

## DOCKETED

<b>Docket Number:</b>	09-AFC-07C
<b>Project Title:</b>	Palen Solar Power Project - Compliance
<b>TN #:</b>	201710
<b>Document Title:</b>	Palen Solar Holdings, LLC's Compilation of Avian Data at Various Solar Projects
<b>Description:</b>	N/A
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<b>Organization:</b>	Galati   Blek LLP
<b>Submitter Role:</b>	Applicant Representative
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**AVIAN MORTALITY INFORMATION FROM 2012/2013 MONTHLY OR QUARTERLY COMPLIANCE REPORTS**

Monthly Totals	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec
Genesis (Trough)	0	0	0	0	2	0	6	2	0	4	0	0	0	0	3	4	10	4	27	66	7	11	2	6
Desert Sunlight (PV)	2	0	2	0	2	2	3	4	4	4	6	0	1	1	1	8	7	11	11	7	6	39	12	1
ISEGS (Tower)	1	0	1	3	1	0	2	1	2	1	1	2	2	1	1	3	5	5	7	7	30	50	11	13
Totals by Month	3	0	3	3	5	2	11	7	6	9	7	2	3	2	5	15	22	20	45	80	43	100	25	20

Yearly Totals	2012	2013
Genesis (Trough)	14	140
Desert Sunlight (PV)	29	105
ISEGS (Tower)	15	135

Color Code Legend	Location not reported	Open area	Fence	Pond	Solar trough, panel, or heliostat	Solar Tower	Solar Flux	Power block or building	T/L, power line, sub-station	Road or vehicle	Drainage channel	Const. Laydown Area	Carcass surveys conducted

**THIS IS A SUMMARY SHEET--PROJECT SPECIFIC DATA FOLLOWS ON NEXT PAGES**

GENESIS	2012												2013											
	Month	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov
Monthly Total	0	0	0	0	2	0	6	2	0	4	0	0	0	0	3	4	10	4	27	66	7	11	2	6
					Unknown		Bullocks Oriole	Mourning dove		American coot					Lesser goldfinch	Black throated grey warbler	Pied billed grebe	Mourning dove	Barn owl	White winged dove	Grebe species (netting)	Clark's grebe (netting)	Gadwall	House finch
					Unknown		Bullocks Oriole	Lesser nighthawk		Unknown small bird					Lesser goldfinch	House wren	Wilson's warbler	Barn owl	Cliff swallow	Tree swallow	MacGillivray's warbler	Green wing teal	Pigeon	Unknown
							Western meadow lark			American kestrel					Bufflehead	Orange-crowned warbler	Hermit thrush	Great Blue Heron	Yellow headed blackbird	Tree swallow	Yellow breasted black bird	Green wing teal		White crowned sparrow
							Unknown species			Barn owl						Pied-billed grebe (netting)	Wilson's warbler	Barn owl	Mourning dove	Cowbird	Unknown water bird	Blue wing teal		Grebe species (netting)
							Brewers blackbird										Townsend's warbler		Barn owl	Cowbird	Grebe species (netting)	Marsh wren		Grebe species (netting)
							Mourning dove										Western grebe		American coot	Herring gull	Mourning dove	Lesser goldfinch		Unknown
																	Yellow warbler	Bat western pipestrelle	Say's Phoebe	Unknown	Cooper's hawk			
																	Unknown warbler		Great blue heron	Cliff swallow		Passerine species		
																	Unknown sparrow		American kestrel	Gull		Orange-crowned warbler		
																	American coot		Yellow headed blackbird	Bullock's Oriole		Bat		
																			Unknown	Cliff swallow		Bat		
																			Bat western pipestrelle	Eared grebe				
																			Great roadrunner	Yellow headed blackbird				
																			Brown pelican	Common loon				
																			Cliff swallow	Bullock's Oriole				
																			Lesser nighthawk	Tree swallow				
																			Cliff swallow	Rough wing swallow				
																			Cowbird	Cowbird				
																			Unknown	Cowbird				
																			Say's Phoebe	Mourning dove				
																			Cowbird	Black headed Grosbeak				
																			Great blue heron	Common loon				
																			Cowbird	Black phoebe				
																			Great tailed grackle	Mourning dove				
																			American kestrel	Cliff swallow				
																			Brown pelican	Cliff swallow				
																			Canyon bat	Flycatcher				
																				Mourning dove				
																				Lesser nighthawk				
																				Sora				

