2020 PROPOSAL PROJECT OFFICER'S PAGE

What is the proposal title? Wetlands of the Imperial Valley, California

What is the date you are submitting the proposal? July 10, 2020

What are the geographical landmarks for the proposal?

- State: California
- County: Imperial County
- Congressional District(s): 51
- JV: Sonoran
- BCR: 33

Project Officer Information:

- Name: Chadd Santerre
- Title: Wetland Programs Supervisor/NAWCA Coordinator
- Organization: California Waterfowl Association
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  916-275-1019
- Duns #: 1970514770000

Is an Optional Matching Contributions Plan (MCP) submitted with the proposal? No

Does the proposal contain match associated with a previously submitted MCP? No

Are you requesting that this proposal be considered as a continuation of a previous grant agreement (a Programmatic Project Proposal)? No

Do you expect this project to be the first phase of a Programmatic Project? No

How many proposals are planned for the same project area? There is a great need to continue with protection, restoration and enhancement efforts in the project area in order to meet Sonoran Joint Venture goals. Previously funded NAWCA and state grants have been extremely successful in accomplishing partner goals. The southern California region encompasses some of the state's most valuable wetland resources, and is a significantly important region for the Pacific Flyway's migratory birds. It is hoped that future grants will be developed if available match allows for such beneficial projects to be undertaken.

Will any of the NAWCA funds requested as part of this proposal be received or spent by the U.S. Fish and Wildlife Service or another Federal agency? No

Does this proposal include acquisition activities that will add to the National Wildlife Refuge System (NWRS)? No

Are carbon sequestration credits involved in your proposal? No

Will any portion of any tract or activities associated with any tract be used to satisfy wetlands or habitat mitigation requirements under Clean Water Act, Rivers and Harbors Act, Fish and Wildlife Coordination Act, Water Resources Development Act, ecological service credits or other related statues now or in the future? No

Have you confirmed that all partners, key personnel, and contractors are eligible to participate in Federal grants? Yes

To ensure that the proposal complies with available guidelines and that partners are aware of their responsibilities, the Project Officer certifies the following statement: "I have read the 2020 U.S. Standard Grant proposal instructions, eligibility information, and applicable U.S. grant administration policies and informed partners or partners have read the material themselves. To the best of my knowledge, this proposal is eligible and complies with all NAWCA, North American Wetlands Conservation Council, and Federal grant guidelines and the information submitted herein is true and correct. The work in the proposal consists of allowable and eligible work and costs associated with long-term wetlands and migratory bird habitat conservation."

OMB Circular A-133 audit report: The latest report was completed for the fiscal year ending on March 31, 2019 and has been submitted to NAWCA as of June 1, 2020.

Overlap: There is no overlap of the proposed activities in this application with any other proposals or other activities anticipated in terms of costs, or time commitments of key personnel. This proposal is not in any way duplicative of any proposal that was or will be submitted for funding consideration to any other potential funding source.

Do you have any comments about, or suggestions for, the NAWCA program? Thank you for the opportunity to continue benefiting habitat and wildlife within the State of California.

NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL SUMMARY
Wetlands of the Imperial Valley, California

COUNTY(S), STATE(S), CONGRESSIONAL DISTRICT(S): Imperial County, California, Congressional Districts 51

GRANT AMOUNT		**$970,435**
Allocation: California Waterfowl Association	$970,435	

MATCHING PARTNERS		**$992,639**
Grantee: California Waterfowl Association	$7,500	
California Department Fish and Wildlife	30,005	
Cottonwood Duck Club	$36,009	
Salton Sea Conservancy	$19,125	
Wildlife Conservation Board	$900,000	

GRANT AND MATCH – ACTIVITIES, COSTS & ACRES		**$1,963,074 / 1,110 (43) acres**
Restoration	$280,254/ 161 acres	
Enhanced	$1,635,320 / 949 (43) acres	
Other Direct Costs	$47,500	

NON-MATCHING PARTNERS		**$6,780**
US Fish and Wildlife Service	$6,780	

PROPOSAL PURPOSE AND DESCRIPTION:
The setting for this proposal lies within the southern portion of California, known for its world renowned agricultural production. Within this breadbasket of America, the Salton Sea and the surrounding wetland and agricultural landscape provide an oasis for birds that travel south from the western United States and Canada. The main source of water for this winter oasis is the Colorado River, which historically carried runoff from seven western states to the Gulf of California (Sea of Cortez). Water diversions from the Colorado River, which started around 1901, allowed the development of highly productive agricultural fields throughout the region. In 1905, a breach of the main delivery canal created the Salton Sea, a 35 mile long and 15 mile wide water body which is ±225 feet below sea level. Once created, the Salton Sea quickly became a resource rich hot spot for hundreds of bird species. As waterfowl use increased, conflicts between farming and wildlife developed which led to the establishment of the state's Imperial Wildlife Area (WA) and the federal Sonny Bono National Wildlife Refuge (NWR). Privately-owned properties dedicated to providing wetland habitat were also established and helped to create a matrix of agriculture and wetlands throughout the region.

The project boundary incorporates the Salton Sea, Coachella Valley, Imperial Valley, San Jacinto Valley and lower Colorado River. Together **these areas represent the region's most valuable wetland habitat base that provides resources to millions of birds from more than 400 different species** (Beardmore 2007). The **Wetlands of the Imperial Valley**, **California** will continue with efforts, which started in 2008, to improve resource values for waterbirds by undertaking three restoration projects and four enhancement projects within the Imperial Valley.

The six Tracts are located within the Sonoran Joint Venture's (SJV) Salton Sea and Imperial Valley Focus Areas and represent a significant portion of the managed wetland acreage found within the region. These projects will help to re-establish NAWCA priority habitats thus increasing resources for populations of NAWCA priority species, contributing directly to the goals and objectives of the SJV and NAWMP.

The objectives of this proposal are to concentrate on the development of needed infrastructure which will enable habitat managers to undertake proscribed management strategies, thereby increasing resources for all wetland dependent species. The majority of the project sites currently provide little in the way of high-valued foraging resources for waterbirds, primarily due to an inability to adequately manage these habitats. The importance of quality palustrine emergent habitat surrounding the Salton Sea continues to increase as salinity levels continue to raise and the Sea recedes. The partners within this proposal are dedicated to expanding and enhancing habitats by improving infrastructure that allows for intensified management of high quality habitats for hundreds of species of migrating, wintering and breeding waterbirds.

The protection and establishment of these habitats and the resources they will produce will allow for broad landscape-based habitat improvements for migratory waterbirds and other wetland dependent wildlife for decades to come. In total, the **partners and NAWCA will be investing $1,963,074** into these projects. Project results will contribute to the goals of not only NAWCA, the SJV and NAWMP, but also to the many partners that have made this proposal a reality, including landowners, the Wildlife Conservation Board, California Department of Fish and Wildlife, US Fish and Wildlife Service, Salton Sea Conservancy and the California Waterfowl Association.

HABITAT TYPES AND WILDLIFE BENEFITING: The proposal will contribute immediately to the SJV designated Salton Sea and Imperial Valley Focus Areas by protecting, **restoring and enhancing 1,110 (43) acres of habitat**. Under this proposal, 155 acres of palustrine emergent wetlands and 6 acres of associated uplands will be restored and 830 (43) acres of palustrine emergent wetlands and 119 acres of associated uplands will be enhanced.

The successful completion of these projects on both private and public lands will provide protection, expansion, and improvements to a diversity of habitats types, that **will benefit four high priority** waterfowl species (northern pintail, mallard, lesser scaup and greater scaup), **seven priority** waterfowl species (Pacific greater white-fronted goose, Wrangle Island snow goose, wood duck, redhead, canvasback, ring-necked duck and American widgeon), and **nine described (16 total)** other species of waterfowl. Projects will also benefit numerous NAWCA priority birds and hundreds of wetland associated bird species. In addition, **eight federal and state listed species** and numerous species of concern will benefit from the improvements that result from these projects.

PUBLIC BENEFITS/PUBLIC ACCESS: The US Fish and Wildlife Service's **Sonny Bono National Wildlife Refuge project (20,000+ visitors/yr)** and three state **Imperial Wildlife Area projects (30,000+ visitors/yr)** are taking place on properties that are open to the public year-round to provide outdoor recreation such as hiking, birding, hunting, fishing, and research opportunities. Private land projects are improving a significant resource to wildlife that will help to maintain and increase populations throughout the year. Improved habitat conditions will be maintained by the landowners and agencies for the long term. These improvements will benefit not only wildlife populations, but those people who like to partake in outdoor recreational activities involving wildlife. Increased wildlife use of these projects may ultimately lead to improved opportunities for the public to experience wildlife throughout the Pacific Flyway.

NEW PARTNERS: Of the proposed projects seeking NAWCA funds, one of the two non-agency properties is a new participant (Cottonwood Duck Club) to the NAWCA grant program. They are very enthusiastic about the potential of having such a large collaborative effort undertaken that will benefit their habitat and the natural resources throughout the region. Additionally, the US Fish and Wildlife Service's Sonny Bono National Wildlife Refuge and the Imperial Wildlife Area are continuing to contribute time and support while participating. These **two public areas represent the great majority of the freshwater habitat within the entire Salton Sea region** that is available for wildlife. All partners

are looking forward to contributing and expanding what was originally started in 2008 with funding through NAWCA!

RELATIONSHIP TO PREVIOUSLY FUNDED NAWCA PROPOSALS: This proposal continues with the extremely successful **restoration (356 acres) and enhancement (3,806 acres) efforts** that were completed in **two previously funded NAWCA grants** (Imperial Valley Wetlands Project Phase I and II) delivered in 2007-2009 and 2012-2015 by these same partners. The habitat benefits from this grant are in addition to other successfully completed grants supported by the Wildlife Conservation Board. These programs are working for habitat protection, enhancement, and restoration throughout the region. A collaborative effort, led by the SJV and its partners, is underway to establish partnerships and funding to ensure increases in habitat acreage and productivity. The previously funded and future grants will all be critical to improving and expanding habitat values within southern California, and also help to accomplish goals of the SJV and NAWMP.

THREATS AND SPECIAL CIRCUMSTANCES: The Salton Sea is receding at a rapid rate, and the concern for dust and respiratory issues are a significant concern. The benefits and resources that the Imperial Valley's freshwater wetlands provide will play an increasingly important role in the health and survival of humans as well as the wildlife populations that live, winter and migrate through the region. Threats to habitats within the project boundary and most of California include: expanding human population, water shed encroachment, increased agriculture, invasive plant species, increasing costs of water, lack of water supplies, the inability to efficiently manage and maintain the area's existing wetland habitats, and the lack of long term protection. It is important that ecosystems are fully protected, managed and maintained in a way that will support wildlife populations into the future. NAWCA has played a key role in facilitating advances throughout California, and the program has made leaps and bounds with regards to helping partners expand, maintain and improve habitat resources. Funding by NAWCA and project partners will help to successfully complete **project goals and objectives by improving over 1,110 (43) acres of California's most valuable habitat** communities that support hundreds of wetland and upland dependent species.

DIRECT and INDIRECT COST ACTIVITIES	GRANT $	MATCHING PARTNERS			TOTAL$ GRANT + MATCH $	TRACT ID	NON MATCH $
		ABB. PARTN. NAME	OLD MATCH $	NEW MATCH $			
Restoration							
Contracts	$60,000	CWA			$60,000	Tract 1	
Contracts		CDC	$36,009		$36,009	Tract 1	
Contracts	$110,000	CWA			$110,000	Tract 5	
Contracts		FWS				Tract 5	$6,780
Contracts	$24,550	CWA			$24,550	Tract 6	
Materials	$6,000	CWA			$6,000	Tract 1	
Materials	$10,000	CWA			$10,000	Tract 5	
Materials	$2,000	CWA			$2,000	Tract 6	
Non-Contract Personnel & Travel	$10,420	CWA			$10,420	Tract 1	
Non-Contract Personnel & Travel	$16,690	CWA			$16,690	Tract 5	
Non-Contract Personnel & Travel	$4,585	CWA			$4,585	Tract 6	
TOTAL RESTORATION	**$244,245**		**$36,009**		**$280,254**		**$6,780**
Enhancement							
Contracts	$283,000	CWA			$283,000	Tract 2	
Contracts	$261,000	CWA			$261,000	Tract 3	
Contracts		WCB	$720,373		$720,373	Tract 4	
		DFW	$30,005		$30,005	Tract 4	
Contracts	$26,825	CWA			$26,825	Tract 6	
Contracts		SSC		$19,125	$19,125	Tract 6	
Materials	$12,000	CWA			$12,000	Tract 2	
Materials	$14,000	CWA			$14,000	Tract 3	
Materials		WCB	$179,627		$179,627	Tract 4	
Materials	$4,000	CWA			$4,000	Tract 6	
Non-Contract Personnel & Travel	$41,840	CWA			$41,840	Tract 2	
Non-Contract Personnel & Travel	$38,940	CWA			$38,940	Tract 3	
Non-Contract Personnel & Travel	$4,585	CWA			$4,585	Tract 6	
TOTAL EHANCEMENT	**$686,190**		**$930,005**	**$19,125**	**$1,635,320**		
OTHER DIRECT COSTS	**$40,000**	CWA		**$7,500**	**$47,500**	Tracts 1-3, 5, 6	
GRAND TOTAL ALL COSTS	**$970,435**		**$966,014**	**$26,625**	**$1,963,074**		**$6,780**

