scorched or	4.2			-115.4514,	
2019_158_ISEGS	swallow	NRWS	Incidental	8/22/2019	8/22/2019		1-3 days	singe to head and coverts.	singed	1;3	1	Powerblock	35.5351	NA
2019 159 ISEGS	brown-headed cowbird	ВНСО	Incidental	8/22/2019	8/22/2019	dead-semi-	3-7 days	sings to soverts	Scorched or	1	2	Powerblock	-115.4704,	NΙΛ
2019_159_15EG5	brown-neaded cowbird	впсо	incidental	6/22/2019	6/22/2019	fresh	3-7 uays	singe to coverts.	singed	1		Powerblock	35.5568	NA
								curling to all flight feathers						
	northern rough-winged					dead-semi-		in wings and tail, singe to coverts, head, breast, and	Scorched or				-115.4702,	
2019 160 ISEGS		NRWS	Incidental	8/22/2019	8/22/2019		3-7 days	belly.	singed	2;3	2	Powerblock	35.5565	NA
2013_100_13203	Swanow	1411.475	meracritar	0,22,2013	0,22,2013	11 0311	3 7 days	singe to flight and tail	3111 <u>B</u> Cu	2,3		1 OWEI BIOCK	33.3303	10/1
								feathers, top of head and	Scorched or				-115.4513,	
2019_161_ISEGS	Bullock's oriole	BUOR	Incidental	8/23/2019	8/24/2019	dead-fresh	0.33-1 days	breast.	singed	2;3	1	Powerblock	35.5354	NA
				3, 23, 2323	0, = ., = 0 = 0		0.00 = 0.070	no evidence of singe or	5604				-115.4516,	
2019 162 ISEGS	unidentified bird (small)	UNID	Incidental	8/26/2019	8/26/2019	broken up	3-7 days	collision.	unknown	NA	1	Powerblock	35.5351	NA
	, ,				•	•	•	no evidence of singe or					-115.4556,	
2019_163_ISEGS	American avocet	AMAV	Incidental	8/26/2019	8/26/2019	broken up	0.33-1 days	collision.	unknown	NA	1	Heliostat	35.5397	NA
								curling to flight feathers in						
								wings and tail, singe to	Scorched or				-115.4705,	
_2019_164_ISEGS	house finch	HOFI	Incidental	8/26/2019	8/26/2019	mummified	31-60 days	head, back, breast.	singed	2;3	2	Powerblock	35.5568	NA
								curling to flight feathers in						
						dead-semi-		wings and tail, singe to	Scorched or				-115.4707,	
2019_165_ISEGS	brown-headed cowbird	ВНСО	Incidental	8/26/2019	8/26/2019	fresh	3-7 days	head and back.	singed	2;3	2	Powerblock	35.5563	NA
								no evidence of singe or					-115.4519,	
2019_166_ISEGS	northern mockingbird	NOMO	Incidental	8/27/2019	8/27/2019	feather spot	8-14 days	collision.	unknown	NA	1	Powerblock	35.5358	NA
								curling to flight feathers in						
								both wings and tail, singe						
								to head, nape, back, rump,	Scorched or				-115.4514,	
	yellow warbler	YWAR	Incidental	8/27/2019	8/27/2019	dead-fresh	0-0.33 days	and flanks.	singed	2;3	1	Powerblock	35.5352	NA
2040 460 16500	tura a socialla.	TDEC	to data a total	0/27/2012	0/27/2012	deed f	0.22.4.1	and the second of the second	Scorched or	4.3	4	Danie III.	445 453 35 5353	A.I.A
_2019_168_ISEGS	tree swallow	TRES	Incidental	8/27/2019	8/2//2019	dead-fresh	0.33-1 days	curling to all flight feathers.	singed	1;3	1	Powerblock	-115.452, 35.5357	NA
2010 100 10500	Taumanulle	TOWA	المعتمامين فيا	0/27/2040	0/27/2042	daad for the	0.0.22 -1	singe to wings, tail, head,	Scorched or	2.2	4	Damarlala al-	-115.4519,	NI A
	Townsend's warbler	TOWA	Incidental	8/27/2019	8/2//2019	dead-fresh	0-0.33 days	and back.	singed	2;3	1	Powerblock	35.5349	NA
2010 170 15505	lesser nighthawk	LENII	Eatality Soarch	8/28/2019	0/20/2010	broken up	9 14 days	no evidence of singe or collision.	unknown	NΙΛ	2	Holiostat	-115.4814, 35.5743	NΙΛ
7012_1/0_12502	icssei iligiitilawk	LENI	Fatality Search	0/28/2019	0/28/2019	proken up	8-14 days		unknown	NA	3	Heliostat		NA
2019_171_ISEGS	vellow warhlor	YWAR	Fatality Search	8/28/2019	Q/20/2010	dead-fresh	0.33 ₋ 1 days	singe to wings, head, tail,	Scorched or	2.2	2	۸۲۲	-115.4824, 35.5757	NΑ
7012 ¹ 1/1 ¹ 2502	yellow walbiel	IVVAN	ratality Search	0/20/2019	0/20/2019	ueau-118511	0.33-1 days	and body.	singed	2;3	3	ACC	33.3737	NA

				Detection	Collection	0 100	Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
2019 172 ISEGS	yellow warbler	YWAR	Fatality Search	8/28/2019	8/28/2019	dead-semi- fresh	3-7 days	singe to primaries and secondaries.	Scorched or singed	2;3	3	ACC	-115.483, 35.576	NA
2015_172_15205	yenow warbier	I VV/AIX	ratality Scarell	0/20/2013	0/20/2013	11 C 311	3 7 days	singe to head, back, and in	Jiligeu	2,3		ACC	113.403, 33.370	IVA
						dead-semi-		both wings with rects	Scorched or				-115.4823,	
2019 173 ISEGS	yellow warbler	YWAR	Fatality Search	8/28/2019	8/28/2019	fresh	1-3 days	singed off.	singed	2;3	3	ACC	35.5758	NA
	<u>'</u>		•	•	•	dead-semi-	•	singe to primaries and	Scorched or	•			-115.4825,	_
2019_174_ISEGS	yellow warbler	YWAR	Fatality Search	8/28/2019	8/28/2019		1-3 days	secondaries.	singed	1	3	ACC	35.5759 [′]	NA
								singe to tail, wings, head,	Scorched or					
2019_175_ISEGS	blue-gray gnatcatcher	BGGN	Fatality Search	8/28/2019	8/28/2019	dead-fresh	0.33-1 days	and back.	singed	2;3	3	ACC	-115.483, 35.5758	NA
·						dead-semi-			Scorched or				-115.4824,	_
2019_176_ISEGS	mourning dove	MODO	Fatality Search	8/28/2019	8/28/2019	fresh	3-7 days	curling to 1 primary.	singed	3	3	Heliostat	35.5771	NA
						dead-semi-		singe to wings, tail, head,	Scorched or					
_2019_177_ISEGS	yellow warbler	YWAR	Fatality Search	8/28/2019	8/28/2019	fresh	3-7 days	chest, and back.	singed	2;3	3	ACC	-115.483, 35.5758	NA
						dead-semi-		curling to all flight feathers	Scorched or				-115.4825,	
	tree swallow	TRES	Fatality Search	8/28/2019	8/28/2019	fresh	3-7 days	in wings and tail.	singed	2	3	ACC	35.5759	NA
						dead-semi-		curling to flight feathers in	Scorched or				-115.4826,	
2019_179_ISEGS	yellow warbler	YWAR	Fatality Search	8/28/2019	8/28/2019	fresh	1-3 days	wings.	singed	Unknown	3	ACC	35.5759	NA
				- 1 1	- 1 1	dead-semi-		no evidence of singe or	other					
	yellow warbler	YWAR	Fatality Search	8/28/2019	8/28/2019	fresh	3-7 days	collision.	(entrapment)	NA	3	ACC	-115.4825, 35.576	NA
2010 101 10500		\0.445	III 6 I	0/00/0040	0/00/0040		0.00.4.1	no evidence of collision or			•		-115.4849,	
2019_181_ISEGS	yellow warbier	YWAR	Fatality Search	8/28/2019	8/28/2019	dead-fresh	0.33-1 days	singe.	unknown	NA	3	Heliostat	35.5764	NA
2040 402 15565	laasaa alababaa da	LENU	Fatalita Caranala	0/20/2040	0/20/2010	£41	2.7.4	no evidence of collision or		N. A	2	11-11	-115.4852,	N1.0
_2019_182_ISEGS	iesser nightnawk	LENI	Fatality Search	8/28/2019	8/28/2019	•	3-7 days	singe.	unknown	NA	3	Heliostat	35.5759	NA
2010 102 10500	unidentified werbler	11010474	Incidontal	0/20/2010	9/29/2010	dead-semi-	2 7 days	no evidence of collision or	unknouwn	NIA	3	Dawarblack	-115.4829,	NIA
2019_183_ISEGS	unidentified warbler	UNWA	Incidental	8/28/2019	8/28/2019	fresh	3-7 days	singe.	unknown	NA		Powerblock	35.5756	NA
2019 184 ISEGS	unidentified bird (small)	UNID	Fatality Search	8/28/2019	8/28/2010	feather spot	8-14 days	no evidence of collision or singe.	unknown	NA	3	Heliostat	-115.4855, 35.5759	NA
