Appendix D

Kern Water Bank Raptor and Upland Bird Survey Report: August 2012 – June 2015



This page intentionally left blank.

Woodland CA 95695 Phone: 530 908-3836 E-Mail: jsterling@wavecable.com Web: www.sterlingbirds.com

Kern Water Bank

Raptor and Upland Bird Survey Report: August 2012 - April 2015

1 June 2015

Introduction

The property managed by the Kern Water Bank Authority supports a wealth of native wildlife, especially an abundance of upland birds and raptors attracted to the recharge ponds and/or the upland habitats. In order to document and quantify this natural resource value, John Sterling of Sterling Wildlife Biology conducted bird surveys from late August 2012 to late May 2015. These surveys are intended to capture a snapshot of the bird use of the project area during the winter, spring/fall migration and the breeding seasons. The resulting data serve to document the regional importance of habitats on the Kern Water Bank for raptors and upland birds during this period. Most importantly, the data describe the baseline of existing conditions that may be used to inform range management practices with regard to productive bird habitat. This baseline data will be used to measure population trends with range management enhancement and/or unmanaged changes in habitat due to the extension or end of current drought conditions.

Methods

Survey Methods

For the raptor/Loggerhead Shrike and upland bird surveys, John Sterling visited the sites approximately every two weeks for a total of sixty-three surveys. The dates of the surveys were approximately every two weeks starting on 31 August 2012 to 29-30 May 2015, with breaks in June and July. Surveys were not conducted during the summer period as most nesting had been completed by 30 May and there were few birds remaining on the study area until fall migration began in mid-August. Upland bird surveys were conducted on fixed, one-half mile long transects (Figure 1). Mr. Sterling conducted upland bird surveys by walking transects and recording all birds heard or seen within 200 meters of the transect line. He tabulated the numbers of each species. Each transect was surveyed fifty-nine times with the exception of new transects that were created in October 2012 and surveyed fifty-seven times. Transects were 0.5 miles long with the exception of Transect G, which was 0.25 miles long due to the small size of that habitat fragment. For sixty-three sets of raptor surveys, Mr. Sterling drove most roads to cover the entire project area and kept running tallies of numbers of individuals of all raptor species and Loggerhead Shrike. All data were compiled onto spreadsheets (See attached Appendix B & C files).

Descriptions of Upland Bird Survey Transects

The following are brief descriptions of the bird habitat along each of the survey transects including photographs showing conditions on 7 June 2013.

Transect A

The transect borders a large canal that is watered and supports a few water birds. As such, it also supports tules and some sunflowers and other ruderal plants along its edge. There are several large willow trees (*Salix sp.*) but the habitat is mostly open, ruderal fields with some tumbleweed cover (*Salsola* sp.). During wet years, the ruderal vegetation is rank and relatively tall (up to 4 ft).



Figure 1. Locations of Upland Bird Survey Transects on the Kern Water Bank



Transect B

This transect borders a canal that was watered until spring 2012. It supports several willow trees along its banks along with mulefat, thistles and other ruderal vegetation. The fields are dry ponds and support ruderal vegetation.



Transect C

This transect is a honey mesquite (*Propospis glandulosa*) woodland with some tree tobacco, annual grasses and some ruderal vegetation.



Transect D

This transect has one small willow and the upland fields are dominated by tumbleweed up to four feet tall. These fields have been mowed during the fall months greatly reducing vegetation cover.



Transect E

The west side of this transect is a dry pond that is now an open willow woodland with moderate ruderal and annual grassland cover. The east side is a dry pond that is now a ruderal field with low, sparse vegetative cover.



Transect F

This transect has a honey mesquite woodland on the south side, with some annual grasses, but otherwise little vegetative cover apart from the mesquite. On the north side is a dry pond that is a ruderal field.



Transect G

This transect has several honey mesquite shrubs on the east side, but the west side is dominated by saltbush (Atriplex sp.).



Transect H

This transect has some Fremont cottonwood saplings, along with an open honey mesquite woodland and tall ruderal vegetation (mowed in late fall) on the west side. The east side is a dry pond and now a ruderal field.



Transect I

This transect has two small willow trees in a field dominated by tumbleweed on the south side, while the north side is an alfalfa field on property adjacent to the project area.



Special-Status Species Criteria

In evaluating the potential presence of special-status species, the following criteria were used to determine which species should be included:

- Bird species listed, or proposed for listing, as threatened or endangered under the ESA (50 CFR 17.11 [listed animals], and various notices in the Federal Register [proposed species]);
- bird species that are candidates for possible future listing as threatened or endangered under the ESA (61 FR 40: 7596-7613, February 28, 1996);
- bird species listed, or proposed for listing, by the State of California as threatened or endangered under CESA (14 CCR 670.5);
- bird species that meet the definitions of rare or endangered under CEQA (CEQA Guidelines, Section 15380);
- bird species of special concern to CDFG (CDFG in preparation [birds, Shuford and Gardali 2008]; .
- bird species fully protected in California (California Fish and Game Code, Section 3511 [birds]; and .
- bird species included in CDFG's list of special animals and monitored by the California Natural Diversity Database (CNDDB).