DIRECT and INDIRECT COST ACTIVITIES	GRANT $	MATCHING PARTNERS			TOTAL$ GRANT + MATCH $	TRACT ID	NON MATCH
		ABB. PARTN. NAME	OLD MATCH $	NEW MATCH $			
FUND SOURCES							
Grant	$970,435				$955,435	Tracts 1-3, 5, 6	
Cal. Dept. Fish and Wildlife		DFW	$30,005		$30,005	Tract 4	
California Waterfowl		CWA		$7,500	$7,500	Tract 1-3, 5, 6	
Cottonwood Duck Club LLC		CDC	$36,009		$36,009	Tract 1	
Salton Sea Conservancy		SSC		$19,125	$19,125	Tract 6	
US Fish and Wildlife Service		FWS				Tract 5	$6,780
Wildlife Conservation Board		WCB	$900,000		$900,000	Tract 4	
GRAND TOTAL	**$970,435**		**$966,014**	**$26,625**	**$1,963,074**		**$6,780**

2020 WORK PLAN

TRACT 1 – Cottonwood Duck Club (CDC)
OVERALL ACRES AFFECTED: 51
CENTRAL LOCATION: 33.245, -115.547
STATE/FEDERAL AGENCIES HOLDING INTERESTS: Private Landowner

Acreage Summary of Grant/Match Activities on the Tract:
Acquisition: Restoration: 51 Enhancement: Establishment:

Describe all grant/match activities occurring on the tract here (Restoration): The Cottonwood Duck Club is adjacent to the east side of the Imperial Wildlife Area's Wister Unit T10 and U10 fields. In the spring of 2020 the owners undertook a restoration project that developed 24 acres of palustrine emergent wetlands from farmed ground. Due to the success of the first project the landowners decided they would like to restore 27 additional acres. The proposed 27 acres will fill in a gap between the new 24 acres and the properties historic 65 acre managed marsh. The efforts will create a contiguous 116 acre complex of palustrine emergent wetlands, that will address NAWCA and Sonoran Joint Venture identified goals and objectives for the region. By constructing stable perimeter levees, installing water control structures, adding islands/loafing bars, and construction of swales/potholes, managers will be able to provide a diverse wetland habitat complex suitable for migratory/wintering waterfowl and shorebirds.

Tract 1- Cottonwood Duck Club (CDC): Restoration Financial Plan Justification - $112,429 and 51 acres
Grant - $76,420 Match - $36,009 Completion: 2020/21 & 2022/23

Item & Work	Units	$/unit	Total $	Schedule	Funding Source
CONTRACTS					
WCS/Pipe & Installation	6	lump sum	$5,809	2019/2020	CDC
Levee and Swale Construction	15,100 cyd	$2.00 /cyd	$30,200	2019/2020	CDC
Levee, Swale Field Grading Construction	25,066 cyd	$2.25 /cyd	$56,400	2022/2023	Grant
WCS Installation	6	$600 /ea	$3,600	2022/2023	Grant
Subtotal Contracts					$96,009
MATERIALS and EQUIPMENT					
18" WCS w/ HDPE Pipe	6	$1,000 ea	$6,000	2022/2023	Grant
Subtotal Materials and Equipment					$6,000
NON-CONTRACT PERSONNEL and TRAVEL					
Project Management	50 hr	$125 /hr	$6,250	2022/2023	Grant
Project Design	30 hr	$110 /hr	$3,300	2022/2023	Grant
Travel	1,500 mi	$0.58 /mi	$870	2022/2023	Grant
Subtotal Non-Contract Personnel					$10,420
TOTAL RESTORATION DIRECT COSTS					**$112,429**

TRACT 2 – Imperial WA, Wister Unit W11A&C
OVERALL ACRES AFFECTED: 285
CENTRAL LOCATION: 33.259, -115.571
STATE/FEDERAL AGENCIES HOLDING INTERESTS: California Department of Fish & Wildlife

Acreage Summary of Grant/Match Activities on the Tract:
Acquisition: Restoration: Enhancement: 285 Establishment:
Describe all grant/match activities occurring on the tract here (Enhancement): The enhancement project at the Imperial Valley Wildlife Areas (WA), Wister Unit W11A&C will completely reconstruct infrastructure that is severely degraded and limiting resources. Development of the habitat in the 1950's and 60's created impoundments that at the time were designed to hold water and provide limited management capabilities. Research over the last 20 years has given all wetland managers a better understanding of what management techniques promote moist soil plant growth in California. This knowledge has led to a drastic change in wetland design. The majority of the included wetland units in this grant proposal do not have the ability to be properly managed. Failing levees, broken water control structures, invasive vegetation, and poor drainage/water delivery capabilities have created such a problem that some units are no longer flooded.

The 285 acres which makes up W11A&C will be transformed from 15 individual flat units into six easily managed and diversified units that will have all new levees, water control structures, islands/loafing bars and new swale systems. The broad slopes on the new levees will provide protection from erosion and burrowing animals while allowing easy access for maintenance equipment. Independent water delivery to each unit will allow for quick irrigations of these moist soil units. A reduction in the sheer number of levees will reduce annual maintenance for Department of Fish and Wildlife (DFW) staff. Managers must maintain the levees at the water line annually to remove salt cedar and phragmites encroachment. Fewer and more accessible levees with broad slopes will allow them to use onsite equipment for maintenance. Currently levees have steep eroded slopes and are dominated by invasive plants due to the inability of DFW staff to maintain them.

The improved infrastructure will also allow for accumulated salts to be leached from the soil, thus increasing viability and production of quality natural resources for all wetland dependent species. The improved habitat conditions will benefit migratory/wintering waterbirds the most and increased access to wetland units for public hunting with the reduction in salt cedar and phragmites that have taken over these units.

Tract 2- Imperial WA, Wister Unit W11A&C: Enhancement Financial Plan Justification: $336,840 and 285 acres
Grant - $336,840 Match -$0 Completion: 2022-2023

Item & Work	Units	$/unit	Total $	Schedule	Funding Source
CONTRACTS					
24" WCS Installation	6	$600 ea	$3,600	2022/2023	Grant
Site Prep/Shrub Removal	175 hrs	$170 /hr	$29,750	2022/2023	Grant
Levee and Swale Construction	110,955 cyd	$2.25 /cyd	$249,650	2022/2023	Grant
Subtotal Contracts					$283,000
MATERIALS and EQUIPMENT					
24" WCS w/ HDPE Pipe	6	$2,000 ea	$12,000	2022/2023	Grant
Subtotal Materials and Equipment					$12,000
NON-CONTRACT PERSONNEL and TRAVEL					
Project Management	180 hr	$125 /hr	$22,500	2022/2023	Grant
Engineering/Design	160 hr	$110 /hr	$17,600	2022/2023	Grant
Travel	3,000 mi	$0.58 /mi	$1,740	2022/2023	Grant

Subtotal Non-Contract Personnel	$41,840
TOTAL ENHANCEMENT DIRECT COSTS	**$336,840**

TRACT 3 – Imperial WA, Wister Unit Y15A&B
OVERALL ACRES AFFECTED: 230
CENTRAL LOCATION: 33.266, -115.571
STATE/FEDERAL AGENCIES HOLDING INTERESTS: California Department of Fish and Wildlife

Acreage Summary of Grant/Match Activities on the Tract:
Acquisition: Restoration: Enhancement: 230 Establishment:

Describe all grant/match activities occurring on the tract here: (Enhancement): The enhancement project at the Imperial Valley Wildlife Areas (WA), Wister Unit Y15A&B will completely reconstruct the units infrastructure. In total 230 acres will be reconfigured from 14 individual cells into five new wetland units. Project efforts will also establish a 17 acre native upland unit with the capability to irrigate. Invasive salt cedar will be removed from the upland area and DFW staff will be planting native species (i.e., mesquite, palo verde, atriplex) with access to the new water supply that will be established as part of enhancement activities on this project.

All design, construction and final management capacities will follow those described above for Wister Unit W11A&C. The ability to manage the wetland units more efficiently and precisely will not only improve desired moist soil plant production for waterfowl, but also will directly benefit the endangered clapper rail. Roughly 12% of the U.S. population of clapper rails inhabits the Imperial Valley Wildlife Area's, Wister Unit (FWS data 2018). With improved water management capabilities managers will be able to provide quality breeding habitat for a variety of species including rail, waterfowl, and shorebirds.

Tract 3 – Imperial WA, Wister Unit Y15A&B Enhancement Financial Plan Justification: $313,940 and 230 acres
Grant - $313,940 Match - $0 Completed: 2022/2023

Item & Work	Units	$/unit	Total $	Schedule	Funding Source
CONTRACTS					
24" WCS Installation	7	$600 ea	$4,200	2022/2023	Grant
Site Prep/Shrub Removal	160 hrs	$170 /hr	$27,200	2022/2023	Grant
Levee and Swale Construction	102,044 cyd	$2.25 /cyd	$229,600	2022/2023	Grant
Subtotal Contracts					$261,000
MATERIALS and EQUIPMENT					
24" WCS w/ HDPE Pipe	7	$2,000 ea	$14,000	2022/2023	Grant
Subtotal Materials and Equipment					$14,000
NON-CONTRACT PERSONNEL and TRAVEL					
Project Management	170 hr	$125 /hr	$21,250	2022/2023	Grant
Engineering/Design	145 hr	$110 /hr	$15,950	2022/2023	Grant
Travel	3,000 mi	$0.58 /mi	$1,740	2022/2023	Grant
Subtotal Non-Contract Personnel					$38,940

TOTAL ENHANCEMENT DIRECT COSTS	$313,940

TRACT 4 – Imperial WA, Wister Unit T10/S20/S22
OVERALL ACRES AFFECTED: 434
CENTRAL LOCATION: 33.234, -115.564
STATE/FEDERAL AGENCIES HOLDING INTERESTS: California Department of Fish and Wildlife

Acreage Summary of Grant/Match Activities on the Tract:
Acquisition: Restoration: Enhancement: 434 Establishment:

Describe all grant/match activities occurring on the tract here (Enhancement): The development and funding of the Wister Unit T10/S20/S22 project was a continued effort that has been ongoing at the Imperial WA though partnerships that initially started in 2008 through funding by NAWCA. The California Wildlife Conservation Board (WCB) continues to support significant improvements efforts at the wildlife area which have resulted in big changes in the quality and quantity of habitat. In March of 2019 WCB awarded the California Waterfowl a grant for $950,000 ($900,000 identified as match) to undertake complete reconstruction of the 434 acres that make up Wister Units T10, S20 and S22.

The project started by addressing water conservation issues which are one of the leading causes of habitat quality reduction and water loss. Historically, narrowly excavated ditches deliver water to wetland units on the wildlife area and become overgrown with invasive vegetation. These ditches were very inefficient with significant ditch loss and overgrowth of invasive salt cedar and phragmites lead to additional water loss and constricted flows. The Department of Fish and Wildlife (DFW) had to clean out delivery ditches with an excavator every 12-18 months with hired contractors. DFW does not own an excavator so this expense continually added up. The solution to this costly maintenance issue was installing large (18”-21”) PVC pipelines with valves, which have proven to eliminate these problems. Pipelines are extremely efficient, user friendly and significantly reduced annual maintenance costs and water loss with a life expectancy of well over 50 years.

In the fall of 2019, and spring of 2020, a total of 5,700’ of new pipeline was installed which eliminated the historic delivery ditch systems within the T10, S20 and S22 Units. The installation of valves along the pipeline allowed precise and flexible application of water supplies to each unit..

The second major improvement was to the habitat layout and infrastructure which developed 332 acres of palustrine emergent wetland habitat and 102 acres of managed green feed units. Green feed units are used to grow annual crops specifically for providing resources to wintering geese. Through improved management capabilities naturally occurring moist soil plant species have been propagated and then irrigated to maximize production of their highly desirable seeds. Historically small units were developed with little emphasis placed on strategically considering topography or capabilities that allowed for management. When managers have control of water supplies and inundation periods they are able to maximize moist soil plant seed production, thus maximizing benefits to wetland dependent wildlife. Irrigatable green feed units were developed in 2019 and allowed DFW staff to plant desired crops that are highly sought after by migrating geese throughout the winter.

The design for the T10, S20 and S22 units allowed for much larger wetland units configurations, thereby reducing the overall amount of infrastructure/DFW maintenance required to maintain the acreage. The overall infrastructure reduction will reduce maintenance and upkeep costs over time while also reduce the time needed to conduct wetland management by DFW staff.

Each wetland unit is now connected with new water control structures and new swale systems. These infrastructure upgrades allow water to pass from field to field making spring irrigations very efficient. Once the highest elevational unit is irrigated the water is then released to the next unit below it and the water used again to irrigate that unit and so on down the line. The new pipeline systems allow for each unit to have independent water delivery systems in place, providing flexibility during management. Managers

can deliver water supplies exactly where they want them instead of having to flood up every unit to get water to one specific area, saving precious water supplies.

Each wetland unit has a new swale system that allows water to move efficiently through a unit. Swales typically have a 14' bottom width, 10:1 side slopes, and average about 1' in depth below the field grade. Gradual elevational fall is built into their length to drive water towards the drain structure. Swale material is used to construct and refurbish all perimeter levees, build islands and used for field grading in order to level out the units. Levees have a 14' crown and 4:1 side slopes. All units had islands and loafing bars developed and water control structures installed. Flashboard water controls structures are made of concrete with high-density polyethylene (HDPE) pipe utilized for longevity. This infrastructure allows for precise water depth adjustments within each unit.