2019_164_15EG3	unidentined bird (smail)	UNID	ratality Search	6/26/2019	0/20/2019	reatrier spot	0-14 uays	singe.	Scorched or	IVA	3	Heliostat	33.3733	INA
2019 185 ISEGS	yellow warbler	YWAR	Incidental	8/28/2019	8/28/2019	dead-fresh	0.33-1 days	singe to all flight feathers.	singed	2;3	3	Powerblock	-115.4837, 35.575	NA
	yenow warster		moraciicai	0,20,2023	0,20,2013	dedd iresii	0.55 1 4445	no evidence of singe or	311gcu			TOWEIDIOCK	113.1037, 33.373	
2019 186 ISEGS	house finch	HOFI	Fatality Search	8/28/2019	8/28/2019	broken up	3-7 days	collision.	unknown	NA	3	Powerblock	-115.483, 35.5753	NA
				5, = 5, = 5 = 5	5, -5, -5-5	ототтот опр	0 1 00/0	singe to several contour	Scorched or				-115.4829,	
2019 187 ISEGS	black-throated sparrow	BTSP	Fatality Search	8/28/2019	8/28/2019	broken up	3-7 days	feathers.	singed	3	3	Powerblock	35.5754	NA
	<u>'</u>		•	•	•	dead-semi-	•	no evidence of singe or					-115.4828,	_
2019 188 ISEGS	unidentified swallow	UNSW	Fatality Search	8/28/2019	8/28/2019		3-7 days	collision.	unknown	NA	3	Powerblock	35.5754	NA
			•				•	singe to several contour	Scorched or				-115.4827,	
2019_189_ISEGS	unidentified bird (small)	UNID	Fatality Search	8/28/2019	8/28/2019	broken up	8-14 days	feathers.	singed	3	3	Powerblock	35.5754	NA
	northern rough-winged						-		Scorched or				-115.4825,	
2019_190_ISEGS	• •	NRWS	Fatality Search	8/28/2019	8/28/2019	dead-fresh	0-0.33 days	singe to all flight feathers.	singed	2	3	Powerblock	35.5756	NA
	northern rough-winged							curling to all flight feathers,	Scorched or				-115.4825,	
2019_191_ISEGS	swallow	NRWS	Fatality Search	8/28/2019	8/28/2019	dead-fresh	0-0.33 days	singe to head and back.	singed	2;3	3	Powerblock	35.5757	NA
						dead-semi-			Scorched or				-115.4513,	
_2019_192_ISEGS	black-throated sparrow	BTSP	Incidental	8/28/2019	8/28/2019	fresh	3-7 days	singe to tips of right wing.	singed	1	1	Powerblock	35.5352	NA
2019_193_ISEGS	bank swallow	BANS	Incidental	8/28/2019	8/28/2019	dead-fresh	0-0.33 days	singe to top of head, nape, back, rump, axillaries, upper breast with all flight feathers singed off.	Scorched or singed	2;3	1	Powerblock	-115.4515, 35.5352	NA

				Datastian	Callaction		Time o Cimeo	Description of	Causa of	D		Nearest		CDUT
LICENAC #	Common Nama	Cuasias Cada	Have Faund	Detection	Collection	Condition	Time Since	Description of	Cause of	Burn	l lmit	Project	Coordinates	SPUT
USFWS #	Common Name	Species Code	now round	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
								curling to flight feathers in	6 1 1					
2040 404 10500	NA 6:11: 1 1 1	N 4 C) 4 / 4		0/20/2040	0/20/2040	dead-semi-	4.2.1	wings and tail, singe to cap	Scorched or	2			445 454 25 5252	
2019_194_ISEGS	MacGillivray's warbler	MGWA	Incidental	8/28/2019	8/28/2019	fresh	1-3 days	and upper breast.	singed	2	1	Powerblock	-115.451, 35.5352	NA
				- 1 1	- 1 1			singe to all flight feathers	Scorched or		_		-115.4828,	
2019_195_ISEGS	MacGillivray's warbler	MGWA	Incidental	8/28/2019	8/28/2019	dead-fresh	0-0.33 days	and coverts.	singed	2;3	3	Powerblock	35.5755	NA
				- / /	0/00/00/0			singe to head, wings, and	Scorched or		_		-115.4832,	
2019_196_ISEGS	yellow warbler	YWAR	Incidental	8/29/2019	8/29/2019	dead-fresh	0-0.33 days	tail.	singed	2;3	3	Powerblock	35.5751	NA
2040 407 15565	well I II	14/114/4		0/20/2040	0/20/2040		0.0.22.1		Scorched or	2	2		-115.4839,	
	Wilson's warbler	WIWA	Incidental	8/29/2019	8/29/2019	dead-fresh	0-0.33 days	singe to neck feathers.	singed	3	3	Powerblock	35.5759	NA
				- 4. 4	- 1- 1			no evidence of collision or					-115.4511,	
2019_198_ISEGS	brown-headed cowbird	ВНСО	Incidental	9/1/2019	9/2/2019	broken up	3-7 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
								curling to rectrices, singe to						
						dead-semi-		flight feathers in wings , left	Scorched or				-115.4512,	
_2019_199_ISEGS	cliff swallow	CLSW	Incidental	9/1/2019	9/2/2019	fresh	3-7 days	side of nape, coverts.	singed	2;3	1	ACC	35.5358	NA
								curling to all flight feathers						
	unidentified					dead-semi-		in wings and tail, singe to	Scorched or					
2019_200_ISEGS	hummingbird	UNHU	Fatality Search	9/3/2019	9/3/2019	fresh	3-7 days	cap and body feathers.	singed	1;3	2	ACC	-115.4701, 35.557	NA
								curling to all flight feathers						
	black-throated gray					dead-semi-		in wings and tail, singe to	Scorched or					
_2019_201_ISEGS	warbler	BTYW	Fatality Search	9/3/2019	9/3/2019	fresh	3-7 days	body feathers.	singed	2;3	2	ACC	-115.4699, 35.557	NA
								singe to all of dorsal side						
						dead-semi-		with all flight feathers	Scorched or					
2019_202_ISEGS	yellow warbler	YWAR	Fatality Search	9/3/2019	9/3/2019	fresh	3-7 days	singed off.	singed	2;3	2	ACC	-115.4704, 35.557	NA
						dead-semi-		curling to all flight feathers	Scorched or				-115.4698,	
2019_203_ISEGS	yellow warbler	YWAR	Fatality Search	9/3/2019	9/3/2019	fresh	1-3 days	with singe to top of head.	singed	1;3	2	ACC	35.5572	NA
_								curling to all flight feathers,						<u> </u>
								singe to top of head,	Scorched or				-115.4702,	
2019_204_ISEGS	yellow warbler	YWAR	Fatality Search	9/3/2019	9/3/2019	dead-fresh	0.33-1 days	breast, and rump.	singed	2;3	2	ACC	35.5572	NA
								singe to left flank, nape,						
						dead-semi-		top of head with all flight	Scorched or				-115.4704,	
2019 205 ISEGS	yellow warbler	YWAR	Fatality Search	9/3/2019	9/3/2019	fresh	3-7 days	feathers singed off.	singed	2;3	2	ACC	35.5572	NA
	,		,		, ,		,	<u> </u>	Scorched or	,			-115.4705,	
2019 206 ISEGS	unidentified bird (small)	UNID	Fatality Search	9/3/2019	9/3/2019	broken up	8-14 days	curling to flight feathers.	singed	Unknown	2	ACC	35.5573	NA
	, ,		•	• •	•	dead-semi-	•	no evidence of collision or					-115.4711,	
2019 207 ISEGS	vellow warbler	YWAR	Fatality Search	9/3/2019	9/3/2019		3-7 days	singe.	unknown	NA	2	Powerblock	35.5565	NA
	10			5,5,555	2/2/222			no evidence of collision or					-115.4708,	
2019 208 ISEGS	unidentified bird (small)	UNID	Fatality Search	9/3/2019	9/3/2019	feather spot	1-3 days	singe.	unknown	NA	2	Powerblock	35.5563	NA
	amachinea on a (ornan)	OTTE	ratanty scaren	3,3,2313	3/3/2013	reaction spot	10 00,5	all dorsal side singed, singe	unino vin			TOWERDIOCK	33.3303	
						dead-semi-		to left and right flank, all	Scorched or					
2019 209 ISEGS	vellow warhler	YWAR	Fatality Search	9/3/2019	9/3/2019		3-7 days	flight feathers singed off.	singed	2;3	2	Powerblock	-115.471, 35.5566	NA
	yenow warbier	1 VV /-\11\	ratumty scarcif	3/3/2013	3/3/2013	11 (311	J / days	singe to tips of body	Scorched or	۷,3		1 OWEI DIOCK	-115.471, 33.3300	NA .