### LEGEND

Location not reported	Open area	Fence	Pond	Solar trough, panel, or heliostat	Solar Tower	Solar Flux	Power block or building	T/L, power line, sub-station	Road or vehicle	Drainage channel	Const. Laydown Area	Carcass surveys conducted
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GENESIS, cont.	2012												2013											
	Month	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov

Tree swallow
Blue winged teal
Cowbird
Mourning dove
Sora
Tree swallow
Tree swallow
Yellow headed blackbird
Cowbird
Cowbird
Bullock's Oriole
Bullock's Oriole
Bunting (Lazul?)
Bunting (Lazul?)
Cowbird
Cowbird
Cowbird
Passerine species
Passerine species
Passerine species
Passerine species
Unknown
Unknown
Unknown
Passerine species
Eared grebe
Gull - ring billed
Hermit warbler
Lesser nighthawk
Unknown
American Kestral
Chipping sparrow
Bat
Bat
Bat
Bat

LEGEND												
Location not reported	Open area	Fence	Pond	Solar trough, panel, or heliostat	Solar Tower	Solar Flux	Power block or building	T/L, power line, sub-station	Road or vehicle	Drainage channel	Const. Laydown Area	Carcass surveys conducted

DESERT SUNLIGHT	2012												Bat											
	Month	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov
Monthly Total	2	0	2	0	2	2	3	4	4	4	6	0	1	1	1	8	7	11	11	7	6	39	12	1
	Burrowing owl		Black tailed gnatcatcher		Western grebe	Unknown	Yellow headed blackbird	Yellow headed blackbird	Cowbird	White crowned sparrow	Barn owl		Common poorwill	Common poorwill	Loggerhead shrike	Loggerhead shrike	Yuma clapper rail	Mourning dove	Townsend's warbler	Brewer's blackbird	Common yellowthroat	Western grebe	Western grebe	Eared grebe
	Praire falcon		Costa's humming bird		Brewer's blackbird	American kestrel	Sparrow	Wilson's warbler	American avocet	American avocet	Long-eared owl					White-crowned sparrow	Wilson's warbler	Common loon	Brown pelican	Western tanager	Eared grebe	Eared grebe	Western meadow lark	
							Loggerhead shrike	Yellow rumped warbler	American avocet	Blackbird	Unknown					Eared grebe	Loggerhead shrike	Mourning dove	Brown pelican	Eared grebe	Unknown	Eared grebe	Western grebe	
								Pallid bat	American avocet	Eared grebe	American avocet					Surf scooter	Western tanager	Eared grebe	Brown pelican	Cowbird	Unknown	Sora	Western grebe	
											Mourning dove					Great-tailed grackle	Townsend's warbler	Western grebe	Black crowned night heron	Western tanager	Savannah sparrow	American coot	Sora	
											American avocet					Red-breasted Merganser	Lesser nighthawk	American coot	Ash throated fly catcher	Pied billed grebe	Common raven	Western grebe	Red-necked Phalarope	
																Horned lark	Wilson's warbler	Double breasted commorant	Black headed grosbeak e	Wilson's warbler		Eared grebe	Great egret	
																Double-breasted comorant		Common raven	Tree swallow			Sora	Western grebe	
																		Great tailed grackle	Horned lark			American coot	Sora	
																		Double breasted commorant	Common poorwill			EAGR (?)	Red-necked Phalarope	
																		Costa humming bird	Great tailed grackle			Mourning dove	Western grebe	
																						American Avocet	Great egret	
																						Eared grebe		
																						Mourning dove		
																						Eared grebe		
																						American Avocet		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Western grebe		
																						Yellow headed blackbird		

### LEGEND

Location not reported	Open area	Fence	Pond	Solar trough, panel, or heliostat	Solar Tower	Solar Flux	Power block or building	T/L, power line, sub-station	Road or vehicle	Drainage channel	Const. Laydown Area	Carcass surveys conducted
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Month	2012												2013											
	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec

Western grebe
Western grebe
Western grebe
Blue-winged teal
American coot
American coot
Mourning dove
Western grebe
Yellow headed blackbird
Western grebe
Blue-winged teal
American coot
Mourning dove
American coot