Green feed units were designed and leveled to allow for quick and efficient irrigations. By constructing proper elevational fall within the units, and establishing new pipelines with water control valves, the growth of desired resources for migrating and wintering geese was realized.

As part of the project DFW contributed staff time and equipment to chop and disc many of the wetland units which had been overtaken by salt cedar trees that were nearly four feet tall. These trees were too small to remove with an excavator and DFW equipment was perfect for the task. The fire crew also was able to burn the extensive piles of old growth salt cedar that had been removed and piled up prior to major dirt work construction starting.

Tract 4 – Imperial WA, Wister Unit T10/S20/S22: Enhancement Financial Plan Justification: $930,005 and 434 acres

Grant - $0 Match – $930,005 Completion: 2019/2020

Item & Work	Units	$/unit	Total $	Schedule	Funding Source
CONTRACTS					
WCS Installation	17	lump sum	$19,840	2019/2020	WCB
Site Prep/Shrub & Old Pipe Removal		lump sum	$57,040	2019/2020	WCB
Green Feed Leveling	40,500 cyd	$1.85/cyd	$74,925	2019/2020	WCB
21" PVC Pipeline & Valves Installed	5,700'	lump sum	$77,721	2019/2020	WCB
Fire Crew Shrub Burning	96 hrs	$30 /hr	$2,880	2020	DFW
9150 Case w/ 32" Stubble	172 hrs	$125 /hr	$21,500	2020	DFW
8430 JD with Chopper	45 hrs	$125 hr	$5,625	2020	DFW
Levee, Swales, Grading Construction	162,599 cyd	$2.25 /cyd	$365,847	2019/2020	WCB
Project Management		lump sum	$78,000	2019/2020	WCB
Engineering/Design		lump sum	$47,000	2019/2020	WCB
Subtotal Contracts					$750,378
MATERIALS and EQUIPMENT					
21" PVC Pipeline & Parts	5,700'	lump sum	$155,775	2019/2020	WCB
15-18" WCS w/HDPE Pipe	17	lump sum	$23,852	2019/2020	WCB
Subtotal Materials					$179,627
TOTAL ENHANCEMENT DIRECT COSTS					**$930,005**

TRACT 5 – Sonny Bono NWR Hazard Unit North
OVERALL ACRES AFFECTED: 83
CENTRAL LOCATION: 33.195, -115.593

STATE/FEDERAL AGENCIES HOLDING INTERESTS: Private

Acreage Summary of Grant/Match Activities on the Tract:
Acquisition: Restoration: 83 Enhancement: Establishment:

Describe all grant/match activities occurring on the tract here (Restoration): The Sonny Bono NWR is just over 32,000 acres in size and maintains roughly 2,000 acres of managed palustrine emergent wetlands for waterbirds and green feed production units specific to wintering geese. The Hazard Unit which is managed by the US Fish and Wildlife Service is a complex of wetlands that are within the public hunting area. In 2012, as part of a NAWCA grant awarded to California Waterfowl, 226 acres of the Hazard Unit were completely reconstructed. What once was a large complex of basins heavily encrusted with salt, today has turned into highly diversified lush green moist soil plant communities. These moist soil units are producing seed resources and emergent cover that is being used heavily by wintering and migratory birds. The goals of the project at that time were to establish management capabilities, remove the buildup of salts, and create conditions that allowed for the reestablishment of desired plants. The completed project was a resounding success. FWS staff is excited about further expanding the managed units on acreage that is currently unmanageable. Two areas will have levees developed, islands and field grading undertaken to create wetland units that will be incorporated into the existing wetland complex. There will be significant salt cedar removal undertaken as part of this project.

The infrastructure needed to efficiently manage and control water within 77 acres of wetland units will be developed. A six acre upland unit will also be created to allow for establishment of native upland plants. The upland unit will be irrigatable to help support native upland plant species (typical species include mesquite, palo verde and atriplex). Swales will be built that are approximately one foot in depth, 14 feet wide, and have a 10:1 side slope. Swale construction provides material for levee and island development, while at the same time creating topographic variation throughout the bottom of the wetlands. All swales will have gradual topographic fall built into them and will meander through the wetland unit from water control inlets to the drain outlets. The installation of this infrastructure will provide long term management capability resources for the staff at Sonny Bono NWR. The results of habitat expansion/restoration will provide waterfowl, shorebirds and other migratory/non-migratory wildlife with increased high quality resources throughout the year.

Tract 5 – Sonny Bono NWR Hazard Unit North: Restoration Financial Plan Justification: $143,470 and 83 acres
Grant - $136,690 Non-Match - $6,780 Completion: 2022/23

Item & Work	Units	$/unit	Total $	Schedule	Funding Source
CONTRACTS					
18" WCS Installation	10	$600 ea	$6,000	2022/2023	Grant
Site Prep/Shrub Removal	110 hrs	$170 /hr	$18,700	2022/2023	Grant
Levee and Swale Construction	37,911 cyd	$2.25 /cyd	$85,300	2022/2023	Grant
Small Dozer	40 hrs	$114 hr	$4,560	2022/2023	FWS
Back-hoe	24 hrs	$92.52 hr	$2,220	2022/2023	FWS
Subtotal Contracts					$116,780
MATERIALS and EQUIPMENT					
18" WCS w/ HDPE Pipe	10	$1,000 ea	$10,000	2022/2023	Grant
Subtotal Materials and Equipment					$10,000
NON-CONTRACT PERSONNEL and TRAVEL					

Project Management	80	hr	$125	/hr	$10,000	2022/2023	Grant
Engineering/Design	45	hr	$110	/hr	$4,950	2022/2023	Grant
Travel	3,000	mi	$0.58	/mi	$1,740	2022/2023	Grant
Subtotal Non-Contract Personnel							$16,690
TOTAL RESTORATION DIRECT COSTS							**$143,470**

TRACT 6 – Salton Sea Conservancy (SSC)
OVERALL ACRES AFFECTED: 27 (43)
CENTRAL LOCATION: 33.085, -115.720
STATE/FEDERAL AGENCIES HOLDING INTERESTS: Private Landowner

Summary of Grant/Match Activities on the Tract:
Acquisition: Restoration: 27 Enhancement (43) Establishment:

Describe all grant/match activities occurring on the tract here (Enhancement): The Salton Sea Conservancy is adjacent to the southern shoreline of the Salton Sea and is also situated next to Sonny Bono NWR's managed palustrine emergent wetland units. The increased fresh water wetland acreage will provide excellent benefits to many wetland dependent species throughout the year. The project will create 27 acres of palustrine emergent habitat that will adjoin an existing complex of 103 acres of emergent marsh. The existing habitat had a NAWCA project conducted back in 2009 at which time water delivery improvement efforts successfully updated the properties delivery capabilities for year-round management. The owners wish to expand their wetland footprint and provide additional habitat. At the same time 43 acres of the existing habitat identified as non-additive will have levees refurbished, several small units combined into a much large unit (reducing needed infrastructure) and water control structures replaced. The non-additive enhancement acreage only received water delivery benefits from the 2009 project. Infrastructure improvements will aid in wetland management on the property, and also provide long term stability of the habitat. The establishment of perimeter levees, islands, and swales will allow for efficient water management, and propagation of moist soil plant resources relied upon by migrating waterfowl.

Tract 6 – Salton Sea Conservancy (SSC): Restoration Financial Plan Justification: $31,135 and 27 acres
Grant - $31,135 Match - $0 Completion: 2022/23

Item & Work	Units		$/unit		Total $	Schedule	Funding Source
CONTRACTS							
18" WCS Installation	2		$600	ea	$1,200	2022/2023	Grant
Site Prep/Shrub Removal	5	hrs	$170	/hr	$850	2022/2023	Grant
Levee and Swale Construction	10,000	cyd	$2.25	/cyd	$22,500	2022/2023	Grant
Subtotal Contracts							$24,550
MATERIALS and EQUIPMENT							
18" WCS w/ HDPE Pipe	2		$1,000	ea	$2,000	2022/2023	Grant
Subtotal Materials and Equipment							$2,000
NON-CONTRACT PERSONNEL and TRAVEL							
Project Management	20	hr	$125	/hr	$2,500	2022/2023	Grant
Engineering/Design	15	hr	$110	/hr	$1,650	2022/2023	Grant
Travel	750	mi	$0.58	/mi	$435	2022/2023	Grant

Subtotal Non-Contract Personnel	$4,585
TOTAL RESTORATION DIRECT COSTS	**$31,135**

Tract 6 – Salton Sea Conservancy (SSC): Enhancement Financial Plan Justification: $54,535 and (43) acres

Grant - $35,410 Match - $19,125 Completion: 2022/23

Item & Work	Units	$/unit	Total $	Schedule	Funding Source
CONTRACTS					
18" WCS Installation	4	$600 ea	$2,400	2022/2023	Grant
Site Prep/Shrub Removal	15 hrs	$170 /hr	$2,550	2022/2023	Grant
Levee and Swale Construction	18,222 cyd	$2.25 /cyd	$41,000	2022/2023	Grant/SSC
Subtotal Contracts					$45,950
MATERIALS and EQUIPMENT					
18" WCS w/ HDPE Pipe	4	$1,000 ea	$4,000	2022/2023	Grant
Subtotal Materials and Equipment					$4,000
NON-CONTRACT PERSONNEL and TRAVEL					
Project Management	20 hr	$125 /hr	$2,500	2022/2023	Grant
Engineering/Design	15 hr	$110 /hr	$1,650	2022/2023	Grant
Travel	750 mi	$0.58 /mi	$435	2022/2023	Grant
Subtotal Non-Contract Personnel					$4,585
TOTAL ENHANCEMENT DIRECT COSTS					**$54,535**

2020 OTHER GRANT/MATCH ACTIVITIES FINANCIAL PLAN JUSTIFICATION – $47,500

Grant - $40,000 Match - $7,500 Completion: Entire Grant Period

The funds to be spent within the "Grant Administration" category are the accrued costs of the actual administration of the grant for the three-year grant period which we plan on accomplishing in two years. The tasks performed under this category include contract administration, report writing, and general accounting conducted by the project manager/accounting staff to process all payments for contract expenses incurred on projects receiving NAWCA funds. Costs are billed at an hourly rate based upon hours worked at the end of each pay period. California Waterfowl will be contributing match towards this section of the grant.

Item & Work	Units	$/unit	Total $	Schedule	Funding Source
Grant Administration	320 hrs	$125/hr	$40,000	2022/23	Grant
Grant Administration	60 hrs	$125/hr	$7,500	2022/23	CWA
TOTAL DIRECT COSTS					**$47,500**

2020 PROPOSAL TECHNICAL ASSESSMENT QUESTIONS

Numbers are from the annual White Goose Counts conducted by the US Fish and Wildlife Service (FWS) and California Department of Fish and Wildlife (DFW) each year and annual counts conducted by FWS staff at Sonny Bono NWR. Additional information was obtained from interviews by California Waterfowl (CWA) with staff from the Imperial Wildlife Area (WA) and Sonny Bono NWR. Harvest reports (2018-2020) from both public hunt areas (Imperial WA Wister Unit and Sonny Bono NWR) were referenced. We have identify **bird numbers for the Sonny Bono NWR and Imperial WA tracts based upon the percentage the tracts acreage represent of the entire palustrine emergent acreage** on that site. For example Imperial WA maintains ±3,800 acres of freshwater marsh and Tract 2-4 represents ±25% (949 acres) of that habitat base, Wister sees typical 12,000-18,000 pintail and Tract 2-3 will likely see increased use upwards of 3,500 – 5,000 pintail possibly more.

2020 TECHNICAL ASSESSMENT QUESTION #1

Describe how the proposal will aid in meeting objectives of waterfowl conservation plans: The greatest limiting factor to accomplishing nationwide waterfowl population goals has been the historic and continued impacts of habitat loss and degradation. The North American Waterfowl Management Plan (NAWMP) addresses these issues through habitat objectives, which are accomplished at the Joint Venture level. In 2007 the SJV developed the **Waterfowl Management Supplement which identified four basic limiting factors that are influencing populations;** 1) the availability, density, and quality of the food/energy resources to meet daily energetic needs as well as needs to begin migration and breeding, (2) wetland availability and extent for roosting and foraging, (3) wetland condition, and (4) context or compatibility of the surrounding landscape. Within the "Supplement" the SJV identified that the **highest priority needs for waterfowl and all migratory birds is the restoration and enhancement of wetlands**.

This proposal continues with the successful restoration (356 acres) and enhancement (3,806 acres) efforts that were completed in two previously completed NAWCA grants (Imperial Valley Wetlands Project Phase I and II) delivered in 2007-2009 and 2012-2015 by the partners. This new proposal, **Wetlands of the Imperial Valley**, **California**, continues to addresses the highest priority needs **by restoring 155 acres of new palustrine emergent habitat and 6 acres of associated uplands while enhancing 830 (43) acres of palustrine emergent habitat and 119 acres of associated uplands.** Benefits will improve the ability for managers to effectively and efficiently manage habitat thus maximizing resource availability and diversity while expanding the habitat base. These projects and the **habitats** they **represent are a significant portion of the managed freshwater wetland acreage that remains in the SJV's identified Salton Sea and Imperial Valley Focus Areas and in all of southern California** (Beardmore 2007). These wetlands in the southern Salton Sea region see 125,000-150,000 wintering waterfowl each year (FWS interview) with significantly larger numbers that migrate through. The region sees twice that many migratory shorebirds moving through. The entire **Salton Sea region is a major pinch point in the Pacific Flyway for millions of migratory birds** heading south and then again when returning north. The continued reduction in Salton Sea shoreline and the **increased salinity levels have decreased invertebrate production** as well as fish in the sea. The **dependence of all wetland birds has shifted significantly towards managed freshwater wetlands** throughout the region. Compounding this has been the continued degradation and reduction is size of the Rio Hardy Marsh just 50 miles south of the boarder in Mexico which is less than 10% of its original 1.9 million acres (Luecke et al. 1999). All these **compounding factors are increasing the dependence of these species on the managed habitats** that remain within the Salton Sea region.