2010 210 ISECS	unidentified bird (small)	UNID	Fatality Search	9/3/2019	9/2/2010	feather spot	3-7 days	feathers.	singed	Unknown	2	Powerblock	35.5572	NA
	amachanica bira (sindii)	OIVID	ratanty search	3/3/2019	9/3/2019	reactiet spot	J-7 uays			CHRIOWII		1 OWEI DIUCK		NO.
2010 211 ISECS	unidentified bird (small)	LINID	Eatality Soarch	9/3/2019	0/2/2010	footbor spot	2 7 days	singe to several contour feathers.	Scorched or	Unknows	ว	Dowarhlask	-115.4703, 35.5571	NΙΔ
	· · · · · · · · · · · · · · · · · · ·	UNID	Fatality Search	9/3/2019	5/3/2019	feather spot	3-7 days		singed	Unknown	2	Powerblock		NA
2010 212 15555	northern rough-winged	NDMC	Fotolity Coonst	0/2/2010	0/2/2010	hrokon ···-	2 7 de :	no evidence of collision or	unka au	NIA	2	Downer last	-115.4704,	NIA
2019_212_ISEGS	swallow	NRWS	Fatality Search	9/3/2019	9/3/2019	broken up	3-7 days	singe.	unknown	NA	2	Powerblock	35.5568	NA

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury		Death/Injury	Grade	Unit	=	Coordinates	Revisions
		<u> </u>			2		2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Scorched or	0.000			-115.4703,	
2019_213_ISEGS	unidentified warbler	UNWA	Fatality Search	9/3/2019	9/3/2019	broken up	3-7 days	curling to flight feathers.	singed	2	2	Powerblock	35.5567	NA
						·		no evidence of collision or					-115.4704,	
2019_214_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/3/2019	9/3/2019	broken up	3-7 days	singe.	unknown	NA	2	Powerblock	35.5569	NA
									Scorched or				-115.4704,	
2019_215_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/3/2019	9/3/2019	feather spot	3-7 days	singe to body feathers.	singed	3	2	Powerblock	35.5568	NA
								curling to flight feathers in						
								wings and tail, singe to						
				0/1/0010	0.10.100.00	dead-semi-		body feathers and top of	Scorched or				-115.4517,	
2019_216_ISEGS	yellow warbler	YWAR	Fatality Search	9/4/2019	9/4/2019	fresh	1-3 days	head.	singed	2;3	1	ACC	35.5354	NA
								curling to flight feathers in						
						dead-semi-		wings and tail, singe to body feathers and top of	Scorched or				-115.4516,	
2019_217_ISEGS	yellow warbler	YWAR	Fatality Search	9/4/2019	9/4/2019	fresh	3-7 days	head.	singed	2;3	1	ACC	35.5354	NA
2019_217_13E03	yellow warbiel	IVVAIN	ratality Search	3/4/2013	3/4/2013	116311	3-7 days	curling to flight feathers in	Siligeu	2,3		ACC	33.3334	IVA
								wings and tail, singe to						
						dead-semi-		body feathers and top of	Scorched or				-115.4514,	
2019 218 ISEGS	yellow warbler	YWAR	Fatality Search	9/4/2019	9/4/2019	fresh	1-3 days	head.	singed	2;3	1	ACC	35.5354	NA
	,		•	•	• •	dead-semi-	•	curling to flight feathers in	Scorched or	•			-115.4514,	
2019 219 ISEGS	yellow warbler	YWAR	Fatality Search	9/4/2019	9/4/2019		3-7 days	wings and tail.	singed	2	1	ACC	35.5354	NA
	,		•	•	• •		•	no evidence of singe or	<u> </u>				-115.4516,	
2019_220_ISEGS	lesser nighthawk	LENI	Fatality Search	9/4/2019	9/4/2019	feather spot	8-14 days	collision.	unknown	NA	1	Powerblock	35.5352	NA
			•			·	•	no evidence of singe or	other				-115.4518,	
2019_221_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/4/2019	9/4/2019	broken up	8-14 days	collision.	(entrapment)	NA	1	ACC	35.5356	NA
	, ,					•	•		Scorched or				-115.4519,	
2019_222_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/4/2019	9/4/2019	feather spot	3-7 days	curling to primaries.	singed	3	1	Powerblock	35.5352	NA
_									Scorched or					_
2019_223_ISEGS	yellow warbler	YWAR	Fatality Search	9/4/2019	9/4/2019	feather spot	1-3 days	singe to flight feathers.	singed	3	1	Powerblock	-115.4518, 35.535	NA
									Scorched or				-115.4517,	
2019_224_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/4/2019	9/4/2019	broken up	3-7 days	singe to flight feathers.	singed	Unknown	1	Powerblock	35.5356	NA
				- 1 - 1	- 1 - 1				Scorched or	_			-115.4525,	
2019225ISEGS	unidentified bird (small)	UNID	Fatality Search	9/4/2019	9/4/2019	broken up	3-7 days	singe to 1 contour feather.	singed	3	1	Powerblock	35.5358	NA
				- 1- 1	- 1- 1			no evidence of singe or			_			
2019_226_ISEGS	yellow warbler	YWAR	Fatality Search	9/5/2019	9/5/2019	broken up	3-7 days	collision.	unknown	NA	2	Heliostat	-115.469, 35.5563	NA
				0 /= /00 . 0	0 /= /00 . 0			no evidence of singe or			_		-115.4728,	
2019_227_ISEGS	northern mockingbird	NOMO	Fatality Search	9/5/2019	9/5/2019	broken up	3-7 days	collision.	unknown	NA	2	Heliostat	35.5559	NA
2040 220 15565		WEID	to stale a kell	0/5/2010	0/5/2040	harden ee	0.22.4	andia a ta fii ah t faath aas	Scorched or	2.2	4	11-1:	-115.4425,	NI A
_2019_228_ISEGS	wnite-raced ibis	WFIB	Incidental	9/5/2019	9/5/2019	broken up	0.33-1 days	curling to flight feathers.	singed	2;3	1	Heliostat	35.5432	NA
2019_229_ISEGS	tree swallow	TRES	Fatality Search	9/6/2019	0/6/2010	broken up	8-14 days	curling to flight feathers.	Scorched or singed	2	1	Heliostat	-115.4542, 35.5359	NA
2019_229_13EG3	tiee swallow	INLO	ratality Search	9/0/2019	3/0/2013	broken up	0-14 uays	curing to night feathers.	Scorched or	Z		Heliostat	33.333	IVA
2019 230 ISEGS	blue-gray gnatcatcher	BGGN	Fatality Search	9/6/2019	9/6/2019	dead-fresh	0.33-1 days	singe to rectrices.	singed	3	1	Heliostat	-115.452, 35.5341	NA
	northern rough-winged		, atalie, ocuren	3, 3, 2013	3, 0, 2013	2000 110011	5.55 ± day5	no evidence of singe or	5 ₀ -0			,	-115.4496,	
2019_231_ISEGS		NRWS	Fatality Search	9/6/2019	9/6/2019	broken up	3-7 days	collision.	unknown	NA	1	Heliostat	35.5342	NA
			. atancy Scarcii	3,0,2013	3,0,2013	2. OKC. 7 up	J , 44,5	singe to flight feathers and	Scorched or	14/1			-115.4514,	
2019 232 ISEGS	blue-gray gnatcatcher	BGGN	Fatality Search	9/6/2019	9/6/2019	broken up	1-3 days	rectrices.	singed	3	1	Heliostat	35.5339	NA
	0 - 1 0			-,-,	-,-,-0-0	-		no evidence of collision or	- 0				-	
2019_233_ISEGS	mourning dove	MODO	Incidental	9/6/2019	9/6/2019	dead-fresh	0.33-1 days	singe.	unknown	NA	3	Powerblock	-115.483, 35.5754	NA