Results

Two hundred and eight species of birds have been recorded thus far at the Kern Water Bank during water bird, upland bird and raptor surveys since this project began in mid October 2011 (Appendix A). Many of those are discussed below or in the previous reports (Sterling Wildlife Biology, 27 April 2012 and 9 December 2013).

Upland Birds

One hundred and eleven species of birds were detected during the upland bird surveys. Of the nine transects, Transects A and C have the largest number of species with sixty-eight thus far (Figure 2). This number does not include some waterbirds that occasionally inhabit the watered canal on Transect A. Although species richness (number of species) did not vary greatly over time in each transect, numbers of birds counted fluctuated greatly (Figures 3-11). Transects with the most birds contained mesquite and/or willow trees although Transect I with its grassland and alfalfa harbored large numbers of sparrows during the winter.

Figure 2. Cumulative Number of Species Found in each Transect

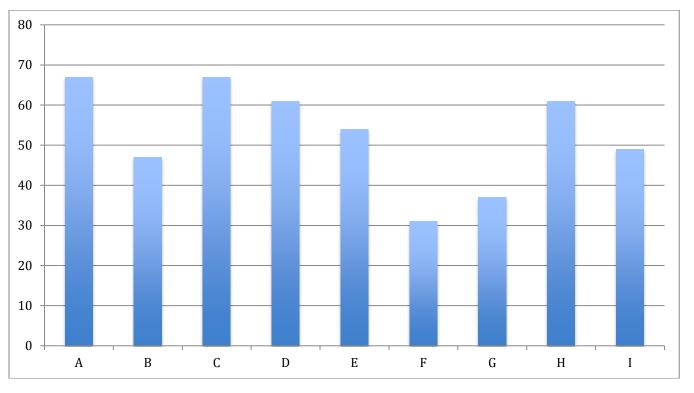


Figure 3. Number of Birds and Bird Species: Transect A.

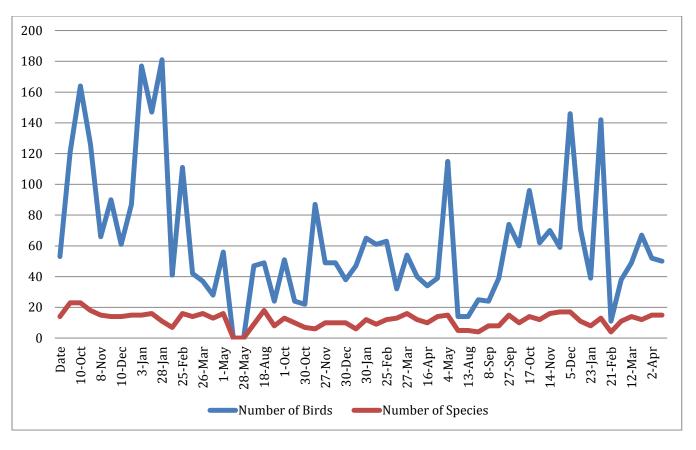


Figure 4. Number of Birds and Bird Species: Transect B.

8



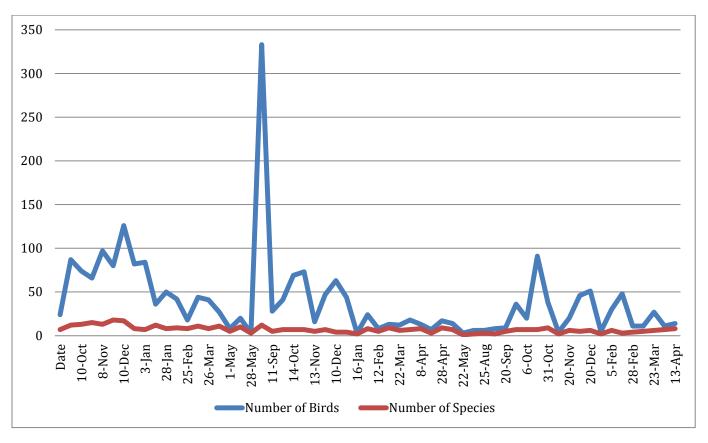


Figure 5. Number of Birds and Bird Species: Transect C.

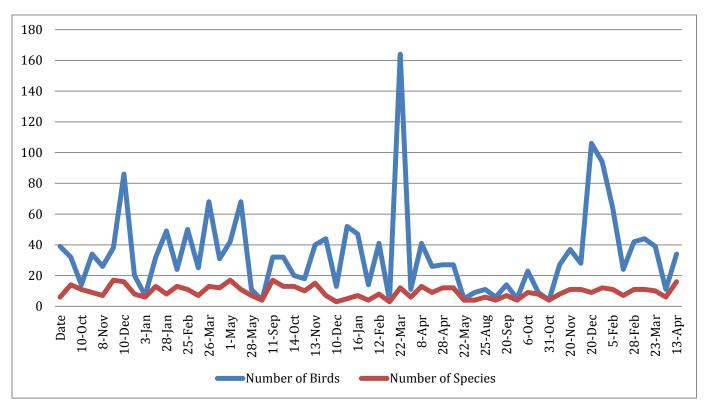


Figure 6. Number of Birds and Bird Species: Transect D.