Species	Numbers Affected/Life Cycles Stage	Tract Importance
High Priority		
Northern Pintail	Wintering/migrant regionally up to 35,000. Wister (T2-4) will see 3,500-5,000 and Sonny Bono NWR (T5) 100-300 benefit at peak. #2 most harvest duck on Wister in 2018-20 (1,612 average/yr). T1/6 will benefit 50-200 each.	T1-6 will all support improved resources and expanded habitat opportunities on 985 acres of shallow flooded palustrine emergent wetlands.

Mallard	Wintering/migrant/most abundant breeder Wister 450-850 and Sonny Bono NWR 250-350. T1/6 likely 50-150 at peak following project results. T2/3 may aid in production with up to several dozen broods each year.	T1-6 will be providing significant wintering resources (985 acres) also semi-perm wetland units in T2/3 will be providing brood rearing opportunities.
Lesser/Greater Scaup	Wintering species that use the Salton Sea and are found regularly on the wildlife area and refuge properties. T2-4 will benefit 100-150 and T5 50-75. T1/6 will benefit up to 25 each.	T1-6 will provide rich resources for winter. Improved water supplies will aid in moist soil plant propagation and increase invertebrate #'s.
Other Priority		
PG White Fronted Goose	Wintering/migrant T2-4 will increase use to as many as 40-60 and T5 5-20 loafing. Private property use is rare. They forage in farm fields and loaf on public areas. T4 will provide foraging opportunities for 40-60.	T4 will provide for foraging with its green feed field (102 acres) development completed. The remaining tracts would provide potential 985 acres of roosting and loafing locations.
Wrangle Island Snow Geese	Wintering snow geese are the most numerous goose species in the region with a % being Wrangle Island birds (PFC 2006). Peak for the region is around 50,000-55,000 between Wister and Sonny Bono and some private clubs. Wister T4 could see 500-1,500. T1 sees regular roosting and new habitat could provide nearly 1,000 birds roosting opportunities.	T4 will provide excellent foraging on new green feed fields (102 acres). T1-6 all have the potential to provide roosting sites for the species which depend upon these freshwater wetlands for roosting and resources. T1's existing marsh is regularly used for roosting, expansion offers opportunity.
Wood Duck	Wintering/migrant T1-6 with numbers up to 20 at times moving through. Each year several are harvested on the public lands but not in any great numbers.	T1-6 will all provide the species with excellent resources on these sites following completion of the wetland construction.
Redhead	Wintering/migrant and some breeding seen on all areas. 300-400 harvested at Wister annually. T2-4 350-450 at peak and T5 200-300. T1/6 20-40/ea possibly more.	T1-6 will all see major habitat improvement and management capabilities enhanced leading to improved wintering resources for all species on 985 acres.
Canvasback	Wintering/migrant normally seen on all areas. T2-4 100-150 at peak and T5 50-100. T1/6 15-30/ea possibly more.	T1-6 will provide opportunities for foraging/roosting with the improved habitat conditions/expanded habitats.
Ring-Neck Duck	Wintering/migrant at T2-4 200-400 and T5 100-200 and T1 & T6 20-40/ea will benefit.	T2/3 will have slightly deeper swales which will be attractive through the winter. All tracts will provide foraging and roosting opportunities especially with increased resources resulting from management improvements.
American Wigeon	Wintering/migrant is one that will benefit greatly from the projects. T2-4 will increase use to 1,000-1,500 while T5 (Sonny Bono NWR) 300-400 during the peak. T1/6 will improve numbers possibly to 100-300/ea.	T1-6 will provide 985 acres of the most valuable habitat throughout the region for wigeon. Shallow moist soil units with an abundance of resource will help to improve body conditions for return migration north and potentially increase production during the breeding season.
Other Waterfowl		
Western	In general they are a resident with increased	T1-6 shallow moist soil units with an

Canada Goose	numbers during winter. The region sees several hundred wintering and then even some production. T5 25-45 and T2-4 50-75. T1/6 sees between 5-10/ea.	abundance of resource will help to improve body conditions for return migration north and potentially increase production during the breeding season.
Gadwall	Wintering/migrant/breeder the fifth most harvested duck on the public areas. T2-4 will see 500-700 while T5 might see 200-300 during the peak. T1/6 will see 100-250 during peak use following resource development.	T1-6 will provide ideal feeding depths and resources once moist soil management practices are implemented. T2/3 will provide for production with 5-10 broods possible.
Cinnamon Teal	Wintering/migrant and the 2nd most numerous breeder in the state. They are the 3rd most harvested species on the public ground with an average of 800-1,100 harvest at Wister/year. T2-4 500-1,000 and T5 200-300 while T1/6 will see ±100-200 during peak.	T1-6 will provide ideal feeding depths and resources once management undertakes moist soil feed production. T2/3 will also provide opportunities for production late spring into early summer possibly up to 12 broods.
Northern Shoveler	Wintering/migrant they are the 4th most harvested species on the public ground with an average of 750-1,000 harvest at Wister/year. However historically they are the most numerous species identified on the mid-Winter Waterfowl Counts (discontinued in 2015). T2-4 1,250-2,000 and T5 250-300 while T1/6 will see use increase up to 350.	T1-6 will provide ideal feeding depths and increased resources once moist soil management practices are implemented. These practices will result in improved body conditions for spring migration and potential reproductive success.
Green-winged Teal	Wintering/migrant they are the #1 most harvest species on the public ground in most years with an average of 2,200-2,500 harvest at Wister/yr. T2-4 1,500-2,000 and T5 450-600 while T1/6 will benefit 300-500 during peak.	T1-6 will be providing ideal depths for foraging and improved roosting sites with the enhanced habitat conditions and expanded habitat base.
Common Goldeneye	Have been historically observed as an uncommon migrant. Seen every winter just few in numbers. It's estimated that 12-24 will venture onto T5 and fewer on the private properties. T2-4 may see use by 5-10.	T1-6 will provide improved habitat conditions for the species when they are present.
Hooded Merganser	Wintering/migrant at T5 6-12 and T2-4 will benefit 10-20. Rare on T1/6 ±2-4.	T1-6 will provide loafing habitat and resources with the use of district water which contains fish that comes in on. Aquatic plant and invertebrates will also provide increase foraging opportunities.
Bufflehead	Wintering/migrant regularly seen at Sonny Bono NWR's T5 50-150 and T2-4 100-200 at peak. T1/6 will benefit up to ±10.	T1-6 will provide increased seed resources and ideal feeding conditions.
Ruddy Duck	Common wintering/migrant with rare breeding. T5 150-180 and T2-4 estimated benefits for up to 1,300-1,600 with T1/6 100-300.	T1-6 will provide increased seed resources and ideal feeding conditions. Increased plant growth will elevate invertebrate populations.

3) How will the proposal impact species affected and improve habitat quality (describe before- and after-proposal environment)? The manipulation of California's waterways over the past 100 years has nearly eliminated naturally occurring flood events. Habitat managers are required to manually flood and drain wetland units too effectively and efficiently mimic natural hydrologic events to promote desired moist soil plant growth.

Currently, most project sites are able to flood their wetland units, but very few are able to remove water when managers desire to do so. This lack of control significantly limits the ability of managers to provide high quality resources for waterfowl. The inability to completely remove water from wetland units leaves little choice other than to evaporate water. Evaporation reduces plant germination, seed production and leads to an accumulation of residual salt. Water in the region comes from the Colorado River and has a slightly higher salt content which can create issues if not drained off. Salts reduce soil fertility, which impacts plant growth and reduces seed production. Additional problems can include rank invasive plant growth and vector control issues.

The **funding and support by the participating partners and NAWCA will increase overall habitat acreage, and most importantly the establishment of infrastructure allowing for proper wetland management techniques to be implemented**. Results will allow management to increase the availability of high quality habitat and resources for all wetland dependent bird species. Studies have shown that when water is drawn off managed units at a prescribed time then desirable moist soil plants species germinate. Then when timely irrigations are applied there is a significant increase in seed production (Naylor 2002, Mushet et al. 1992, Heitmeyer et al. 1989). Increased plant growth also helps to increases resources for invertebrate populations.

The **Wetlands of the Imperial Valley, California will continue with the landscape scale successes that were accomplished during the Imperial Valley Wetlands Project Phase I and II** which started over a decade ago. Habitat improvements that resulted from those two successful grants are obvious by visiting the previous project sites today. Salt flats that once existed are gone and significant growth of emergent cover and swamp timothy flats dominate both the Imperial WA Wister Unit and the Sonny Bono NWR sites. **Managers of these large public areas identify that birds are taking advantage of the resources they are now able to provide and feel bird use has increased.**

A comparison of hunter success at the Imperial WA's Wister Unit from 1998-2008 and then 2009-2019 following the initiation of the two large grants **shows an overall increase in harvest by public hunters of 16.3%**. In California the waterfowl bag limit of 7 birds and a 100 day seasons were consistent during those 20 years. We know it could be argued that it's not an indicator of increased bird use but in any respect DFW is seeing an increase in overall bird use over an increased duration of time while harvest on this wildlife area has also increased. Nearly 50% of the WA's historic wetland foot print has been reconstructed and new management capabilities put into action as a result of these completed projects.

2020 TECHNICAL ASSESSMENT QUESTION # 2

A. NAWCA Priority Bird Species for BCR 33

Species/Plan	Numbers Affected	Benefits of Project	Tract Importance
"California" Black Rail NAWCA (BCR-33) NAWCP SJV-CC CA Status: Cal-T	Breeder - common <50 breeding pairs T2/3 (FWS interview). Benefits will contribute to the SJV pop goals of increasing pop by 50%. T5 will see foraging of up to 20.	Improve foraging conditions through invasive plant removal and levee refurbishment will open up the water's edge and increase shallow water (<6") habitat with cattails.	T1 - 6 Cattail dominated emergent marsh benefits will directly improve resources on 985 acres. T2/3 semi-perm wetlands for production will increase breeding.
"Western" Snowy Plover NAWCA (BCR-33) SJV-CC; USSCP-HI FED Status: FED-T CA Status: Cal-SSC	Breeder - common 200-300 pairs along Sea (estimated 10% of Cal. Pop) (Page et al. 1991, Shuford et al. 2000). T5 will provide 100-200 at peak (FWS interview/data) foraging.	The removal of rank exotic plants along the water's edge, refurbishment of levees/slopes will increase/improve foraging and breeding opportunities.	T1 - 6 Habitat expansion/improvements on 985 acres will increase foraging and T2/3 may provide limited breeding benefits.

Least Bittern NAWCA (BCR-33) CA Status: Cal-SSC SJV-RC	Resident - common breeder 50-75 breeding pairs at T2/3. Ranging upwards of +600 birds locally (CBC 2019). 2018 spring survey ±35 at Tract 5 (FWS data). T1/6 will see 5-10.	Increased shallow flooded seasonal wetlands with enhanced edge through contoured levee slopes and islands improving foraging and breeding opportunities.	T1 – 6: Will provide breeding/foraging benefits on 985 acres of wetlands. T2/3 will be managed as semi-perm and rotated every other year for production.
Long-billed Curlew NAWCA (BCR-33) USSCP-HI SJV-CC	Migrant - common ±20% of the global pop. winters in the project area. (Shuford et al. 2000). Seen every month. T2-5 will see 100-200 regularly peaks of 1000+ (FWS interview). T1/6 will see 10-20.	Improved water control and movement will enhance irrigation capabilities allowing for improved management of green feed upland fields, which are used extensively for foraging.	T1-6 will improve foraging opportunities. T4: is a site that will provide 102 acres of irrigated uplands which will benefit curlews with foraging habitat.
Marbled Godwit NAWCA (BCR-33) USSCP-HC SJV-CC	Migrant – common up to 80 will benefit from T5 (FWS data 2018). Observed Sept –Jan at T5. T2-4 50-100, T1/6 up to 20	Increased shoreline edge, exotic vegetation removal and refurbishment of levees and slopes will enhance foraging conditions.	T1 - 6: The enhancement (830) and restoration (155 ac) of palustrine wetlands will provide foraging benefits.
Bald Eagle NAWCA (BCR-33) CA-Status: CAL-E	Wintering - common found on most sites. Sonny Bono NWR (T5) typically 3-6. Wister Unit (T2-4) winters an estimated 5-8. T1/6 properties will see use by 1-3.	Benefits to shorebirds and waterfowl will increase use that will provide an enhanced prey base. Such benefits were identified in the Pacific Bald Eagle Recovery Plan (FWS 1986).	T1 - 6: Each tract sees use and provides resources for wintering eagles. Benefits will enhance body conditions and potentially reproductive success.
Black Skimmer NAWCA (BCR-33) SJV-CC NAWCP-HC CA Status: Cal-SSC	Breeder, Migrant - common peak +8,000 during migration around Sea. T5 has ±100 breeding pairs nearby (FWS interview/ data). T5 will be used for foraging ±50, T6 ±10.	Shoreline protection and shallow water feeding habitat expansion will provide suitable breeding and rearing habitat.	T5, 6: Habitats are adjacent to the Salton Sea and could provide potential nesting sites for the species.
(Least) Bell's Vireo NAWCA (BCR-33) FED Status: FED-E	Breeder, Migrant - uncommon, has breeding pops just west of the Salton Sea. Migrate through in limited numbers (Patten et al. 2003). T5 will see 12-24 during spring migration, T3 20-30 (FWS interview).	Habitat improvement projects will help to increase invertebrate production and improve foraging for the species especially with the enhancement of native shrub units through improved water supplies.	T1 - 6: Expansion and enhancement will improve foraging, especially at T3 and T5 where suitable native uplands (23 acres) and wetlands interface.
Red Knot NAWCA (BCR-33) SJV-CC	Migrant – uncommon small groups (<20) will benefit from T5 and T2-4 during migration to Baja and the Colorado River delta (FWS data).	Restoration/enhancement efforts will expand/improve wintering conditions for the species through increased water's edge and sloping shoreline edges.	T1 - 6: All sites (985 acres) will provide foraging benefits to this species.