	O			, -, -	, -,	= =	, -	5			-		-,	

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
2019_234_ISEGS	northern mockingbird	NOMO	Incidental	9/6/2019	9/6/2019	mummified	31-60 days	singe to body feathers.	Scorched or singed	3	3	Powerblock	-115.4827, 35.5754	NA
2019_234_13103	Horthern Hockingbird	NOIVIO	incidental	9/0/2019	9/0/2019	dead-semi-	31-00 days	singe to body feathers.	Scorched or	<u> </u>	3	POWEIDIOCK	-115.4826,	INA
2019_235_ISEGS	yellow warbler	YWAR	Incidental	9/10/2019	9/10/2019		1-3 days	singe to head.	singed	3	3	ACC	35.5757	NA
	700			2, 22, 222	5, 25, 2525			curling to flight feathers	Scorched or				-115.4822,	
2019_236_ISEGS	warbling vireo	WAVI	Fatality Search	9/12/2019	9/12/2019	dead-fresh	0.33-1 days	and tail, singe to head.	singed	1;3	3	Heliostat	35.5736	NA
	U		,	, ,			,	no evidence of collision or		,				
2019_237_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/12/2019	9/12/2019	feather spot	8-14 days	singe.	unknown	NA	3	Heliostat	-115.484, 35.5767	NA
								no evidence of collision or					-115.4853,	
2019_238_ISEGS	lesser nighthawk	LENI	Fatality Search	9/12/2019	9/12/2019	feather spot	3-7 days	singe.	unknown	NA	3	Heliostat	35.5761	NA
								curling to flight feathers in	Scorched or					
2019_239_ISEGS	verdin	VERD	Fatality Search	9/12/2019	9/12/2019	alive-injured	0-0.33 days	wings and tail.	singed	2;3	3	Heliostat	-115.483, 35.5742	NA
								curling to flight feathers						
						dead-semi-		and tail, singe to body	Scorched or				-115.4519,	
	yellow warbler	YWAR	Incidental	9/15/2019	9/18/2019		3-7 days	feathers.	singed	2;3	1	Powerblock	35.5348	NA
						dead-semi-		curling to flight feathers	Scorched or				-115.4521,	
2019_253_ISEGS	black-tailed gnatcatcher	BTGN	Incidental	9/15/2019	9/18/2019	fresh	3-7 days	and tail.	singed	2;3	1	Powerblock	35.5349	NA
								curling to all flight feathers,					445 4000	
2019 240 ISEGS	hara swallow	DADC	Fatality Coard	0/16/2010	0/16/2010	dood froch	0 0 22 days	singe to back, head, and	Scorched or	2.2	2	ACC	-115.4829,	NIA
2019_240_15EGS	parn swallow	BARS	Fatality Search	9/16/2019	9/16/2019		0-0.33 days	neck.	singed	2;3	3	ACC	35.5757	NA
2019 241 ISEGS	Nashville warbler	NAWA	Eatality Sparch	9/16/2019	9/16/2019	dead-semi- fresh	2 7 days	curling to flight feathers	Scorched or	2;3	2	ACC	-115.4699, 35.5573	NA
2019_241_13E03	Nasilville warbier	INAVVA	Fatality Search	9/10/2019	9/10/2019	iresii	3-7 days	and tail, singe to head. curling to all flight feathers	singed	2,3		ACC	33.3373	INA
								with rectrices singed off,						
	unidentified					dead-semi-		singe to head and body	Scorched or				-115.4704,	
2019 242 ISEGS	gnatcatcher	UNGN	Fatality Search	9/16/2019	9/16/2019		3-7 days	feathers.	singed	2;3	2	ACC	35.5572	NA
			•	•	• •		•	curling to tail and	<u> </u>	•				
	black-chinned					dead-semi-		primaries, singe to head,	Scorched or				-115.4828,	
2019_243_ISEGS	hummingbird	BCHU	Fatality Search	9/16/2019	9/16/2019	fresh	1-3 days	back, and breast.	singed	2;3	3	ACC	35.5759	NA
								no evidence of collision or	other					
_2019_244_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/16/2019	9/16/2019	broken up	3-7 days	singe.	(entrapment)	NA	3	ACC	-115.4827, 35.576	NA
									Scorched or				-115.4837,	
_2019_245_ISEGS	yellow warbler	YWAR	Fatality Search	9/16/2019	9/16/2019	broken up	1-3 days	singe to flight feathers.	singed	1;3	3	Powerblock	35.5758	NA
				- 4 - 4	- 1 1				Scorched or				-115.4509,	
_2019_246_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/18/2019	9/18/2019	broken up	3-7 days	singe to flight feathers.	singed	1	1	Powerblock	35.5352	NA
								curling to all flight feathers,	Coarabadar				115 4510	
2010 247 ISECS	vollow warblor	VIA/A D	Eatality Soarch	9/18/2019	0/19/2010	dead-fresh	0.0.33 days	singe to head, back, and belly.	Scorched or	2.2	1	۸۵۵	-115.4518,	NIA
2019_247_ISEGS	yellow warbiel	YWAR	Fatality Search	9/16/2019	9/10/2019	ueau-iresii	0-0.33 days	curling to flight feathers	singed	2;3	1	ACC	35.5355	NA
								and tail, singe to body	Scorched or				-115.4514,	
2019 248 ISEGS	Brewer's sparrow	BRSP	Fatality Search	9/18/2019	9/18/2019	dead-fresh	0.33-1 days	feathers.	singed	2;3	1	ACC	35.5355	NA
			,	-, -,	-,,				Scorched or	,-			-115.4513,	
2019_249_ISEGS	MacGillivray's warbler	MGWA	Fatality Search	9/18/2019	9/18/2019	dead-fresh	0.33-1 days	singe to rump.	singed	1;3	1	ACC	35.5355	NA
								no evidence of collision or						
2019_250_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/18/2019	9/18/2019	feather spot	3-7 days	singe.	unknown	NA	1	Powerblock	-115.4513, 35.535	NA
								no evidence of collision or	other				-115.4511,	
2019_251_ISEGS	unidentified large bird	UNLB	Fatality Search	9/18/2019	9/18/2019	feather spot	3-7 days	singe.	(entrapment)	NA	1	ACC	35.5358	NA

USFWS#	Common Name	Species Code	How Found	Detection Date	Collection Date	Condition	Time Since Death/Injury	Description of Carcass/Injury	Cause of Death/Injury	Burn Grade	Linit	Nearest Project Feature	Coordinates	SPUT Revisions
U3FVV3#	northern rough-winged	Species Code	now round	Date	Date	Condition	Death/injury	Carcass/Illjury	Scorched or	Graue	Unit	reature	Coordinates	Revisions
2019_254_ISEGS	swallow	NRWS	Fatality Search	9/18/2019	9/18/2019	broken up	3-7 days	singe to wing.	singed	1;3	1	Powerblock	-115.452, 35.5356	NA
2013_234_13203	Swanow	MICOUS	ratanty Scaren	3/10/2013	3/10/2013	ы окси ир	3 7 days	no evidence of collision or	Siriged	1,5		TOWEIDIOCK	-115.4534,	IVA
2019 255 ISEGS	unidentified bird (small)	UNID	Fatality Search	9/18/2019	9/18/2019	broken up	3-7 days	singe.	unknown	NA	1	Heliostat	35.5366	NA
	amachinea sha (shlan)	01110	ratanty scaron	3/10/2013	3/ 13/ 2013	broken up	3 7 4475	curling to flight feathers	dilitiro Wil	1171		Trenostat	33.3300	
								and tail, singe to head and	Scorched or				-115.4504,	