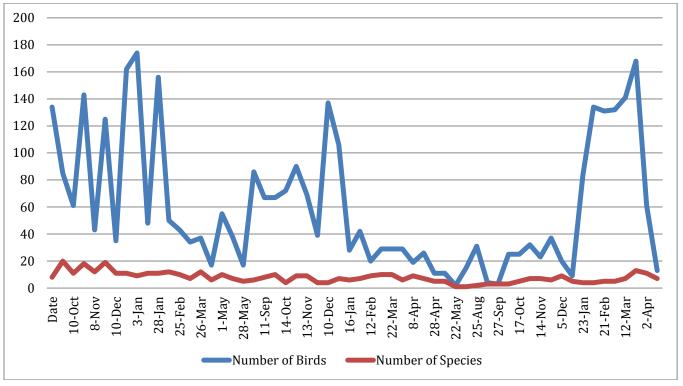


Figure 7. Number of Birds and Bird Species: Transect E.

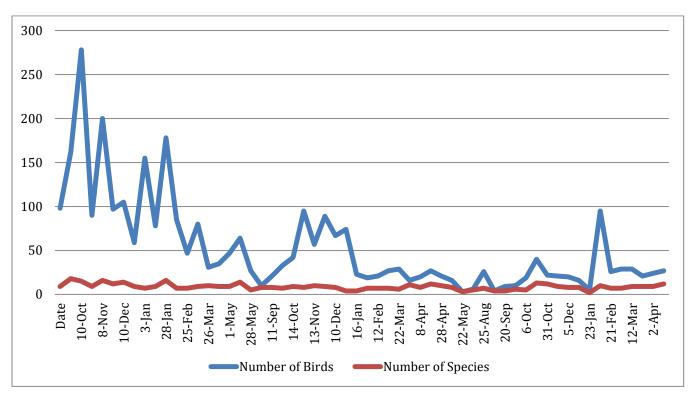


Figure 8. Number of Birds and Bird Species: Transect F.



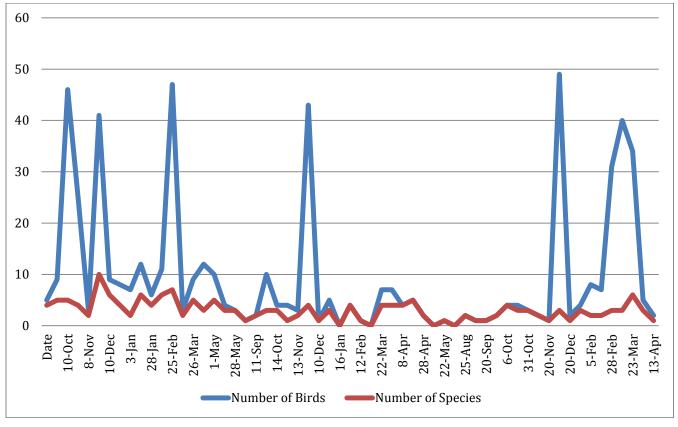


Figure 9. Number of Birds and Bird Species: Transect G.

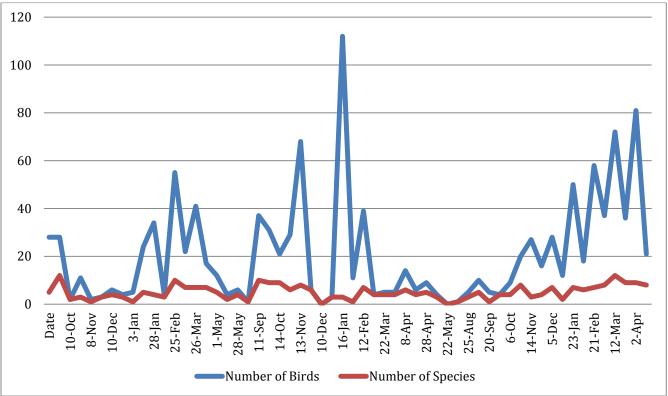


Figure 10. Number of Birds and Bird Species: Transect H.