Gull-billed Tern NAWCA (BCR-33) SJV-CC	Breeder - common around the south end of the Salton Sea. The Salton Sea/San Diego boast the largest population of breeders in the western US, low hundreds (Molina and Erwin 2006). Sonny Bono NWR had 104 nesting pairs (FWS data 2018). T5 will be used for foraging ±25.	Improvements on T5 which is near nesting habitat during the spring drawdown and open water will increase opportunities for foraging. Promoted favorable feeding conditions during the breeding season.	T1 - 6: The close proximity of wetland units and adjacent farm lands will increase foraging habitat. Species differs from other terns in their diet, taking both aquatic and terrestrial arthropods, lizards, chicks of other bird species, and fish.

(Key: Relative Abundance: Concern Status: NAWCP- Waterbird Plan, HC=High Concern, MC=Moderate Concern; USSCP-Shorebird Plan HI=Highly Imperiled, HC=High Concern, MC=Moderate Concern; PIF- Landbird Plan WL=Watch List, RC=Regional Concern; SJV - CC=Continental Concern, RC=Regional Concern; Federally Endangered = FED-E, Threatened=FED-T; California Endangered=Cal-E, Threatened=Cal-T and Species of Special Concern=Cal-SSC. CBC = Christmas Bird Count

B. Other Wetland-Associated Bird Species

Species/Plan	Numbers Affected	Benefits of Project	Tract Importance
American Avocet USSCP-MC SJV-CC On Old BCR 33 List	Migrant, Breeder - common T2-4 #'s peak upwards of 750-1,000 and T5 +250 during winter (FWS interview) and T2/3 breeding pairs around 75-150 each spring. T1/6 will benefit dozens each.	Increased shallow flooded seasonal wetlands with enhanced edge through contoured levee slopes and islands will improve foraging/breeding opportunities.	T1 – 6: All tracts provide breeding/foraging benefits on 985 acres of wetlands, of which T2/3 acres management will include semi-perm breeding benefits.
Eared Grebe NAWCP-MC	Migrant - common ±50,000 birds during peak migration/winter along the Sea (FWS data). Historically over 1M and 95% of N.A. population (Shuford et al. 2000). T2-5 will see use up to ±10 each.	Restoration/enhancement of freshwater wetlands will increase and improve loafing and foraging habitat.	T1-6: Will all provide foraging benefits for the species with T2-5 with the most identified use but the Salton Sea itself is preferred.
Western Grebe NAWCP-MC	Breeder, Migrant - common 3,000-6,000 during peak migration regionally. T2/3 sees 30-50 on semi-perm wetland units with occasional breeding. T5 will see 10-20 moistly foraging (FWS data).	Restoration/enhancement of freshwater wetlands will increase quality loafing and foraging opportunities. Fish make their way into the wetland units through the water supply and provide foraging benefits.	T1-6: Grebes use the deeper water areas found on these tracts. Improvements in surface water delivery and movement could potentially benefit the species.

"Yuma" Ridgway's Rail NAWMP SJV –RC FED Status: FED-E CA Status: Cal-T	Breeder - common 2018 survey results showed 97 which included T2/3 in the count for Wister and 197 at Sonny Bono NWR. Estimated 38.7% of the US population resides within the project area (FWS data 2018). T4-6 will benefit rails when foraging up to 5-20 at times.	Enhancement of habitats will likely increase **breeding pairs by 2-10 (FWS interview) at T2/3.** Increased shallow water emergent vegetation will improve habitat foraging and breeding conditions and aid in the SJV goal of doubling the population.	T1-6: Units being reconstructed and the overgrowth of exotic plant species will be removed providing foraging benefits. **T2/3 will have 498 acres of potential breeding habitat enhanced**, improving conditions for recruitment.
American White Pelican NAWCP-MC CA Status: Cal-SSC	Resident - common T1-6 sites receive use especially during drawdown events with a few to several dozen congregating on sites.	Managed wetlands are used during draw downs, when stranded fish (imported with surface water) are trapped in low lying areas. The semi-permanent wetland units will provide loafing areas.	T1-6: Improved water management and increased diversity of open water and emergent cover will improve foraging on 985 ac of wetlands during draw downs.
White-faced Ibis NAWCP CA Status: Cal-SSC	Breeder, Migrant - common +5,000 breeding pairs 35,000 plus birds during peak migration (FWS data, Sonny Bono). T2-5 will benefit 200+ each. T1/6 will see benefits for several dozen.	Enhanced foraging conditions on irrigated uplands and brood rearing habitat on designated semi/permanent water habitat units will all aid in providing benefits.	T2-4: Are providing irrigated uplands and will benefit foraging ibis with potential breeding locations. T1-6 wetlands will also provide improved foraging habitat on seasonal wetlands.
Mountain Plover USSCP-HI CA Status: Cal-SSC	Migrant – common 2,500-4,100 birds counted during migration (Wunder and Knopf 2003) in the project area. T4 will provide up to 30 with benefits.	Agricultural fields and grasslands habitats are primarily utilized. Seeded and irrigated upland habitats on project sites will improve foraging habitat.	T4: Seeded uplands and enhanced water control will improve management & provide foraging on 102 acres.
Wilson's Phalarope USSCP-HC SJV-CC On Old BCR 33 List	Migrant - common Several thousand during migration. July 2019 saw 110 counted on adjacent field to T5 (FWS interview). 100-150 will benefit from T5. T2-4 200-250 each.	Increased water's edge will provide access to invert populations. Improved body conditions during migration will help to increase the population.	T1 - 6: All of the proposed project sites will provide benefits to the species during the time of year when they are present.
Western Sandpiper USSCP-MC SJV-CC	Migrant - common peak of ±40,000 during migration regionally (FWS interview). A dominate shorebird species during migration. T2-4 400-600/ea, T5 ±500, T1/6 ±100/ea.	Enhanced management capabilities, increased edge habitat with broad slopes will improve foraging and increase wetland habitat diversity. Benefits will support habitat and population objectives.	T1 - 6: Projects will provide enhanced habitat conditions on 830 acres of wetlands and increase available habitat on an additional 155 acres of restored wetlands.

Yellow-headed Blackbird SJV-SS CA Status: Cal-SSC On Old BCR 33 List	Breeder - common 500-1,000 sized breeding colony adjacent to T5. T5 will provide enhanced foraging. Smaller colonies are at T2/3 (DFW interview) of 100-500.	Found mostly in and around shoreline habitats of the Salton Sea. Projects will expand/improve breeding conditions for the species (T2/3) through increased water supplies and shoreline vegetation.	T1 – 6: Preferred shoreline habitat with emergent vegetation on these tracts. Projects will protect and improve foraging/breeding especially in T2/3 with late water for breeding.

*Unless otherwise noted, numbers affected are based on communications with regional FWS and DFW biologists and land managers.

2020 TECHNICAL ASSESSMENT QUESTIONS #3

A. National Priority Wetland Areas:

National Bird Plan Priority Area	In	Partially In	Out
NAWMP	XX		
PIF	XX		
Wading Birds	XX		
Shorebirds	XX		

B. Regional Important Wetland Areas:

Sonoran Joint Venture (SJV): The SJV's mission is to conserve the unique birds and habitats of the southwestern United States and northwestern Mexico. The SJV strives to integrate the strategies, goals, and objectives of existing regional, national, and international bird conservation plans and programs into a single strategic effort that addresses the unique regional bird conservation needs. The SJV's Waterfowl Management Supplement, Version 1.0 (Beardmore 2007) addresses the reduction in habitat quality, availability, and a shortage of freshwater inland wetlands as the greatest limiting factors for waterfowl populations in the lower Colorado River, Salton Sea and southern California regions.

The SJV established "Priority Wetland Areas" which designate highly desirable wetland habitats that the SJV strives to protect, restore and enhance. **All of the projects fall within a SJV designated "Priority Wetland Area."** This proposal will contribute directly to the goals of the SJV by providing long term protection, increased habitat acreage (restoration), and improved management capabilities and infrastructure on existing habitats (enhancement).

California Partners in Flight (CalPIF): CalPIF has developed seven state-level, habitat-based conservation plans promoting the conservation of landbirds and their habitats within California. Southeastern California habitats are specifically discussed in the Grassland, Riparian and Desert plans. The proposed protection, expansion, and enhancement of these habitats parallel the goals identified with in the CalPIF Plan.

CalPIF - Grassland Bird Conservation Plan: The project benefits will contribute to the goals of the CalPIF Grassland Bird Conservation Plan by enhancing 125 acres of upland habitat on Tracts 3-5. The Track 4 acreage will be dominated by annual irrigated grass/grain species while Tracts 3 and 5 will have native upland plant species established. The above mentioned properties have significant upland habitat acreage that is associated with palustrine emergent wetlands. These associated habitats, are in fact providing habitat to many upland species, as well as providing potential nesting and foraging areas for birds. All of the plan's designated focal species have been identified within the project area and will benefit directly from the proposed habitat improvement work. These species include the Ferruginous Hawk, Grasshopper Sparrow, Mountain Plover, Northern Harrier, Western Meadowlark, Savannah Sparrow, and White-tailed Kite.

State Wildlife Management Area & State Wildlife Action Plan (SWAP): DFW has developed a specific Management and Action Plans for the Imperial Wildlife Areas, Wister Unit and the surrounding region, which details how conservation projects can improve habitat conditions. The wildlife area is comprised of more than 7,900+ acres, dedicated to preserving habitat and wildlife. The **proposed efforts will directly contribute to the State's goals** that specify the need to protect, restore and enhance habitat

values for wildlife as well as provide for public uses on state properties. In total, **949 acres of state managed public property will be or have had habitat work accomplished as a result of this proposal**. **All 949 acres is open to the public** for hunting during the appropriate seasons, or for a host of other outdoor activities year around.

California Inland Wetlands Conservation Program & California Riparian Habitat Conservation Program: Goals of these two State programs are to carry out the mandates of the all joint ventures covering California through the protection, restoration and enhancement of wetland and riparian habitats. The Wildlife Conservation Board (WCB), which administers these two programs, has three basic components to their mission: 1) the acquisition of land and water (through ownership or easements) for recreational purposes and the protection of wildlife habitat; 2) the enhancement/restoration of habitats on public/private land; 3) the development of public access to the state's wildlife/fish resources. The program actively funds conservation easements/restoration projects within the region, which is a designated priority improvement area. **The Imperial WA, Wister Unit T10/S20/S22 Project, (Tract 4) is a result of this program and the funds are being used as match within the proposal.**

US Fish and Wildlife Service's Partners for Fish and Wildlife Program: The Partners program is a voluntary program that assists landowners with providing technical and financial assistance for habitat improvements. The program has conducted numerous projects within the southern California area. This program targets the conservation of federal trust species and their habitats. The proposed project will contribute to the goals and objectives of the program within this FWS's priority area. Program administrators are fully aware of this NAWCA proposal and are fully supportive of these efforts.

US Fish and Wildlife Service – National Wildlife Refuge System and Regional Wetlands Concept Plan under the National Wetlands Priority Conservation Plan: The Sonny Bono NWR is a high priority wetlands conservation area established to protect and restore habitat for migratory birds and for threatened and endangered species. Eighty-three acres of its palustrine emergent freshwater habitat and native uplands restoration will contribute to the goals/objectives of the refuge complex.

Western Hemisphere Shorebird Reserve Network (WHSRN): The project area falls within the Salton Sea region and includes the Sonny Bono NWR, which **in 2000, was designated as a site of Regional Importance for shorebirds by WHSRN**. This designation identifies the area as providing critical habitat to a significant number of migratory shorebirds. Shorebirds are highly mobile and opportunistic birds and their use of the project area is estimated at 100,000-250,000. As a result of these completed projects, shorebirds will be provided with year-round benefits, contributing to the goals and objectives of WHSRN. In addition, breeding conditions for several shorebird species including Snowy Plover, Killdeer, Black-necked Stilt, and American Avocet will be greatly improved.