2019 256 ISEGS	barn swallow	BARS	Fatality Search	9/18/2019	9/18/2019	dead-fresh	0-0.33 days	back.	singed	2;3	1	Heliostat	35.5338	NA
			-				-	curling to flight feathers						
								and tail, singe to head and	Scorched or				-115.4527,	
2019_257_ISEGS	barn swallow	BARS	Fatality Search	9/18/2019	9/18/2019	dead-fresh	0.33-1 days	back.	singed	2;3	1	Heliostat	35.5335	NA
								no evidence of collision or					-115.4493,	
2019_258_ISEGS	unidentified teal	TEAL	Fatality Search	9/18/2019	9/18/2019	broken up	0-0.33 days	singe.	unknown	NA	1	Heliostat	35.5357	NA
								no evidence of collision or						
2019_259_ISEGS	great-tailed grackle	GTGR	Fatality Search	9/18/2019	9/18/2019	feather spot	3-7 days	singe.	unknown	NA	1	Heliostat	-115.4516, 35.537	NA
								curling to flight feathers						
								and tail, singe to body	Scorched or				-115.4521,	
2019_260_ISEGS	lazuli bunting	LAZB	Incidental	9/18/2019	9/18/2019	dead-fresh	0-0.33 days	feathers.	singed	1;3	1	Powerblock	35.5351	NA
								curling to flight feathers						
								and tail, singe to body	Scorched or				-115.4516,	
2019_261_ISEGS	yellow warbler	YWAR	Incidental	9/18/2019	9/18/2019	dead-fresh	0-0.33 days	feathers.	singed	2;3	1	Powerblock	35.5353	NA
								curling to flight feathers					445 4547	
2040 262 16566	blor man material or	DCCN	to delenated	0/10/2010	0/40/2040		0.0.22 days	and tail, singe to body	Scorched or	4.2	4	Danie da la ali	-115.4517,	NIA
	blue-gray gnatcatcher	BGGN	Incidental	9/18/2019	9/18/2019	dead-fresh	0-0.33 days	feathers.	singed	1;3	1	Powerblock	35.5353	NA
2010 262 ISEGS	black-tailed gnatcatcher	BTGN	Incidental	9/20/2019	9/20/2019	dead-semi- fresh	3-7 days	curling to rectrices.	Scorched or	1	3	Powerblock	-115.4828, 35.5756	NA
2019_205_13EG3	Diack-tailed griatcatcher	DIGN	incidental	9/20/2019	9/20/2019	ITESII	5-7 udys		singed		3	Powerblock		INA
2010 271 ISECS	Lincoln's sparrow	LISP	Incidental	9/28/2019	9/30/2019	dead-fresh	0.33-1 days	no evidence of collision or	unknown	NA	2	Powerblock	-115.4699, 35.5569	NA
2019_2/1_13EG3	Lilicolli 3 Sparrow	LISP	incidental	9/26/2019	9/30/2019	ueau-iresii	0.55-1 uays	singe.	unknown	INA		Powerblock	33.3309	INA
								curling to secondaries in	Coorebador				115 4025	
2010 264 ISEGS	chipping sparrow	CHSP	Fatality Search	9/30/2019	9/30/2019	dead-fresh	0.33-1 days	right wing, singe to head, nape, and throat.	Scorched or singed	1	3	ACC	-115.4825, 35.5757	NA
2019_204_13L03	chipping sparrow	CHSF	ratality Search	3/30/2013	9/30/2019	ueau-iresii	0.55-1 days	curling to most of flight	Siligeu	т		ACC	33.3737	IVA
						dead-semi-		feathers, singe to top of	Scorched or				-115.4823,	
2019_265_ISEGS	vellow warbler	YWAR	Fatality Search	9/30/2019	9/30/2019		1-3 days	head.	singed	1	3	ACC	35.5757	NA
	70			5,55,252	5,55,2525			curling to primary flight	8					
								feathers with evidence of	Scorched or				-115.4829,	
2019 266 ISEGS	Lincoln's sparrow	LISP	Fatality Search	9/30/2019	10/1/2019	broken up	1-3 days	external trauma.	singed	1	3	ACC	35.5757	NA
		-		-,,	-, ,			curling to all flight feathers	. 0					
	orange-crowned							in wings and tail, singe to	Scorched or					
2019_267_ISEGS		OCWA	Fatality Search	9/30/2019	9/30/2019	dead-fresh	0.33-1 days	nape.	singed	2;3	2	ACC	-115.4703, 35.557	NA
								curling to all flight feathers,						
								singe to nape, right flank	Scorched or				-115.4704,	
2019_268_ISEGS	yellow-rumped warbler	YRWA	Fatality Search	9/30/2019	9/30/2019	dead-fresh	0.33-1 days	and axillary.	singed	2;3	2	ACC	35.5573	NA
						dead-semi-		no evidence of collision or	other				-115.4704,	
2019_269_ISEGS	yellow warbler	YWAR	Fatality Search	9/30/2019	9/30/2019		1-3 days	singe.	(entrapment)	NA	2	ACC	35.5566	NA
								curling to majority of flight	Scorched or				-115.4705,	
2019_270_ISEGS	unidentified bird (small)	UNID	Fatality Search	9/30/2019	9/30/2019	feather spot	3-7 days	feathers.	singed	2	2	Powerblock	35.5566	NA

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
								curling to all flight feathers,	Caranah and an				445 4744	
2019 272 ISEGS	yellow-rumped warbler	YRWA	Fatality Search	9/30/2019	9/30/2019	dead-fresh	0-0.33 days	singe to head, nape, breast, rump, and axillaries.	Scorched or singed	2.2	2	Powerblock	-115.4711, 35.5569	NA
2019_272_13EG3	yellow-rumped warbier	INVVA	ratality Search	9/30/2019	9/30/2019	dead-semi-	0-0.33 uays	curling to tips of rectrices	Scorched or	2;3		POWEIDIOCK	33.3309	IVA
2019 273 ISEGS	calliope hummingbird	CAHU	Fatality Search	9/30/2019	9/30/2019		3-7 days	and wings.	singed	3	2	Powerblock	-115.47, 35.5571	NA
				2,22,222	2,23,232			curling to all flight feathers	8					
								in wings and tail, singe to	Scorched or				-115.4711,	
2019 274 ISEGS	yellow-rumped warbler	YRWA	Incidental	9/30/2019	9/30/2019	dead-fresh	0-0.33 days	contour feathers.	singed	3	2	Powerblock	35.5568	NA
						dead-semi-	-	singe to lower left flank and	Scorched or				-115.4515,	
2019_275_ISEGS	Costa's hummingbird	COHU	Fatality Search	10/1/2019	10/1/2019	fresh	1-3 days	rump.	singed	3	1	ACC	35.5354	NA
2019 276 ISEGS	unidentified gnatcatcher	UNGN	Fatality Search	10/1/2019	10/1/2019	dead-semi- fresh	3-7 days	curling to all flight feathers with tail singed off, singe to top of head, nape, rump, and axillaries.	Scorched or singed	2;3	1	ACC	-115.4515, 35.5354	NA
								curling to all flight feathers						
						dead-semi-		with many singed off, singe	Scorched or				-115.4518,	
2019_277_ISEGS	cliff swallow	CLSW	Fatality Search	10/1/2019	10/1/2019	fresh	1-3 days	to head, rump, and throat.	singed	2;3	1	ACC	35.5354	NA
								curling to all contour	Scorched or				-115.4517,	
2019_278_ISEGS	unidentified bird (small)	UNID	Fatality Search	10/1/2019	10/1/2019	•	3-7 days	feathers.	singed	3	1	Powerblock	35.5352	NA
						dead-semi-		no evidence of collision or					-115.4519,	