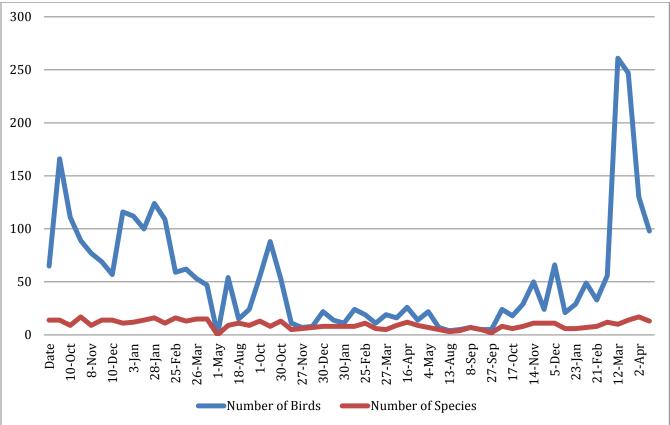
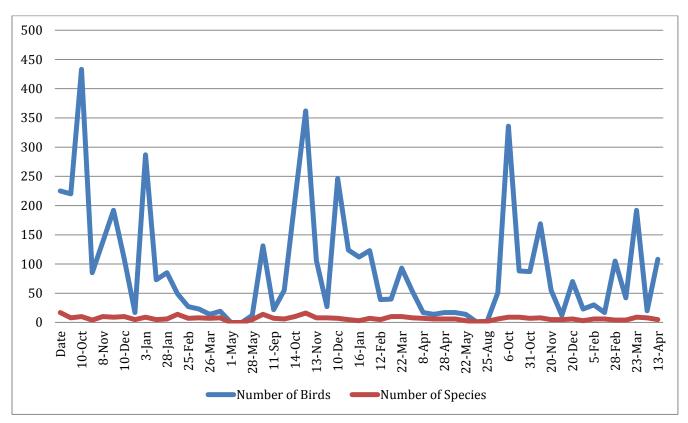


Figure 11. Number of Birds and Bird Species: Transect I.



Raptors and Shrikes

The comprehensive survey for raptors and Loggerhead Shrikes on the entire project area resulted in high numbers of raptors including Red-tailed Hawks and Loggerhead Shrikes (Figures 20-22), but also documented fourteen species of raptors using upland habitats during the surveys (Appendix B). Overall numbers of raptors dipped sharply after the winter of 2012-2013 and then steadily declined to fewer than twenty individuals from February 2014 through May 2015. Conversely, Loggerhead Shrikes

rebounded during the breeding season in 2015 after a similar decline (Figure 21). The increase from ten to fifty-five during a two-month period in spring 2015 was due to good reproductive success of local breeding population. The primary difference among the habitat conditions between spring of 2014 and 2015 was the lack of grasses and forbs in 2014 that resulted in low prey populations (large insects and lizards) in contrast to the tremendous amount of grasses and forbs in winter and spring of 2015.

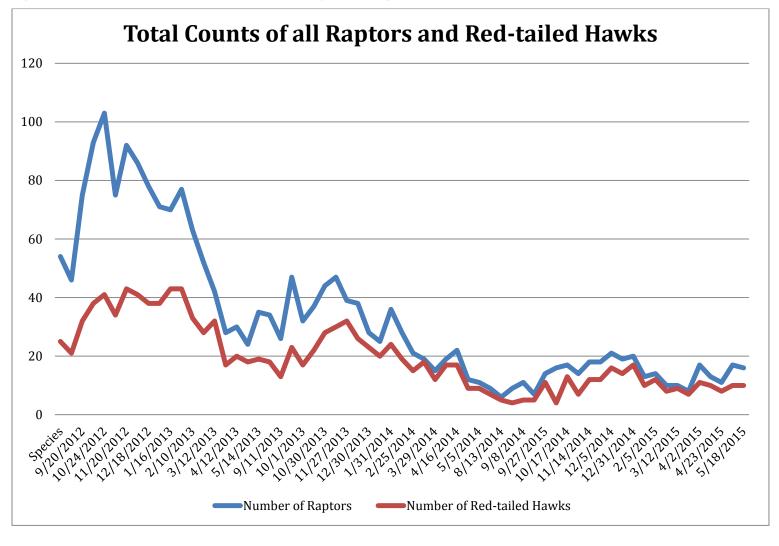
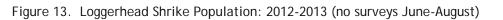
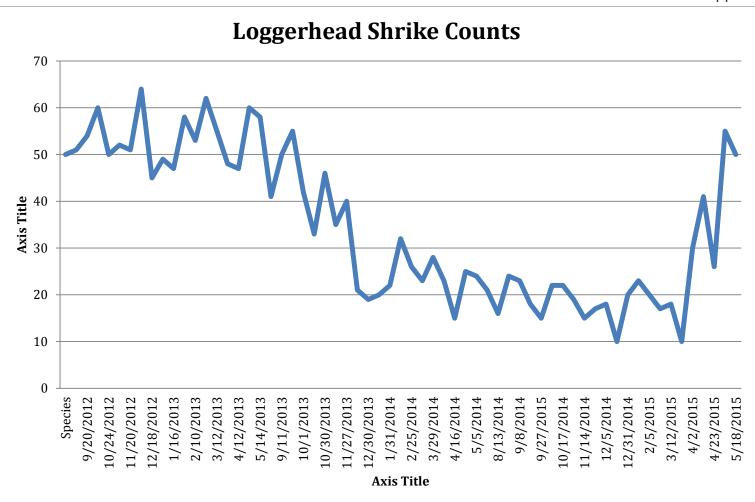


Figure 12. Raptor Population: 2012- 2013 (no surveys June-August)





Special Status Bird Species

There have been twenty-five special-status bird species found during the raptor and upland bird surveys since the project began in October 2011 (Table 2) with an additional fourteen species of waterbirds found during waterbird surveys in winter 2011-12.