2020 TECHNICAL ASSESSMENT QUESTION #4

ACTIVITY AND TRACTS/GROUPS OF TRACTS IN THE PROPOSAL (grant and match tracts only)	STATUS, TYPES AND ACRES OF WETLANDS DECREASING PEM	UPLANDS	TOTAL ACRES
SECTION A			
RESTORATION	155	6	161
ENHANCEMENT	830	119	949
TYPE TOTALS	**985**	**125**	**1,110**
STATUS TOTALS	**985**	**125**	**1,110**
GRAND TOTAL	**1,110**		**1,110**
SECTION B			
RESTORATION			
Tract 1 – Cottonwood Duck Club (Grant/Old Match)	51	-	51
Tract 5 – Sonny Bono NWR Hazard Unit North (Grant)	77	6	83
Tract 6 – Salton Sea Conservancy (Grant/New Match)	27	-	27

Restoration Tract Total	**155**	**6**	**161**
ENHANCEMENT			
Tract 2 – Imperial WA, Wister Unit W11A&C (Grant)	285	-	285
Tract 3 – Imperial WA, Wister Unit Y15A&B (Grant)	213	17	230
Tract 4 – Imperial WA, Wister Unit T10/S20/S22 (Old Match)	332	102	434
Enhancement Tract Total	**830**	**119**	**949**

Narrative: Native upland habitat regionally is very limited and is typically dominated by mesquite, palo verde, iodine bush, arrow weed and atriplex spp. (to name a few) and is used for cover, nesting, and foraging by local and migratory species. The identified **six acres of restoration (Tract 5) and 17 acres of enhancement (Tract 3)** will be providing a great opportunity for native plant establishment on both public areas while also buffering adjacent wetland units that are part of the proposal. The FWS and DFW are dedicated to planting native species once the cleanup and development of these two tracts are completed. These agencies undertake efforts each year to expand their native plant communities and this process is part of their regular management strategies.

The Salton Sea region is dominated by irrigated fields which see heavy use year-round by various egrets, cranes and large numbers of white-faced ibis (in the thousands/FWS interview). Irrigated upland habitat, referred to as green feed (rye grass, wheat, and occasionally alfalfa) are managed specifically for waterfowl food resources, but also provides some nesting habitat in spring and early summer, when residual growth is left behind before fall planting takes place. The **102 acres of enhancement (old match) on Tract 4** (Imperial Valley WA's Wister Unit T10/S20) has established two large easy to manage green feed fields that are used by wintering Snow and Ross' geese heavily.

Part of the annual management strategy at the Imperial Valley WA and Sonny Bono NWR has always been to provide migrating Snow and Ross' geese with resources. Historically, green feed units have been the primary feed source to deter the geese from feeding in fields where they destroy crops. Over time, the dependence by geese on these green feed fields has grown, with some of the largest numbers of geese being recorded in the last three years (average ±35,500). Federal surveys have shown wintering numbers steadily increasing in the region by over ±153% since 1980. Sonny Bono NWR had a peak of 50,700 in 2018 (all data provided by Sonny Bono NWR). Although the intended purpose for these 102 acres is to provide a reliable food source for migrating geese, the fields also provide beneficial nesting and foraging habitat to a variety of upland nesting birds, raptors, and other dependent species. These units are adjacent to managed semi-permanent and permanent wetland habitat units on the wildlife area and are all within the public hunt area.

The proposed and match projects have targeted a total of **six acres of restored (Tracts 5) and 119 acres (Tracts 3 and 4) of enhanced uplands.** The project benefits will directly contribute to Sonoran JV and NAWMP goals and objectives, and ultimately help to support and enhance local waterfowl and upland bird species.

2020 TECHNICAL ASSESSMENT QUESTION #5

ACTIVITY	Acres/Longevity of Benefits * WCS other than wood. ** Wood WCS and pumps.		TOTAL ACRES
	*26-99	**10-25	
SECTION A			
RESTORATION	**161**	**-**	**161**
ENHANCEMENT	**949 (43)**	**-**	**949 (43)**
TOTAL	**1,110 (43)**	**-**	**1,110 (43)**
SECTION B			
RESTORATION			
Tract 1 – Cottonwood Duck Club (Grant/Old Match) #	51	-	51
Tract 5 – Sonny Bono NWR Hazard Unit North (Grant)*	83	-	83

Tract 6 – Salton Sea Conservancy (Grant) #	27	-	27
Restoration Tract Total	**161**	**-**	**161**
ENHANCEMENT		-	
Tract 2 – Imperial WA, Wister Unit W11A&C (Grant) +	285	-	285
Tract 3 – Imperial WA, Wister Unit Y15A&B (Grant) +	230	-	230
Tract 4 – Imperial WA, Wister T10/S20/S22 (Old Match) +	434	-	434
Tract 6 – Salton Sea Conservancy (Grant/New Match) #	(43)	-	(43)
Enhancement Tract Total	**949 (43)**	**-**	**949 (43)**

* = US Fish and Wildlife Service, + = State Property, # = 25yr CWA Agreement

Narrative: 1,032 acres of the 1,110 (43) acres are protected in perpetuity (92.9%) in fee title; US Fish and Wildlife Service, and the California Department of Fish and Wildlife. Projects taking place on these public lands are managed and protected in perpetuity by the appropriate agencies and are open to public hunting and recreation.

The two non-agency properties T1 and T6 (private) **will be maintained under a signed 26 year grant agreement with California Waterfowl.** This agreement requires wetland management and maintenance (including materials) practices to take place for the duration of the agreement. The collaboration between landowners and California Waterfowl biologists help to provide training and education on management techniques with goals designed to establish and maintain high quality habitats.

The restoration of 161 acres (Tracts 1, 5, 6) and enhancement of 949 (43) acres (Tracts 2-4, 6) will have each of their project components lasting for an estimated 26 - 99 years. The practices to be used on each of these sites will follow **construction standards that have been established by Natural Resources Conservation Service (NRCS) as part of the Wetland Reserve Easement Program**. The standardized construction methods help to ensure stable long-lasting results. Ultimately, the goal is to provide managers with sound infrastructure, allowing for efficient multi-species management capabilities. Completed projects will thereby increase habitat quantity, quality and diversity while conserving water supplies.

Climate Change: California has recently come out of one of the state's longest droughts in recent history which impacted water supplies severely. It has become clear that **water for wildlife and wetlands will be taking a back seat when put up against corporate farming and the public**, when times are tough. In the next 30 to 50 years climate change in California and the west in general, will likely lead to less water availability due to decreased rainfall/snowpack. Additional impacts will come from significant changes in land use practices and increases in human consumptive uses. In an area essential to the Pacific Flyway's waterfowl and shorebird populations, such **climate change effects pose a broad threat to water and wetland resources which will require adaptations in management and construction.**

The results of the most recent drought has caused all partners in the restoration and enhancement field to evaluate and reconsider how we design and construct efficient and manageable habitats throughout California. Moving forward **projects are striving to ensure that less water will be used to flood more acres, with increased efficiency while meeting the resource needs of the wetland dependent species.** We are developing components that provide managers with the ability to control water by the most efficient means possible. An example of this is the more efficient pipeline systems that are being installed at the Imperial Wildlife Area's Wister Unit (Tract 4). **By reusing water supplies during irrigations (unit to unit pass through) and eliminating inefficiencies that were once overlooked, we are taking the first steps to increase water conservation efforts,** ensuring continued habitat persistence in the future.

Another step in the battle to conserve water is to limit the amount of topographic fall within wetland units. By reducing the fall, **less water will be consumed to irrigate and flood up resource rich wetland habitat**. Improvements will help to promote habitat quality and increase flooded acreage during future droughts, while also conserving water supplies during normal water years.

The **National Fish, Wildlife and Plant Climate Adaption Strategy** outlines conserving and connecting habitats, enhancing wildlife management capacity, managing species, reducing climate stressors and ensuring agricultural practices align with wildlife values in the face of climate change as key component goals. Project aspects battling climate change effects include **reusing water supplies,**

increasing water use efficiency, **increasing water control infrastructure, and providing the ability to actively manage habitats for wildlife with climate change adaptive features**.

2020 TECHNICAL ASSESSMENT QUESTION #6

A. Federally Threatened, Endangered, Proposed Species:

(Key: Federally Listed as Endangered = E, Threatened = T, Proposed = P, or Category I Candidate = C)

SPECIES	*STATUS*	*HABITAT*
Yuma Ridgway's Rail	E	Wetlands
California Least Tern	E	Wetlands, Shore
Western Snowy Plover	T	Shore, Wetlands

The **Yuma Ridgway's Rail [*Rallus obsoletus yumanensis*] (E/State T)** currently occupies perennial wetland units with thick emergent cover found throughout the project area. With that said, the rails avoid wetlands that become too rank with emergent vegetation. Ideally, wetland units should be managed on 1-3 year cycles to control rank vegetation, which requires the wetland unit to be dry for a period of time. Rails prefer foraging in freshwater wetlands which contain healthy populations of crayfish, small fish, beetles and isopods. Coordinated efforts by a multitude of state and federal personnel have conducted surveys since 2000. Results from 2018 identified 758 rails in the southwestern United States, mostly in California and Arizona (FWS data). The Imperial WA's Wister Unit had a total of 97 rails counted. In addition, Sonny Bono NWR and Hazard Unit (combined counts) had an additional 197 rails counted. In total, these two areas accounted for 38.7% (294) of all rails counted during the 2018 survey (FWS data). Proposed projects (Tract 2 & 3) will undertake enhancement of 498 acres of wetland habitat that is managed for wintering waterfowl and also specific to rails at the Wister Unit. The Tract 2 & 3 projects will engineer units so they can drain, provide shallow water habitat for foraging, and provide independent delivery of water supplies. The new delivery and drainage improvements will allow DFW staff to manage water for desired emergent cover densities. The habitat improvements and benefits to the population will contribute directly to the goals and objectives identified within the Recovery Plan (FWS 1983) and SJV populations objectives. Currently it is estimated that there are 30-40 breeding pairs using the proposed enhancement sites. Once completed, wildlife area staff feels that numbers could potentially increase by an additional 5-10 pairs (DFW interview Sewell).

The **California Least Tern [*Sterna antillarum browni*] (E/State E)** is an occasional migrant and is sometimes seen during the post-breeding season around the southern end of the Salton Sea. The tern is dependent upon southern California beaches during the breeding season and feeds upon schools of small fish. Benefits to the species will be minimal, although the Wister Units and Sonny Bono NWR do contain portions of the Salton Sea shoreline that are often utilized. These areas provide loafing and potential foraging areas that will be maintained and protected. Habitat protection is identified within the Recovery Plan as contributing benefits (FWS 2006).

The **Western Snowy Plover [*Charadrius alexandrinus nivosus*] (T)** has a resident population of 200-300, which is over 10% of the California population and one of the largest congregations within the interior U.S. (Page et al. 1991). Plovers are mostly found along the shoreline of the Salton Sea but frequent managed freshwater wetland habitats due to foraging requirements. Restoration of 155 acres and enhancement of 830 acres of palustrine emergent habitats will remove an overgrowth of exotic plants along the water's edge, refurbish levees and their slopes, and ultimately improve foraging/breeding opportunities. Benefits will contribute directly to the FWS Snowy Plover Recovery Plan and the SJV population goals (FWS 2007).

B. State-listed Endangered (SE) or Threatened (ST) Species:

Five additional state listed species are likely to receive benefits as a result of these proposed projects:

Swainson's Hawk [*Buteo swainsoni*] (ST) are common in the region, passing through mostly during their migration south. Large trees are used for roosting, and grasslands/irrigated pastures are used for foraging. The surrounding associated uplands and irrigated uplands will provide foraging opportunities during the migration seasons (DFG 2000). FWS staff observes typically up to 50 moving through the area during peak migration (FWS interview Schoneman).

The **Bald Eagle [*Haliaeetus leucocephalus*] (SE)** is a fairly common wintering species. Wintering shorebird and waterfowl populations provide this species and other birds of prey with an important food resource. It is anticipated that improvements in habitat availability and conditions will increase waterfowl and shorebird use of these project sites thus benefiting bald eagles and other birds of prey. Conservative estimates of bald eagle numbers based upon observations throughout the project area would identify 5-10 individuals during winter peak (FWS interview Schoneman). The outlined benefits will contribute to bald eagle population stability, and have been identified within the Pacific Bald Eagle Recovery Plan (FWS 1986; DFG 2000).

The **California Black Rail [*Leterallus jamaicensis coturniculus*] (ST)** is a resident of shallow flooded palustrine emergent wetlands with ample emergent cover. There are likely less than 50 breeding pairs throughout the project area (FWS interview). 2018 surveys observed seven at Sonny Bono NWR (FWS Data). Impacts to wetland habitat and encroachment of invasive exotic plants have been identified as contributing factors leading to a reduction in this specie's population. They breed in a very narrowly defined habitat of bulrush (usually) and shallow water. Seasonal wetland habitat expansion (155 acres) and enhancement (830 acres) will improve foraging conditions. Levee refurbishment and islands constructed with broad slopes will increase the availability of shallow water (<6") habitats. Results will provide rails with increased foraging areas. These benefits have been specifically identified within the state's recovery plan for the rail (DFG 2000). Emergent marsh habitat on Tracts 1-6 will provide suitable wetland habitat directly improving conditions for this species.