2019_279_ISEGS	MacGillivray's warbler	MGWA	Fatality Search	10/1/2019	10/1/2019	fresh	3-7 days	singe.	unknown	NA	1	Powerblock	35.5352	NA
								curling to all flight feathers,						
2040 200 15565		DICI		40/2/2040	10/2/2010		0.22.4.1	singe to head, nape, back,	Scorched or	2.2	2		-115.4709,	
2019_280_ISEGS	pine siskin	PISI	Incidental	10/2/2019	10/2/2019	dead-fresh	0.33-1 days	and rump.	singed	2;3	2	Powerblock	35.5565	NA
2010 201 15565	A ma a mi a a ma imit	ANADI	lu ai da mbal	10/2/2010	10/2/2010	alion imiomad	0.0.22 dave	curling to flight feathers in	Scorched or	2	2	Perimeter	-115.4837,	NIA
_2019_281_ISEGS	American pipit	AMPI	Incidental	10/3/2019	10/3/2019	alive-injured	0-0.33 days	wings with tail singed off.	singed	2	3	Fence	35.5842	NA
						dood somi		curling to all flight feathers,	Coorebador				115 4705	
2019 282 ISEGS	yellow-rumped warbler	YRWA	Incidental	10/6/2019	10/7/2019	dead-semi- fresh	1-3 days	singe to all of dorsal side and breast.	Scorched or singed	2;3	2	Powerblock	-115.4705, 35.5571	NA
2019_202_I3LU3	yellow-rumped warbier	IIIVVA	incidental	10/0/2019	10/7/2019	116311	1-3 days	curling to left side of	Scorched or	2,3		FOWEIDIOCK	-115.4706,	IVA
2019 283 ISEGS	blue-gray gnatcatcher	BGGN	Incidental	10/6/2019	10/7/2019	dead-fresh	0.33-1 days	rectrices, singe to rump.	singed	1;3	2	ACC	35.5567	NA
	bide Bidy Brideouterier	500.1	moraciicai	10/0/2013	10///2013	dedd iresii	0.55 1 4475	singe to primaries, head,	Scorched or	1,5		7100	-115.4711,	
2019_284_ISEGS	tree swallow	TRES	Fatality Search	10/14/2019	10/14/2019	broken up	8-14 days	and contour feathers.	singed	1;3	2	Powerblock	35.5565	NA
			,	, ,	, ,	'	,	curling to flight feathers,		<u> </u>				-
								singe to head and contour	Scorched or				-115.4827,	
2019_285_ISEGS	house finch	HOFI	Fatality Search	10/14/2019	10/14/2019	alive-injured	0.33-1 days	feathers.	singed	2;3	3	Powerblock	35.5753	NA
						dead-semi-		curling to all flight feathers,	Scorched or				-115.4518,	
2019_286_ISEGS	violet-green swallow	VGSW	Fatality Search	10/14/2019	10/14/2019	fresh	1-3 days	singe to majority of body.	singed	2;3	1	ACC	35.5356	NA
									Scorched or				-115.4701,	
2019_287_ISEGS	ruby-crowned kinglet	RCKI	Fatality Search	10/14/2019	10/14/2019	dead-fresh	0-0.33 days	singe to primaries.	singed	1	2	Powerblock	35.5566	NA
								curling to rectrices, singe to						
2040 200 15500	mula company 111 1 1	DCKI	Farallia C	40/44/2042	40/44/2000	dead-semi-	4.2.4	head, nape, breast, and	Scorched or	4.3	4	4.66	-115.4517,	NI A
	ruby-crowned kinglet	RCKI	Fatality Search	10/14/2019	10/14/2019		1-3 days	coverts.	singed	1;3	1	ACC	35.5354	NA
2010 200 15565	احال میں سرمام محالی سامال	VD\A/A	Eatality Caarel	10/11/2010	10/14/2010	dead-semi-	1 2 days	singe to rectrices and	Scorched or	2.2	2	۸۵۵	-115.4825,	NΙΔ
2019_289_ISEGS	yellow-rumped warbler	YRWA	Fatality Search	10/14/2019	10/14/2019		1-3 days	primaries of left wing.	singed	2;3	3	ACC	35.5757	NA
2010 200 ISECS	Townsend's warbler	TOWA	Fatality Search	10/14/2019	10/14/2019	dead-semi- fresh	1-3 days	singe to primaries, head, and contour feathers.	Scorched or singed	2.2	3	ACC	-115.483, 35.5758	NΔ
2013_230_13EG3	iowiisciiu s Waibiei	IOVVA	i atanty search	10/14/2019	10/14/2019	11 (2)11	I-3 uays	and contour realisers.	Jiligeu	2;3	3	ACC	-110.400, 00.0/00	INA

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
								singe to primaries and rectrices, contour feathers	Scorched or				-115.4828,	
2019 291 ISEGS	red-naped sapsucker	RNSA	Fatality Search	10/14/2019	10/14/2019	dead-fresh	0.33-1 days	and chest.	singed	2;3	3	ACC	35.5759	NA
2013_231_13203	тей-парей зарзискег	MINOA	Tatanty Scarcii	10/14/2013	10/14/2013	ueau-iresii	0.55-1 days	no evidence of collision or	Sirigeu	2,3		ACC	-115.4517,	IVA
2019 292 ISEGS	unidentified bird (small)	UNID	Fatality Search	10/14/2019	10/14/2019	broken up	1-3 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
	amachinea on a (oman)	01115	ratanty scaren	10/11/2013	10/11/2013	отокси ир	10 44/5	38e.	Scorched or	1171		1 OWEI DIOCK	-115.4705,	
2019 293 ISEGS	house finch	HOFI	Fatality Search	10/14/2019	10/14/2019	dead-fresh	0.33-1 days	singe to contour feathers.	singed	1	2	ACC	35.5573	NA
	northern rough-winged	-	,	-, ,	-, ,		,	singe to primaries, contour	Scorched or				-115.4831,	·
2019 294 ISEGS	• •	NRWS	Fatality Search	10/14/2019	10/14/2019	broken up	8-14 days	feathers, and head.	singed	3	3	Powerblock	35.5755	NA
			•			·	•	·	Scorched or				-115.4831,	
2019_295_ISEGS	unidentified warbler	UNWA	Fatality Search	10/14/2019	10/14/2019	feather spot	3-7 days	singe to secondaries.	singed	1	3	Powerblock	35.5756	NA
						dead-semi-		no evidence of singe or					-115.4831,	
2019_296_ISEGS	white-crowned sparrow	WCSP	Fatality Search	10/14/2019	10/14/2019	fresh	3-7 days	collision.	unknown	NA	3	Powerblock	35.5753	NA
									Scorched or				-115.4851,	
2019_297_ISEGS	yellow-rumped warbler	YRWA	Fatality Search	10/14/2019	10/14/2019	feather spot	3-7 days	singe to primaries.	singed	3	3	Heliostat	35.5746	NA
								singe to primaries and	Scorched or				-115.4727,	
2019_298_ISEGS	tree swallow	TRES	Fatality Search	10/14/2019	10/14/2019	broken up	3-7 days	scapulars.	singed	3	2	Heliostat	35.5562	NA
								no evidence of singe or					-115.4851,	
2019_299_ISEGS	unidentified warbler	UNWA	Fatality Search	10/14/2019	10/14/2019	broken up	0.33-1 days	collision.	unknown	NA	3	Heliostat	35.5749	NA
									Scorched or				-115.4849,	
2019_300_ISEGS	yellow-rumped warbler	YRWA	Fatality Search	10/14/2019	10/14/2019	feather spot	3-7 days	singe to rectrices.	singed	1	3	Heliostat	35.5766	NA
								singe to primaries and	Scorched or				-115.4831,	
	unidentified sparrow	UNSP	Fatality Search	10/14/2019	10/14/2019	feather spot	1-3 days	secondaries.	singed	1	3	Heliostat	35.5766	NA
								no evidence of singe or					-115.4841,	