Table 1. Species Status Bird Species (Landbirds and Raptors) found on the Kern Water Bank

Species Name	Conservation/Legal Status	Seasonal Status	Habitat	Record Dates
Cooper's Hawk	CA Watch List	Migration, Winter, Potential nesting	Nests in trees, hunts in woodlands and open grasslands	Daily during migration
White-tailed Kite	State Fully Protected	Migration, Winter, Potential nesting	Nests in trees, hunts in open grasslands	Daily during migration and winter in 2011- 2013, but absent since then
Northern Harrier	CA Species of Special Concern	Migration, Winter, Potential nesting	Nests on the ground, hunts in wetlands and open grasslands	Daily during migration and winter in 2011- 2013, but mostly absent since then with a few scattered records of individual migrants
Swainson's Hawk	CA Threated Species	Nesting, Migration, Winter	Nests in trees, hunts in open grasslands	Nesting in summer 2012, scattered winter records in 2011-12; up to five individuals in

				15
				March-May 2013; up to three individuals in March-May 2014; and up to four individuals in April/May 2015. No nest located on water bank property in 2015.
Ferruginous Hawk	CA Watch List	Winter	Hunts in open grasslands	Daily during winter
Golden Eagle	State Fully Protected and Federal Eagle Protection Act	Winter	Hunts in open grasslands	Four winter records
Osprey	CA Watch List	Migration, Winter	Hunts in wetlands and canals	Daily during winter 2011-12, only a few sightings of migrants since then
Mountain Plover	CA Species of Special Concern and Federal Proposed Threatened	Migration, Winter	Roosts and forages in grasslands	Two on 14 October 2013
Long-billed Curlew	CA Watch List and Federal Bird of Conservation Concern	Migration, Winter	Roosts and forages in grasslands and wetlands	Scattered winter and migration records
Burrowing Owl	CA Species of Special Concern	Nesting, Migration, Winter	Nests and hunts in grasslands	Found on most visits through year, and nested each spring
Vaux's Swift	CA Species of Special Concern	Migration	Forages over wetlands and grasslands	Found during spring migration visits
Merlin	CA Watch List and Federal Bird of Conservation Concern		Hunts in grasslands and wetlands	Regular during late fall and winter
Peregrine Falcon	Federal Bird of Conservation Concern	Migration, Winter	Hunts in grasslands and wetlands	Regular during fall and winter of 2011-12, scattered records since then
Prairie Falcon	CA Watch List and Federal Bird of Conservation Concern	Migration, Winter	Hunts in grasslands	Found on most visits from November through March
Nuttall's Woodpecker	Federal Bird of Conservation Concern	Nesting, Migration, Winter	Nests in trees, forages in woodlands	Found during most survey visits.
Willow Flycatcher	CA Endangered Species	Migration	Roosts in trees, hunts in open woodlands forages	Regular during migration
Vermilion Flycatcher	CA Species of Special Concern	Migration, Winter. Potential nesting	Nests in trees, forages in open woodlands and scrublands	Several winter records of at least three individuals since 2011
Loggerhead Shrike	CA Species of Special Concern and Federal Bird of Conservation Concern	Nesting, Migration, Winter	Nests in trees, hunts in open woodlands and scrublands	Found during each survey visit.
California Horned Lark	CA Watch List	Nesting, Migration, Winter	Nests on ground, forages in barren fields with little grassland cover	Found during each survey visit. Many breeding during 2015.
Purple Martin	CA Species of Special Concern	Migration	Forages over wetlands and grasslands	1 April 2012
Lucy's Warbler	CA Species of Special Concern	Migration	Nests in trees, hunts in open woodlands and scrublands	1-4 October 2012; second record for the entire Central Valley
Grasshopper Sparrow	CA Species of Special Concern	Migration, Winter, Potential nesting	Nests on ground in grasslands	13 November and 10 December 2013
Tricolored Blackbird	CA Species of Special Concern and Federal Bird of Conservation	Nesting, Migration, Winter	Nests in ruderal and marsh vegetation, forages in grasslands, fields and	Nesting in summer 2012, found most days in migration and winter

16

				10
	Concern		wetlands	during 2011-2012;
				nesting off site in 2015
				but foraging at many
				locations on the water
				bank property
Yellow-headed Blackbird	CA Species of Special	Migration, Winter.	Nests in marsh vegetation,	Regular during
	Concern	Potential nesting	forages in grasslands, fields	migration and winter in
			and wetlands	2011-12
Lawrence's Goldfinch	Federal Bird of	Migration, Winter,	Nests in trees, forages in	Two late fall records in
	Conservation Concern	Potential nesting	open woodlands and	2013 and one spring
			scrublands	record of a pair on 23
				April 2015.