LEGEND												
Location not reported	Open area	Fence	Pond	Solar trough, panel, or heliostat	Solar Tower	Solar Flux	Power block or building	T/L, power line, sub-station	Road or vehicle	Drainage channel	Const. Laydown Area	Carcass surveys conducted

ISEGS	2012												2013											
	Month	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov
Monthly Total	1	0	1	3	1	0	2	1	2	1	1	2	2	1	1	3	5	5	7	7	30	50	11	13
	Eared grebe		Black-throated sparrow	Savannah sparrow	Western tanager		Yellow-billed Cuckoo	Lesser nighthawk	Western tanager	Pine siskin	Chipping sparrow	American coot	White-crowned sparrow	Cooper's hawk	Loggerhead shrike	Brewer's sparrow	Loggerhead shrike	White-throated swift	Greater roadrunner	Lesser Nighthawk (DT holding pens)	Western tanager	House finch	Rock pigeon	American Pipit
				Yellow-rumped warbler			Cooper's hawk		American coot			Unknown	Loggerhead shrike			White-crowned sparrow	Unknown passerine	Lesser nighthawk	Blue-gray gnatcatcher	Gnatcatcher (DT holding pens)	Unknown	House finch	Unknown	American kestrel
				American coot												Green-tailed Towhee	Horned lark	Flycatcher	Ash-throated flycatcher	Common raven	Chipping sparrow	Yellow-rumped Warbler	Greater roadrunner	Northern Flicker
																	Western tanager	Common Poorwill	Black-throated sparrow	White-throated swift	Unknown	Verdin	Blackbird species	Mourning dove
																	Wilson's warbler	Greater roadrunner	Lesser nighthawk	Common raven	MacGillivray's warbler	Unknown	Yellow-rumped Warbler	American coot
																			Black-throated sparrow	Lazuli bunting	Blue-Gray Gnatcatcher	House finch	Yellow-rumped Warbler	American pipit
																			Northern mockingbird	Loggerhead shrike	Brewer's sparrow	House finch	Greater roadrunner	Great tailed Grackle
																				Unknown	Wilson's warbler	Greater roadrunner	Great tailed Grackle	
																				Mourning dove	Verdin	Savannah sparrow	Say's Phoebe	
																				Unknown	Yellow-rumped warbler	American Pipit	Western meadow lark	
																				Unknown	Blue-winged teal	Unknown	Western meadow lark	
																				White-throated swift	Blue-winged teal			Mourning dove
																				American coot	Mourning dove			Brewer's blackbird
																				Cowbird	American coot			
																				Wilson's warbler	Lincoln's sparrow			
																				Black throated Gray warbler	Unknown			
																				Cassin's vireo	House finch			
																				House finch	American coot			
																				Mourning dove	Unknown			
																				Unknown	Yellow-rumped warbler			
																				Mourning dove	Unknown			
																				Unknown	Yellow-rumped warbler			
																				Mourning dove	Verdin			
																				Unknown	Yellow-rumped warbler			
																				Mourning dove	Unknown			
																				Mourning dove	House finch			

### LEGEND

Location not reported	Open area	Fence	Pond	Solar trough, panel, or heliostat	Solar Tower	Solar Flux	Power block or building	T/L, power line, sub-station	Road or vehicle	Drainage channel	Const. Laydown Area	Carcass surveys conducted
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ISEGS, cont.	2012												2013												
	Month	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec
																						Mourning dove	House finch		
																						Unknown	Unknown		
																						Unknown	Unknown		
																						Townsend's Warbler	Yellow-rumped warbler		
																						Unknown	Yellow-rumped warbler		
																							White-crowned sparrow		
																							House finch		
																							Yellow-rumped warbler		
																							Yellow-rumped warbler		
																							House finch		
																							Mourning dove		
																							Yellow-rumped warbler		
																							Black and white warbler		
																							Unknown		
																							American coot		
																							Yellow-rumped warbler		
																							Yellow-rumped warbler		
																							Great-tailed grackle		
																							Unknown		
																							Spotted sandpiper		
																							Yellow-rumped warbler		
																							Mourning doe		
																							Townsend's warbler		
																							White-crowned sparrow		
																							Unknown		

LEGEND												
Location not reported	Open area	Fence	Pond	Solar trough, panel, or heliostat	Solar Tower	Solar Flux	Power block or building	T/L, power line, sub-station	Road or vehicle	Drainage channel	Construction laydown area	Carcass surveys conducted