2019_302_ISEGS	unidentified bird (small)	UNID	Fatality Search	10/14/2019	10/14/2019	feather spot	0.33-1 days	collision.	unknown	NA	3	Heliostat	35.5768	NA
								no evidence of singe or					-115.4812,	
2019_303_ISEGS	unidentified sparrow	UNSP	Fatality Search	10/14/2019	10/14/2019	broken up	0.33-1 days	collision.	unknown	NA	3	Heliostat	35.5771	NA
								no evidence of singe or			_		-115.4822,	
2019_304_ISEGS	white-crowned sparrow	WCSP	Fatality Search	10/14/2019	10/14/2019	broken up	0.33-1 days	collision.	unknown	NA	3	Heliostat	35.5774	NA
2010 205 15565		14000	5 . I'' 6 . I	40/44/2040	40/44/2040		271	no evidence of singe or			•		-115.4822,	
2019_305_ISEGS	mourning dove	MODO	Fatality Search	10/14/2019	10/14/2019	feather spot	3-7 days	collision.	unknown	NA	3	Heliostat	35.5774	NA
2040 206 16566		VEDD	to at dament	10/15/2010	40/45/2040		0.22.4 -1	no evidence of singe or		NI A	2	Dannadala di	-115.4705,	NIA
2019_306_ISEGS	verdin	VERD	Incidental	10/15/2019	10/15/2019	dead-tresn	0.33-1 days	collision.	unknown	NA	2	Powerblock	35.5564	NA
2010 207 ICECS	graatar raadrunnar	CDDO	Incidontal	10/16/2010	10/16/2010	footboronet	2 7 days	no evidence of singe or	unknouun	NΙΔ	2	Project	-115.4964,	NIA
2019_307_13EG3	greater roadrunner	GRRO	Incidental	10/16/2019	10/16/2019	feather spot	3-7 days	collision.	unknown Scorched or	NA	3	Structure	35.5665 -115.4701,	NA
2019_308_ISEGS	yellow warbler	YWAR	Incidental	10/20/2019	10/21/2019	dead-fresh	0.33-1 days	curling to several primaries.	singed	1	2	Powerblock	35.5566	NA
2013_300_13203	yellow warbiel	IVVAIN	incidental	10/20/2013	10/21/2013	ueau-iresii	0.55-1 days	curling to flight feathers in	Sirigeu			TOWEIDIOCK	33.3300	IVA
	northern rough-winged					dead-semi-		both wings, singe to	Scorched or				-115.4699,	
2019 309 ISEGS	• •	NRWS	Incidental	10/20/2019	10/21/2019		8-14 days	coverts.	singed	2;3	2	Powerblock	35.5566	NA
					20, 22, 2020		0 1 : 00/0	curling to all flight feathers,					00.0000	
								majority of flight feather						
						dead-semi-		singed off, singe to back	Scorched or				-115.4702,	
2019 310 ISEGS	Townsend's warbler	TOWA	Fatality Search	10/28/2019	10/28/2019		3-7 days	and head.	singed	2;3	2	ACC	35.5569	NA
			•		. , .		,	curling to all flight feathers,	Scorched or	· · ·			-115.4831,	
2019 311 ISEGS	unidentified bird (small)	UNID	Fatality Search	10/28/2019	10/28/2019	broken up	3-7 days	singe to contour feathers.	singed	1;3	3	Powerblock	35.5753	NA
	, ,		•	• •	• •	•	•	-	_	-				

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS#	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	•	Death/Injury	Grade	Unit	=	Coordinates	Revisions
	- Common Nume	Species code					Death, mjary	curling to flight feathers	2 cam, mjar y	0.440	0		Coordinates	
								with majority singed off,						
						dead-semi-		singe to head and most of	Scorched or				-115.4704,	
2019_312_ISEGS	unidentified sparrow	UNSP	Fatality Search	10/28/2019	10/28/2019	fresh	3-7 days	body.	singed	2;3	2	Powerblock	35.5568	NA
									Scorched or				-115.4701,	
_2019_313_ISEGS	yellow warbler	YWAR	Fatality Search	10/28/2019	10/28/2019	broken up	3-7 days	singe to primaries.	singed	1	2	Powerblock	35.5566	NA
								curling to most of flight	Scorched or					
2019_314_ISEGS	unidentified warbler	UNWA	Fatality Search	10/28/2019	10/28/2019	broken up	3-7 days	feathers, singe to coverts.	singed	1	2	Powerblock	-115.471, 35.5571	NA
								curling to several tips of	Scorched or					
2019_315_ISEGS	unidentified bird (small)	UNID	Fatality Search	10/28/2019	10/28/2019	broken up	3-7 days	contour feathers.	singed	3	3	Powerblock	-115.483, 35.5753	NA
								imprint on heliostat						
								matching size and shape of					-115.4842,	
2019_316_ISEGS	Lincoln's sparrow	LISP	Fatality Search	10/28/2019	10/28/2019	dead-fresh	0-0.33 days	species.	collision	NA	3	Heliostat	35.5743	NA
								imprint on heliostat						
								matching size and shape of				_	-115.4842,	
	Lincoln's sparrow	LISP	Fatality Search	10/28/2019	10/28/2019	dead-fresh	0-0.33 days	species.	collision	NA	3	Heliostat	35.5743	NA
2010 210 15505			Iv. 6 I	10/00/0010	10/00/0010		0.4.4.1		Scorched or				-115.4828,	
2019_318_ISEGS	unidentified swallow	UNSW	Fatality Search	10/28/2019	10/28/2019	broken up	8-14 days	curling to all flight feathers.	singed	1	3	Heliostat	35.5743	NA
2040 240 15565	. 1		F . 12. C . I	40/20/2040	10/20/2010	6	271	curling to rectrices. imprint	Scorched or	4	•		-115.4851,	
2019_319_ISEGS	unidentified bird (small)	UNID	Fatality Search	10/28/2019	10/28/2019	feather spot	3-7 days	found.	singed	1	3	Heliostat	35.5748	NA
								imprint on heliostat						
2019 320 ISEGS	unidentified bird (small)	UNID	Fatality Search	10/28/2019	10/28/2019	broken up	3-7 days	matching size and shape of species.	collision	NA	3	Heliostat	-115.485, 35.5749	NA
2019_320_13103	unidentined bird (smail)	UNID	ratality Search	10/20/2019	10/28/2019	broken up	3-7 days	no evidence of collision or	COMISION	INA	3	Heliostat	·	IVA
2019 321 ISEGS	mourning dove	MODO	Fatality Search	10/28/2019	10/28/2019	feather spot	3-7 days	singe.	unknown	NA	3	Heliostat	-115.4852, 35.5749	NA
2019_321_13103	mourning dove	IVIODO	ratanty Search	10/28/2019	10/28/2019	reatrier spot	3-7 days	no evidence of collision or	UIIKIIOWII	IVA	<u> </u>	Heliostat	33.3743	- IVA
2010 222 ISECS	unidentified sparrow	UNSP	Fatality Search	10/28/2019	10/29/2010	feather spot	3-7 days		unknown	NA	3	Heliostat	-115.4852, 35.575	NA
2019_322_13LU3	unidentified sparrow	UNSF	ratanty Search	10/28/2019	10/28/2019	reatrier spot	3-7 days	singe. no evidence of singe or	UIIKIIOWII	IVA	<u> </u>	Heliostat	·	- IVA
2019_323_ISEGS	cactus wron	CACW	Fatality Search	10/28/2019	10/28/2019	broken up	3-7 days	collision.	unknown	NA	3	Heliostat	-115.4853, 35.5754	NA
2019_323_13LU3	cactus wieli	CACVV	ratanty Search	10/28/2019	10/28/2019	broken up	3-7 days	no evidence of collision or	UIIKIIOWII	IVA	<u> </u>	Heliostat	-115.4836,	- IVA