Rare Birds

A few birds were discovered during the surveys that are not special-status species, but out of their normal range. These records are very important to our understanding of vagrancy in birds and the data are archived by county editors for "North American Birds" magazine and the online eBird database (administered by Cornell University's Laboratory of Ornithology). During fall migration two Black-throated Sparrows were found on Transects A and C. This desert species is very rare in the Central Valley. A fall migrant Clay-colored Sparrow was in mesquite and cottonwoods between transects A and B. This midwestern species is rare anywhere in California and especially in the Central Valley from which there are fewer than ten documented records. Surprisingly, no fewer than eight Brewer's Sparrows were found wintering in 2012-13 as there are very few documented records of this Great Basin and desert species during winter months in the Central Valley. There have been seven records of migrant Sage Thrashers—a Great Basin species, which is a rare but annual migrant in the Central Valley. During a 2012 fall survey, a Chestnut-collared Longspur was heard calling in flight over Transect I. This is a very rare wintering bird in the San Joaquin Valley and Tulare Basin with fewer than ten records. On a Christmas Bird Count before these surveys began, an Eastern Phoebe was documented for one of very few San Joaquin Valley and Tulare Basin records of this eastern species, which rarely occurs in California. During a spring surveys on 1 April 2012 and 12 March 2015, single Cassin's Kingbirds were found establishing the only Tulare Basin records away from eastern Bakersfield (only one record from nearby Kings County). Also on 1 April 2012, a male Purple Martin was photographed migrating over grasslands for one of few records for the Tulare Basin and San Joaquin Valley. The Kern Water Bank has exceptional habitats for birds and many rare birds will likely be found and documented in the future dependent upon survey efforts.

Discussion

The bird use of property managed by the Kern Water Bank Authority is clearly very high in accordance to the large acreages of upland habitats. Overall, in terms of bird abundance, species diversity, acreage, location and habitat diversity, it is an important area of upland habitat, especially when compared to surrounding agricultural lands. These surveys documented particularly large populations raptors and shrikes, sparrows, and many other species typical of native upland habitats on the San Joaquin Valley floor. Of particular interest were the differences in the effect of the drought conditions among the years. There was measureable precipitation in winter of 2014-2015 and in the spring of 2015, which resulted in much growth of grasses and forbs throughout the water bank property. This was in contrast to no new growth during the previous year that left the area devoid of grasses and forbs. As a result, Loggerhead Shrike populations rebounded to pre-winter 2013-2014 levels, primarily as a result of good reproductive success of local breeders. These shrikes prey upon large insects and lizards that were common during the spring of 2015. In contrast, raptor counts remained low likely due to continuing low population levels of rodent prey.

Appendix A. List of Bird Species Recorded at the Kern Water Bank Compiled By John Sterling (1 June 2015) Bold-faced names = species rare in the Tulare Basin

Anseriformes - Screamers, Swans, Geese, and Ducks Anatidae - Ducks, Geese, and Swans Greater White-fronted Goose Anser albifrons Snow Goose Chen caerulescens Ross's Goose Chen rossii Cackling Goose Branta hutchinsii Canada Goose Branta canadensis **Tundra Swan** Cygnus columbianus Wood Duck Aix sponsa Gadwall Anas strepera **Eurasian Wigeon Anas penelope** American Wigeon Anas americana Mallard Anas platyrhynchos Blue-winged Teal Anas discors Cinnamon Teal Anas cyanoptera Northern Shoveler Anas clypeata Northern Pintail Anas acuta Green-winged Teal Anas crecca Canvasback Aythya valisineria Redhead Aythya americana Ring-necked Duck Aythya collaris **Greater Scaup Aythya marila** Lesser Scaup Aythya affinis Bufflehead Bucephala albeola Common Goldeneye Bucephala clangula **Barrow's Goldeneye Bucephala islandica** Hooded Merganser Lophodytes cucultatus Common Merganser Mergus merganser **Red-breasted Merganser Mergus serrator** Ruddy Duck Oxyura jamaicensis

Galliformes - Gallinaceous Birds Odontophoridae - New World Quail California Quail *Callipepla californica*

Phasianidae - Partridges, Grouse, Turkeys, and Old World Quail Ring-necked Pheasant *Phasianus colchicus* - I

Podicipediformes - Grebes

Podicipedidae - Grebes Pied-billed Grebe *Podilymbus podiceps* Horned Grebe *Podiceps auritus* Eared Grebe *Podiceps nigricollis* Western Grebe *Aechmophorus occidentalis* Clark's Grebe *Aechmophorus clarkii*

Phalacrocoracidae - Cormorants Double-crested Cormorant *Phalacrocorax auritus*

Pelecaniformes - Pelicans, Herons, Ibises, and Allies Pelecanidae - Pelicans American White Pelican *Pelecanus erythrorhynchos*

Ardeidae - Herons, Bitterns, and Allies Great Blue Heron Ardea herodias Great Egret Ardea alba Snowy Egret Egretta thula Cattle Egret *Bubulcus ibis* Green Heron *Butorides virescens* Black-crowned Night-Heron *Nycticorax nycticorax*