The **Greater Sandhill Crane [*Grus canadensis tabida*] (ST)** prefers foraging in agricultural grain fields and roosting in shallow flooded marshes and upland fields. The Imperial Valley sees ±500 greater sandhill cranes wintering within wetlands and irrigated pastures (estimated 300-400 lessers also winter here). The Wister Unit sees 150-200, while the Sonny Bono NWR sees upwards of 400 wintering birds (FWS data) of both species. Improvements on all of the properties will enhance roosting habitat for the species, but most importantly the irrigated upland habitat improvements at the Wister Unit (Tract 4) will provide additional benefits (DFG 1994).

The **Bank Swallow [*Riparia riparia*] (ST)** is known to occur within the project area during their migration. The species primarily uses wetland and riparian areas for foraging. Improvements in wetland and upland habitat will likely increase aerial invertebrate populations and thus their prey base. Both the Wister Unit and the Sonny Bono NWR see some use each year.

C. Other wetland-dependent fish and wildlife:

A number of species documented within the project boundary may benefit from the proposed project have been identified as "species of special concern" by the State of California. They include: Western Spadefoot Toad, American White Pelican, Double-crested Cormorant, Least Bittern, Long-billed Curlew, White-faced Ibis, Fulvous Whistling-Duck, Tricolored Blackbird, California Gull, Wood Stork, and Northern Harrier (some of these species are described in Technical Question #1 and #2). These species of special concern typically can be found within the palustrine emergent habitats that are within the project area, and may benefit from the enhancement activities that will be accomplished.

Additional species benefiting from the enhancement work on upland areas include: Golden Eagle, Ferruginous Hawk, Prairie Falcon, White-tailed Kite, Short-eared Owl, Loggerhead Shrike, and Burrowing Owl.

In total, there have been over 400 birds, 41 mammals, 18 reptiles and four different amphibians identified within the project boundary (DFW data). Habitat benefits resulting from completed projects identified within this grant will provide hundreds of wetland dependent species with benefits that will be long lasting and potentially aid in their recovery and long term viability.

2020 TECHNICAL ASSESSMENT QUESTION #7

A. Ratio: The ratio of non-federal match of $992,639 to federal grant request of $970,435 = 1.02:1

B. 10% Matching Partners (1 Total): Wildlife Conservation Board

C. Partnership Categories:

State Agency (2 Total): California Department of Fish and Wildlife, Wildlife Conservation Board

Non-governmental Conservation Organization (2 Total): California Waterfowl Association, Salton Sea Conservancy
PVT Landowner (1 Total): Cottonwood Duck Club, **(1 new partner to NAWCA)**
Federal Agency (1 Total): US Fish and Wildlife Service

D. Important Partnership Aspects: The Salton Sea and its adjacent wetlands have provided a significant stopover point for millions of wintering and migrating waterbirds, predominantly venturing from the Pacific and Central Flyways. Many of the historic wetlands throughout these two flyways have undergone severe degradation or have been lost. The project boundary incorporates the largest and most productive regional wetland complexes that remain within southern California for waterbirds. The proposal is a continued collaboration of efforts by two state agencies, one federal agency, two non-profit organizations and one private landowner encompassing one of the Sonoran Joint Ventures highest priority habitat areas. The partnerships that have been established are dedicated to accomplishing habitat goals and milestones. The measures of success are reflected in the numbers of acres benefited in past NAWCA grants awarded to California Waterfowl. In total, **NAWCA and match dollars since 2008 have acquired in fee title 422 acres, restored 356 acres of palustrine and associate habitats and enhanced 3,806 acres within the project area.** In addition, the support of the Wildlife Conservation Board has continued with them investing significantly into the Imperial WA's Wister Unit. The state funded $1.8M through a grant to California Waterfowl to restored 455 acres of wintering waterfowl habitat from 2014-2017. These previously funded state and NAWCA funded grants have been successful due to dedicated partners and a great willingness to accomplish the goals set out within each grant.

NAWCA has always promoted the development of strong and diverse partnerships to allow for collaboration and successful completion of projects through combined efforts. The partnerships that were originally developed between landowners, the FWS, DFW, WCB and CWA, are a result of NAWCA. The proposed **"Wetlands of the Imperial Valley, California"** is a result of these long-standing efforts and the development of new partnerships. The results will contribute directly to supporting desired populations of wetland dependent species. Contributors include **one 10% Match Partners** (Wildlife Conservation Board), **one private property, one non-profit property, one state wildlife area, and one federal refuge** with results significantly benefiting desired habitats. The **Cottonwood Duck Club ownership is partnering with NAWCA for the first time**. **Private landowners in California protect and maintain an estimated 66% of the remaining acreage of palustrine wetland and riparian habitats (CVJV data).** NAWCA continues to be one of the greatest avenues for biologists to work with private landowners and agency personnel to improve habitat resources. If funded, this proposal will contribute to the goals of many conservation initiatives including those of the Sonoran JV and NAWMP.

E. Public Access: Projects will be **restoring/enhancing 1,032 acres of public lands.**

Imperial WA is open for public hunting (5,958 hunter visits [average/year] 2008-2020), bird watching, hiking, and research throughout the year. Sonny Bono NWR had 6,876 visitors (average/year) for waterfowl hunting during the same time period. The Imperial WA (estimated ±25,000 additional visitors) and Sonny Bono NWR (estimated ±14,000 additional visitors) are both areas that are extremely popular with birders from around the US. In total **92.9% of the** additive acres being **benefited** within this proposal **will be taking place on public lands**.

The Salton Sea Conservancy and the Cottonwood Duck Club have limited access due to the nature of their private ownership (representing <8% of the grant's total acreage). Benefits from their projects will help to support all wildlife that is accessible by the public at some point.

All partners understand the need to increase/expand opportunities that lead to education and recruitment of hunters and non-hunters alike. **This proposal is making an effort to ensure that significant acreage benefits are taking place on publicly accessed lands.** At the same time we are working diligently with landowners to educate them on the importance of maintaining high quality habitat. **Established infrastructure will allow for long term management of quality habitat, providing year around benefits to wetland dependent species that rely on this very important region within the Pacific Flyway.**

Abbreviations

BRC - Bird Conservation Region
CalPIF - California Partners In Flight
CBC - Christmas Bird Count
CDC – Cottonwood Duck Club
CWA - California Waterfowl Association
DFW - California Department of Fish and Wildlife
FWS - US Fish and Wildlife Service
HC – High Concern
HDPE - High Density Poly Ethylene
IBA - Important Bird Area
JV – Joint Venture
NAWCA - North American Wetlands Conservation Act
NAWCP - North American Waterbird Conservation Plan
NAWMP - North American Waterfowl Management Plan
NRCS – Natural Resources Conservation Service
NWR - National Wildlife Refuge
PIF - Partners In Flight
PVT – Private
SBNWR - Sonny Bono National Wildlife Refuge
SE – State Listed Endangered
SJV - Sonoran Joint Venture
SSC – Salton Sea Conservancy
ST – State Listed Threatened
SWAP – State Wildlife Action Plan
USSCP - US Shorebird Conservation Plan
WA - Wildlife Area
WCB - Wildlife Conservation Board
WHSRN - Western Hemisphere Shorebird Reserve Network

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APPENDIX

2020 Tract Table
Partnership Letter
Standard Form SF 424 & D
Project Area Map
Project Location Map

2020 Tract Table - Wetlands of the Imperial Valley

Tract ID	Activity Type	Total Acres	Wetland Acres	Upland Acres	Public Access	Funding Category	Funding Source	County and State	Central Tract Location		Final Title Holder
									Lat	Long	
RESTORATION											
Tract 1 - Cottonwood Duck Club (CDC)	Rest	51	51			Grant/Old Match	NAWCA/CDC	Imperial Co., CA	33.245	-115.547	CDC
Tract 5 - Sonny Bono NWR Hazard Unit North	Rest	83	77	6	83	Grant/Non-Match	NAWCA/FWS	Imperial Co., CA	33.195	-115.593	FWS
Tract 6 - Salton Sea Conservancy (SSC)	Rest	27	27			Grant	NAWCA	Imperial Co., CA	33.085	-115.720	SSC
Total		**161**	**155**	**6**	**83**						
ENHANCEMENT											
Tract 2 - Imperial WA, Wister Unit W11A&C	Enhance	285	285		285	Grant	NAWCA	Imperial Co., CA	33.259	-115.571	DFW
Tract 3 - Imperial WA, Wister Unit Y15A&B	Enhance	230	213	17	230	Grant	NAWCA	Imperial Co., CA	33.266	-115.571	DFW
Tract 4 - Imperial WA, Wister Unit T10/S20/S22	Enhance	434	332	102	434	Old Match	WCB/DFW	Imperial Co., CA	33.234	-115.564	DFW
Tract 6 - Salton Sea Conservancy (SSC)	Enhance	(43)	(43)			Grant/New Match	NAWCA/SSC	Imperial Co., CA	33.085	-115.720	SSC
Total		**949 (43)**	**830 (43)**	**119**	**949**						
GRAND TOTAL		**1,110 (43)**	**985 (43)**	**125**	**1,032**						
Final Title Holder Summary: CDC - 51 acres; FWS - 83 acres; SSC - 27 (43) acres; DFW- 949											

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

06/25/2020

California Department of Fish and Wildlife
Imperial Wildlife Area, Wister Unit
8700 Davis Road
Niland, CA 92257

NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL
PARTNERSHIP CONTRIBUTION FORM

What is the title of the proposal that you are contributing to? Wetlands of the Imperial Valley
What is the name of your organization/ California Department of Fish and Wildlife
When will you make the contribution? The $30,005 in match in-kind contributed in staff time and equipment was provided at the time of construction that took place as part of the Tract 4 – Imperial WA, Wister Unit T10/S20/S22 enhancement project in spring 2020.

What is the value of your contribution and how did you determine the value? Does the contribution have a non-federal origin? If this is based on a fund-raising event or other future action, if that future action fails, will you still provide the contribution amount? Our $30,005 in-kind match contribution was provided as part of our partnership and willingness to help with the habitat improvement efforts at the Wister Unit. The amount is based upon the actual hours worked by staff and the equipment used to complete identified tasks. Since these tasks were completed by our staff they are not dependent upon a fund raising event or any future action.

What long-term migratory bird and wetlands conservation work will the contribution cover? The habitat types on the tract will include palustrine emergent wetlands with an associated upland component, which will be used by breeding and migratory waterfowl and many other wetland and upland dependent wildlife. This in-kind contribution supported efforts that were successfully completed in 2020 and has resulted in a significant increase in our management capabilities of the palustrine emergent wetlands by providing long term management capabilities which will support high quality habitat for migratory and breeding waterbirds throughout the year.
Does the proposal correctly describe your contribution, especially the amount? Yes.
If applicable to the proposal, is your organization competent to hold title to, and manage, land acquired with grant funds and are you willing to apply a Notice of Grant Agreement or other recordable document to the property? Not applicable.
Please confirm that your contribution has not been used to meet any other federal programs match or cost share requirements. These funds have not been used to meet any other federal programs match or cost share requirements.

Will the project benefit tribal hunting and fishing treaty rights and if so, how? No
Do you have any additional comments? We are pleased to be a partner in the planning and implementation of the Wetlands of the Imperial Valley, and this match is put forward with our full knowledge and support in order to leverage other non-federal and Federal grant dollars. We are pleased to be a part of a project that will aid in meeting objectives of the Sonoran Joint Venture and the North American Waterfowl Management Plan, as explained in the proposal.

Signature: _____ Date: 06/25/2020

Signed: 6/25/20 SRS
SCOTT R. SEWELL

Print Name: Scott Sewell_____Title: Senior Fish Wildlife Habitat Supervisor

Organization: California Department of Fish and Wildlife

1346 Blue Oaks Blvd
Roseville, CA 95678
916.648.1406 office

NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL
PARTNERSHIP CONTRIBUTION FORM

What is the title of the proposal that you are contributing to? Wetlands of the Imperial Valley

What is the name of your organization? California Waterfowl Association

When will you make the contribution? California Waterfowl will contribute $7,500 in funds towards non-contract Personnel and Travel at the time of the implementation of the grants (2022/2023).

What is the value of the contribution and how did you determine the value? Does the contribution have a non-federal origin? If this is based on a fund-raising event or other future action, if that future action fails, will you still provide the contribution amount? Our contribution of $7,500 in new match is from a non-profit organization (non-Federal) and has been determined by past grant experience with similar costs. The money is not dependent on fundraising or any future action.

What long-term migratory bird and wetlands conservation work will the contribution cover? The habitat type on these lands, are and will be dominated by palustrine emergent and forested wetlands with an associated upland component. The habitat is extensively used by breeding and migratory waterfowl and many other wetland, riparian and upland dependent wildlife species. These funds will provide much needed match and will help to accomplish the proposed work detailed within the grant proposal.

Does the proposal correctly describe your contribution, especially the amount? Yes.

If applicable to the proposal, is your organization competent to hold title to, and manage, land acquired with grant funds and are you willing to apply a Notice of Grant Agreement or other recordable document to the property? Not applicable.

Please confirm that your contribution has not been used to meet any other federal programs match or cost share requirements. These funds have not been used to meet any other federal programs match or cost share requirements.

Will the project benefit tribal hunting and fishing treaty rights and if so, how? No

Do you have any additional comments? We are pleased to be a partner in the planning and implementation of the **Wetlands of the Imperial Valley**, and this match is put forward with our full knowledge and support in order to leverage other non-federal and Federal grant dollars. We are pleased to be a part of a project that will aid in meeting objectives of the Sonoran Joint Venture and the North American Waterfowl Management Plan, as explained in the proposal.