2010 22/ ISEGS	unidentified warbler	UNWA	Fatality Search	10/28/2019	10/28/2019	feather spot	1-3 days	singe.	unknown	NA	3	Heliostat	35.5769	NA
2013_324_13103	dilidelitilled warbiel	ONWA	ratanty Search	10/20/2013	10/20/2015	reather spot	1-5 days	no evidence of collision or	UTIKITOWIT	IVA		Heliostat	-115.4722,	
2010 225 ISEGS	white-crowned sparrow	WCSP	Fatality Search	10/29/2019	10/29/2019	hroken un	3-7 days	singe.	unknown	NA	2	Heliostat	35.5578	NA
2013_323_13143	willte-crowned sparrow	VVCSI	ratanty Search	10/23/2013	10/23/2013	ы окен ир	3-7 days	no evidence of collision or	UIIKIIOWII	IVA		Heliostat	-115.4699,	
2019 326 ISEGS	unidentified bird (small)	LINID	Fatality Search	10/29/2019	10/29/2019	hroken un	3-7 days	singe.	unknown	NA	2	Heliostat	35.5582	NA
2013_320_13203	amachinea bira (smail)	ONID	ratanty Scaren	10/23/2013	10/23/2013	ы окси ир	3 7 days	curling to flight feathers,	Scorched or	IVA		Tichostat	-115.4524,	17/7
2010 327 ISEGS	unidentified bird (small)	UNID	Fatality Search	10/30/2019	10/30/2019	feather spot	3-7 days	singe to 7 contour feathers.	singed	1;3	1	Powerblock	35.5348	NA
2013_327_13103	unidentified bird (smail)	ONID	ratanty Search	10/30/2013	10/30/2013	reather spot	3-7 days	singe to 7 contour reathers.	Scorched or	1,3		TOWEIDIOCK	-115.4513,	IVA
2019 328 ISEGS	unidentified bird (small)	UNID	Fatality Search	10/30/2019	10/30/2019	feather spot	3-7 days	curling to both primaries.	singed	1	1	Powerblock	35.5349	NA
	amacmamea ema (eman)	02	· atanty sea. c	20,00,202	20,00,202	.catc. spec	0 / 00,0	no evidence of collision or	5860				-115.4517,	
2019 329 ISFGS	unidentified bird (small)	UNID	Fatality Search	10/30/2019	10/30/2019	feather spot	3-7 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
		**** <u></u>	,	,,			,-	no evidence of collision or		.,,,			-115.4514,	
2019 330 ISEGS	unidentified bird (small)	UNID	Fatality Search	10/30/2019	10/30/2019	feather spot	3-7 days	singe.	unknown	NA	1	Powerblock	35.5351	NA
		<u> </u>	. ataney ocuron	_0,00,2013	_5,55,2515	.camer spot	2.44,5	curling to primaries and		1471			33.3331	
								rectrices. singe to breast,						
								top of head, rump, and	Scorched or				-115.4833,	
2019_331_ISEGS	house finch	HOFI	Incidental	11/5/2019	11/5/2019	alive-injured	0-0.33 days	coverts.	singed	1;3	3	Powerblock	35.5756	NA

Detection Collection Time Since Description of Cause of Burn P	•	SPUT Revisions
	-115.4832,	
	Powerblock 35.5758	NA
curling to all flight feathers,		
singe to head, nape, breast, Scorched or		
		NA
no evidence of collision or	-115.4813,	A.I.A.
	Heliostat 35.5768	NA
curling to all flight feathers,		
singe to head, nape, breast, Scorched or 2019_335_ISEGS house finch HOFI Fatality Search 11/13/2019 11/13/2019 dead-fresh 0.33-1 days and back. singed 2;3 3 A	ACC -115.483, 35.5757	NΑ
curling to flight feathers in	-113.463, 33.3737	<u>IVA</u>
both wings with tail singed		
dead-semi- off, singe to all of dorsal Scorched or		
-	ACC -115.47, 35.557	NA
northern rough-winged no evidence of collision or	-115.4823,	
2019_337_ISEGS swallow NRWS Fatality Search 11/13/2019 11/13/2019 feather spot 8-14 days singe. unknown NA 3 P	Powerblock 35.5762	NA
Scorched or	-115.4831,	
2019_338_ISEGS unidentified bird (small) UNID Fatality Search 11/13/2019 11/13/2019 broken up 3-7 days singe to coverts. singed Unknown 3 P	Powerblock 35.5755	NA
curling to several flight Scorched or	-115.4706,	
2019_339_ISEGS unidentified warbler UNWA Fatality Search 11/13/2019 11/13/2019 feather spot 3-7 days feathers. singed 1 2 P	Powerblock 35.5567	NA
curling to tips of several Scorched or	-115.4704,	
2019_340_ISEGS unidentified bird (small) UNID Fatality Search 11/13/2019 11/13/2019 feather spot 3-7 days contour feathers. singed 3 2 P	Powerblock 35.5568	NA
no evidence of collision or	-115.4836,	
		NA
no evidence of collision or	-115.4697,	
		NA
no evidence of collision or	-115.4711,	
		NA
curling to all flight feathers, Scorched or	-115.4523,	
		NA
curling to all flight feathers, Scorched or	-115.4518,	NI A
		NA
no evidence of collision or 2019_346_ISEGS unidentified sparrow UNSP Fatality Search 11/14/2019 11/14/2019 broken up 3-7 days singe. unknown NA 1 F	-115.4493, Heliostat 35.5362	NIA
	Hellostat 55.5562	NA
no evidence of collision or 2019_347_ISEGS unidentified bird (small) UNID Fatality Search 11/14/2019 11/14/2019 broken up 3-7 days singe. unknown NA 1 P	Powerblock -115.451, 35.5354	NA
no evidence of collision or	-115.4505,	<u>NA</u>
	•	NA
no evidence of collision or	-115.4527,	IVA
	•	NA
curling to primaries and	33.3330	
secondaries, singe to Scorched or	-115.4521,	
	-	NA
no evidence of collision or	-115.4492,	
tie etteettee et eetteett et		NA
	Heliostat 35.5337	INA
	-115.4518,	<u>INA</u>

				Detection	Collection		Time Since	Description of	Cause of	Burn		Nearest Project		SPUT
USFWS #	Common Name	Species Code	How Found	Date	Date	Condition	Death/Injury	Carcass/Injury	Death/Injury	Grade	Unit	Feature	Coordinates	Revisions
								coverts curled on partial	Scorched or				-115.4699,	
2019_353_ISEGS	unidentified bird (small)	UNID	Fatality Search	11/25/2019	11/25/2019	broken up	3-7 days	left wing	singed	Unknown	2	Powerblock	35.5575	NA
								body feathers around neck	Scorched or				-115.4705,	
2019_354_ISEGS	American pipit	AMPI	Fatality Search	11/25/2019	11/25/2019	broken up	3-7 days	area singed	singed	3	2	Powerblock	35.5573	NA
						dead-semi-		singe on left side of face	Scorched or				-115.4694,	
2019_355_ISEGS	lesser goldfinch	LEGO	Fatality Search	11/25/2019	11/25/2019	fresh	8-14 days	and coverts	singed	1;3	2	Powerblock	35.5568	NA
						·		no evidence of singe or						
2019_356_ISEGS	unidentified bird (small)	UNID	Fatality Search	11/26/2019	11/26/2019	broken up	3-7 days	collision.	unknown	NA	1	Powerblock	-115.452, 35.535	NA