Threskiornithidae - Ibises and Spoonbills White-faced Ibis *Plegadis chihi*

Accipitriformes - Hawks, Kites, Eagles, and Allies Cathartidae - New World Vultures Turkey Vulture *Cathartes aura*

Pandionidae - Ospreys Osprey *Pandion haliaetus*

Accipitridae - Hawks, Kites, Eagles, and Allies

White-tailed Kite *Elanus leucurus* **Bald Eagle** *Haliaeetus leucocephalus* Northern Harrier *Circus cyaneus* Sharp-shinned Hawk *Accipiter striatus* Cooper's Hawk *Accipiter cooperii* Red-shouldered Hawk *Buteo lineatus* Swainson's Hawk *Buteo swainsoni* Red-tailed Hawk *Buteo jamaicensis* Ferruginous Hawk *Buteo regalis* Golden Eagle *Aquila chrysaetos*

Gruiformes - Rails, Cranes, and Allies Rallidae - Rails, Gallinules, and Coots

Virginia Rail *Rallus limicola* Sora *Porzana carolina* Common Gallinule *Gallinula galeata* American Coot *Fulica americana*

Charadriiformes - Shorebirds, Gulls, Auks, and Allies

Recurvirostridae - Stilts and Avocets Black-necked Stilt *Himantopus mexicanus* American Avocet *Recurvirostra americana*

Charadriidae - Lapwings and Plovers

Black-bellied Plover *Pluvialis squatarola* Snowy Plover *Charadrius nivosus* Semipalmated Plover *Charadrius semipalmatus* Mountain Plover *Charadrius montanus* Killdeer *Charadrius vociferus*

Scolopacidae - Sandpipers, Phalaropes, and Allies

Spotted Sandpiper Actitis macularius Solitary Sandpiper Tringa solitaria Greater Yellowlegs Tringa melanoleuca Willet Tringa semipalmata Lesser Yellowlegs Tringa flavipes Whimbrel Numenius phaeopus Long-billed Curlew Numenius americanus Dunlin Calidris alpina Least Sandpiper Calidris minutilla Western Sandpiper Calidris mauri Short-billed Dowitcher Limnodromus griseus Long-billed Dowitcher Limnodromus scolopaceus Wilson's Snipe Gallinago delicata Wilson's Phalarope Phalaropus tricolor Red-necked Phalarope Phalaropus lobatus

Laridae - Gulls, Terns, and Skimmers

Bonaparte's Gull Chroicocephalus philadelphia Mew Gull Larus canus Ring-billed Gull Larus delawarensis California Gull Larus californicus Herring Gull Larus argentatus Thayer's Gull Larus thayeri Glaucous-winged Gull Larus glaucescens Glaucous Gull Larus hyperboreus Caspian Tern Hydroprogne caspia Black Tern Chlidonias niger Common Tern Sterna hirundo Forster's Tern Sterna forsteri

Columbiformes - Pigeons, and Doves

Columbidae - Pigeons and Doves

Rock Pigeon *Columba livia* - I Eurasian Collared-Dove *Streptopelia decaocto* - I Mourning Dove *Zenaida macroura*

Cuculiformes - Cuckoos and Allies Cuculidae - Cuckoos, Roadrunners, and Anis Greater Roadrunner *Geococcyx californianus*

Strigiformes - Owls Tytonidae - Barn Owls Barn Owl Tyto alba

Strigidae - Typical Owls Great Horned Owl *Bubo virginianus* Burrowing Owl *Athene cunicularia*

Caprimulgiformes - Goatsuckers, Oilbirds, and Allies Caprimulgidae - Goatsuckers Lesser Nighthawk *Chordeiles acutipennis*

Apodiformes - Swifts, and Hummingbirds Apodidae - Swifts Vaux's Swift *Chaetura vauxi* White-throated Swift *Aeronautes saxatalis*

Trochilidae - Hummingbirds

Black-chinned Hummingbird Archilochus alexandri Anna's Hummingbird Calypte anna Rufous Hummingbird Selasphorus rufus

Coraciiformes - Rollers, Motmots, Kingfishers, and Allies Alcedinidae - Kingfishers Belted Kingfisher *Megaceryle alcyon*

Piciformes - Puffbirds, Jacamars, Toucans, Woodpeckers, and Allies Picidae - Woodpeckers and Allies

Nuttall's Woodpecker *Picoides nuttallii* Downy Woodpecker *Picoides pubescens* Northern Flicker *Colaptes auratus*

Falconiformes - Caracaras and Falcons Falconidae - Caracaras and Falcons

American Kestrel Falco sparverius Merlin Falco columbarius Peregrine Falcon Falco peregrinus Prairie Falcon Falco mexicanus