Signature: _____ **Date Signed:** 6/25/2020

Print Name: Jake Messerli **Title:** Chief Operating Officer

Organization: California Waterfowl Association

Cottonwood Duck Club LLC
11620 Sterling Ave, Ste. C
Riverside, CA 92503
951.202.5678

NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL
PARTNERSHIP CONTRIBUTION FORM

What is the title of the proposal that you are contributing to? Wetlands of the Imperial Valley

What is the name of your organization (private landowners indicate "Private")? Cotton Wood Duck Club LLC

When will you make the contribution? The $36,009 in old cash match was used to construct wetland habitat on our property in the fall of 2019 and spring of 2020.

What is the value of your contribution and how did you determine the value? Does the contribution have a non-federal origin? If this is based on a fund-raising event or other future action, if that future action fails, will you still provide the contribution amount? Our $36,009 in old cash match is from a non-federal source (landowner contribution) and was used for the described wetland project on the Cottonwood Duck Club LLC. The amount is based upon the costs paid to complete the described work, which paid fair market value for services provided by contractors at the time of the construction. Since these are private funds they were not dependent upon a fund raising event or any future action.

What long-term migratory bird and wetlands conservation work will the contribution cover? The habitat types on the tract includes palustrine emergent wetlands with an associated upland component, which will be used by wintering and migratory waterfowl and many other wetland and upland dependent wildlife. These funds will contribute to efforts that will significantly increase the management capabilities of the palustrine emergent wetlands by providing long term water supplies which will support high quality habitat for migratory and breeding waterbirds throughout the year.

Does the proposal correctly describe your contribution, especially the amount? Yes.

If applicable to the proposal, is your organization competent to hold title to, and manage, land acquired with grant funds and are you willing to apply a Notice of Grant Agreement or other recordable document to the property? Not applicable.

Please confirm that your contribution has not been used to meet any other federal programs match or cost share requirements. These funds have not been used to meet any other federal programs match or cost share requirements.

Will the project benefit tribal hunting and fishing treaty rights and if so, how? No

Do you have any additional comments? We are pleased to be a partner in the planning and implementation of the **Wetlands of the Imperial Valley**, and this match is put forward with our full knowledge and support in order to leverage other non-federal and Federal grant dollars. We are pleased to be a part of a project that will aid in meeting objectives of the Sonoran Joint Venture and the North American Waterfowl Management Plan, as explained in the proposal.

Signature: _____ **Date Signed:** 10-5-20

Print Name: BRAD WICKS **Title:** CO/OWNER

Organization:
COTTONWOOD DUCK CLUB LLC

Salton Sea Conservancy
17046 Saw Leaf Lane
San Diego, CA 92127
916.787.6440

NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL
PARTNERSHIP CONTRIBUTION FORM

What is the title of the proposal that you are contributing to? Wetlands of the Imperial Valley

What is the name of your organization (private landowners indicate "Private")? Salton Sea Conservancy

When will you make the contribution? The $19,125 in new cash match will be used at the time of construction.

What is the value of your contribution and how did you determine the value? Does the contribution have a non-federal origin? If this is based on a fund-raising event or other future action, if that future action fails, will you still provide the contribution amount? Our $19,125 in cash match is from a non-federal source (landowner contribution) and will be used for the described project on Salton Sea Conservancy. The amount is based upon the estimated costs to complete the described work, which will pay fair market value for services provided by contractors at the time of construction. Since these are private funds they are not dependent upon a fund raising event or any future action.

What long-term migratory bird and wetlands conservation work will the contribution cover? The habitat types on the tract will include palustrine emergent wetlands with an associated upland component, which will be used by breeding and migratory waterfowl and many other wetland and upland dependent wildlife. These funds will contribute to efforts that will significantly increase the management capabilities of the palustrine emergent wetlands by providing long term water supplies which will support high quality habitat for migratory and breeding waterbirds throughout the year.

Does the proposal correctly describe your contribution, especially the amount? Yes.

If applicable to the proposal, is your organization competent to hold title to, and manage, land acquired with grant funds and are you willing to apply a Notice of Grant Agreement or other recordable document to the property? Not applicable.

Please confirm that your contribution has not been used to meet any other federal programs match or cost share requirements. These funds have not been used to meet any other federal programs match or cost share requirements.

Will the project benefit tribal hunting and fishing treaty rights and if so, how? No

Do you have any additional comments? We are pleased to be a partner in the planning and implementation of the **Wetlands of the Imperial Valley**, and this match is put forward with our full knowledge and support in order to leverage other non-federal and Federal grant dollars. We are pleased to be a part of a project that will aid in meeting objectives of the Sonoran Joint Venture and the North American Waterfowl Management Plan, as explained in the proposal.

Signature: _____ **Date Signed:** 5-27-2020

Print Name: Jack Wolfe **Title:**

Organization:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sonny Bono Salton Sea National Wildlife Refuge Complex
906 West Sinclair Road
Calipatria, CA 92233-9744
760-348-5278 Fax 348-7245

NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL
PARTNERSHIP CONTRIBUTION FORM

What is the title of the proposal that you are contributing to? Wetlands of the Imperial Valley

What is the name of your organization/ US Fish and Wildlife Service

When will you make the contribution? The $6,780 in non-match in-kind contributed in staff time and equipment will be provided at the time of construction that will take place as part of the Tract 5 – Sonny Bono NWR Hazard Unit North project. .

What is the value of your contribution and how did you determine the value? Does the contribution have a non-federal origin? If this is based on a fund-raising event or other future action, if that future action fails, will you still provide the contribution amount? Our $6,780 in-kind non-match contribution is being provided as part of our partnership and willingness to help with these habitat improvement efforts at the Hazard Unit. The amount is based upon the estimated time needed to complete certain tasks by staff. Since these are non-match funds they are not dependent upon a fund raising event or any future action.

What long-term migratory bird and wetlands conservation work will the contribution cover? The habitat types on the tract will include palustrine emergent wetlands with an associated upland component, which will be used by breeding and migratory waterfowl and many other wetland and upland dependent wildlife. This in-kind contribution will support efforts that will significantly increase the management capabilities of the palustrine emergent wetlands by providing long term management capabilities which will support high quality habitat for migratory and breeding waterbirds throughout the year.

Does the proposal correctly describe your contribution, especially the amount? Yes.

If applicable to the proposal, is your organization competent to hold title to, and manage, land acquired with grant funds and are you willing to apply a Notice of Grant Agreement or other recordable document to the property? Not applicable.

Please confirm that your contribution has not been used to meet any other federal programs match or cost share requirements. These funds have not been used to meet any other federal programs match or cost share requirements.

Will the project benefit tribal hunting and fishing treaty rights and if so, how? No

Do you have any additional comments? We are pleased to be a partner in the planning and implementation of the **Wetlands of the Imperial Valley,** and this match is put forward with our full knowledge and support in order to leverage other non-federal and Federal grant dollars. We are pleased to be a part of a project that will aid in meeting objectives of the Sonoran Joint Venture and the North American Waterfowl Management Plan, as explained in the proposal.

Signature: _____ **Date Signed:** 6/10/20

Print Name: Chris Schoneman **Title:** Project Leader
Organization: US Fish and Wildlife Service

GAVIN NEWSOM, Governor
NATURAL RESOURCES AGENCY
DEPARTMENT OF FISH AND WILDLIFE
WILDLIFE CONSERVATION BOARD
Mailing address: P.O. Box 944209
Sacramento, California 94244-2090
www.wcb.ca.gov
(916) 445-8448
Fax (916) 323-0280

NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL
PARTNERSHIP CONTRIBUTION FORM

What is the title of the proposal that you are contributing to? Wetlands of the Imperial Valley

What is the name of your organization (private landowners indicate "Private")? California Wildlife Conservation Board (WCB)

When will you make the contribution? The match funds provided by the WCB originated from a grant that was awarded to California Waterfowl Association on April 17, 2019. Restoration efforts are taking place on 434 acres at the state-owned Imperial Wildlife Area. The efforts started in 2019 and will continue through 2020 and are investing $900,000 into the project to maximize habitat management capabilities and habitat quality.

What is the value of your contribution and how did you determine the value? Does the contribution have a non-federal origin? If this is based on a fund-raising event or other future action, if that future action fails, will you still provide the contribution amount? The WCB has awarded $900,000 towards this project and the funds are from a non-federal source, state funds, hence they represent available match.

What long-term migratory bird and wetlands conservation work will the contribution cover? The habitat types on the tract will include palustrine emergent wetlands with an associated upland component, which will be used by breeding and migratory waterfowl and many other wetland and upland dependent wildlife. These funds will contribute to efforts that will significantly increase the management capabilities of the described project by providing long term dependable water supplies and management capabilities with secured infrastructure which will support high quality habitat for migratory and breeding waterbirds throughout the year.

Does the proposal correctly describe your contribution, especially the amount? Yes.

If applicable to the proposal, is your organization competent to hold title to, and manage, land acquired with grant funds and are you willing to apply a Notice of Grant Agreement or other recordable document to the property? Not applicable.

Please confirm that your contribution has not been used to meet any other federal programs match or cost share requirements. These funds have not been used to meet any other federal programs match or cost share requirements.

Will the project benefit tribal hunting and fishing treaty rights and if so, how? No.

Do you have any additional comments? We are pleased to be a partner in the planning and implementation of the Wetlands of the Valley, and this match is put forward with our full knowledge and support in order to leverage other non-federal and Federal grant dollars. We are pleased to be a part of a project that will aid in meeting objectives of the Sonoran Joint Venture and the North American Waterfowl Management Plan, as explained in the proposal.

Signature: John P. Donnelly (DocuSigned) FFD2D7290290428... **Date Signed:** 5/12/2020

Print Name: John P. Donnelly **Title:** Executive Director

OMB Number: 4040-0004
Expiration Date: 8/31/2016

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 07/03/2020

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: California Waterfowl Association

* b. Employer/Taxpayer Identification Number (EIN/TIN): 94-1149574

* c. Organizational DUNS: 1970514770000

d. Address:

* Street1: 1346 BLue Oaks Blvd
Street2:
* City: Roseville
County/Parish:
* State: CA: California
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 95678

e. Organizational Unit:

Department Name: Conservation Programs

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr.
* First Name: Chadd
Middle Name:
* Last Name: Santerre
Suffix:

Title: Wetland Programs Supervisor/NAWCA Coordinator

Organizational Affiliation:

* Telephone Number: 916.275.0983
Fax Number:

* Email: csanterre@calwaterfowl.org

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

M: Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

US Fish and Wildlife Service

11. Catalog of Federal Domestic Assistance Number:

15.623

CFDA Title:

NAWCA US Standard Grant

*** 12. Funding Opportunity Number:**

15.623

* Title:

NAWCA US Standard Grant

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

Wetlands of the Imperial Valley, California

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: 51 * b. Program/Project: 134

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 03/01/2021 * b. End Date: 03/01/2024

18. Estimated Funding ($):

* a. Federal	970,435.00
* b. Applicant	7,500.00
* c. State	930,005.00
* d. Local	55,134.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	1,963,074.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Mr. * First Name: Chadd

Middle Name:

* Last Name: Santerre

Suffix:

* Title: Wetland Programs Supervisor/NAWCA Coordinator

* Telephone Number: 916.275.0983 Fax Number:

* Email: csanterre@calwaterfowl.org

* Signature of Authorized Representative:  * Date Signed: 06/25/2020

OMB Approval No. 0348-0042

ASSURANCES - CONSTRUCTION PROGRAMS

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property aquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.

4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.

5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.

6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) underwhich application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles 11 and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction sub-agreements.

14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-1 33, "Audits of States, Local Governments, and Non-Profit Organizations."

19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
	Wetland Programs Supervisor/NAWCA Coordinator
APPLICANT ORGANIZATION California Waterfowl Association	DATE SUBMITTED 06/25/2020

Imperial WA, Wister Unit Y15 A&B (Enhancement) Tract 3

Imperial WA, Wister Unit W11A&C (Enhancement) Tract 2

Cottonwood Duck Club (Restoration) Tract 1

Imperial WA, Wister Unit T10/S20/S22 (Enhancement) Tract 4

Sonny Bono NWR Hazard Unit North (Restoration) Tract 5

Salton Sea Conservancy (Enhancement) Tract 6

Salton Sea Conservancy (Restoration) Tract 6

Project Location

Wetlands of the Imperial Valley, California Tract Map

- Restoration Project
- Enhancement Project
- Match Project
- NAWCA Project Boundary

0 12.5 25 50 75 100 Miles

North American Wetlands Conservation Act

NAWCA

Imperial WA, Wister Unit Y15 A&B (Enhancement) Tract 3

Imperial WA, Wister Unit W11A&C (Enhancement) Tract 2

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Salton Sea Conservancy (Enhancement) Tract 6

Salton Sea Conservancy (Restoration) Tract 6

Niland

Calipatria

Salton Sea

Sonny Bono National Wildlife Refuge

McDonald Rd

E McDonald Rd

W Sinclair Rd

E Sinclair Rd

Gentry Rd

Blair Rd

Young Rd

Eddins Rd

W Eddins Rd

Highway 115

111

86

115

Wetlands of the Imperial Valley, California
Individual Project Map

NAWCA Project Boundary

0 1.75 3.5 7 10.5 14 Miles

North American Wetlands Conservation Act

NAWCA