Passeriformes - Passerine Birds Tyrannidae - Tyrant Flycatchers

Olive-sided Flycatcher Contopus cooperi Western Wood-Pewee Contopus sordidulus Willow Flycatcher Empidonax traillii **Dusky Flycatcher** Empidonax oberholseri Gray Flycatcher Empidonax wrightii Pacific-slope Flycatcher Empidonax difficilis Black Phoebe Sayornis nigricans Eastern Phoebe Sayornis phoebe Say's Phoebe Sayornis saya Vermilion Flycatcher Pyrocephalus rubinus Ash-throated Flycatcher Myiarchus cinerascens Cassin's Kingbird Tyrannus vociferans Western Kingbird Tyrannus verticalis

Laniidae - Shrikes Loggerhead Shrike Lanius ludovicianus

Vireonidae - Vireos Cassin's Vireo Vireo cassinii Warbling Vireo Vireo gilvus

Corvidae - Crows and Jays Western Scrub-Jay *Aphelocoma californica* American Crow *Corvus brachyrhynchos* Common Raven *Corvus corax*

Alaudidae - Larks Horned Lark *Eremophila alpestris* Hirundinidae - Swallows Purple Martin *Progne subis*

Tree Swallow Tachycineta bicolor Violet-green Swallow Tachycineta thalassina Northern Rough-winged Swallow Stelgidopteryx serripennis Cliff Swallow Petrochelidon pyrrhonota Barn Swallow Hirundo rustica

Aegithalidae - Long-tailed Tits and Bushtits

Bushtit *Psaltriparus minimus*

Troglodytidae - Wrens

Rock Wren Salpinctes obsoletus House Wren Troglodytes aedon Marsh Wren Cistothorus palustris Bewick's Wren Thryomanes bewickii

Polioptilidae - Gnatcatchers and Gnatwrens Blue-gray Gnatcatcher *Polioptila caerulea*

Regulidae - Kinglets Ruby-crowned Kinglet *Regulus calendula*

Turdidae - Thrushes

Western Bluebird *Sialia mexicana* Mountain Bluebird *Sialia currucoides* Hermit Thrush *Catharus guttatus* American Robin *Turdus migratorius*

Mimidae - Mockingbirds and Thrashers

California Thrasher *Toxostoma redivivum* **Sage Thrasher Oreoscoptes montanus** Northern Mockingbird *Mimus polyglottos*

Sturnidae - Starlings European Starling *Sturnus vulgaris* - I

Motacillidae - Wagtails and Pipits American Pipit Anthus rubescens

Bombycillidae - Waxwings Cedar Waxwing *Bombycilla cedrorum*

Ptiliogonatidae - Silky-flycatchers Phainopepla *Phainopepla nitens*

Calcariidae - Longspurs and Snow Buntings Chestnut-collared Longspur Calcarius ornatus

Parulidae - Wood-Warblers

Orange-crowned Warbler Oreothlypis celata Nashville Warbler Oreothlypis ruficapilla MacGillivray's Warbler Geothlypis tolmiei Common Yellowthroat Geothlypis trichas Yellow Warbler Setophaga petechia Yellow-rumped Warbler Setophaga coronata Black-throated Gray Warbler Setophaga nigrescens Townsend's Warbler Setophaga townsendi Wilson's Warbler Cardellina pusilla Lucy's Warbler Oreothlypis luciae

Emberizidae - Emberizids

Spotted Towhee Pipilo maculatus California Towhee Melozone crissalis Chipping Sparrow Spizella passerina **Clay-colored Sparrow Spizella pallida** Brewer's Sparrow Spizella breweri Vesper Sparrow Pooecetes gramineus Grasshopper Sparrow Ammodramus savannorum Lark Sparrow Chondestes grammacus **Black-throated Sparrow Amphispiza bilineata** Bell's Sparrow Artemisiospiza belli canescens Savannah Sparrow Passerculus sandwichensis Fox Sparrow Passerella iliaca Song Sparrow Melospiza melodia Lincoln's Sparrow Melospiza lincolnii White-crowned Sparrow Zonotrichia leucophrys Golden-crowned Sparrow Zonotrichia atricapilla Dark-eyed Junco Junco hyemalis

Cardinalidae - Cardinals and Allies

Western Tanager Piranga ludoviciana Black-headed Grosbeak Pheucticus melanocephalus Blue Grosbeak Passerina caerulea Lazuli Bunting Passerina amoena

Icteridae - Blackbirds

Red-winged Blackbird Agelaius phoeniceus Tricolored Blackbird Agelaius tricolor Western Meadowlark Sturnella neglecta Yellow-headed Blackbird Xanthocephalus xanthocephalus Brewer's Blackbird Euphagus cyanocephalus Great-tailed Grackle Quiscalus mexicanus Brown-headed Cowbird Molothrus ater Hooded Oriole Icterus cucullatus Bullock's Oriole Icterus bullockii

Fringillidae - Fringilline and Cardueline Finches and Allies

House Finch Haemorhous mexicanus Purple Finch Haemorhous purpureus Pine Siskin Spinus pinus Lesser Goldfinch Spinus psaltria **Lawrence's Goldfinch** Spinus lawrencei American Goldfinch Spinus tristis

Passeridae - Old World Sparrows House Sparrow *Passer domesticus* - I