Appendix L – Public Involvement – Responses to Comments

Final Comprehensive Conservation Plan and Environmental Assessment

Merced National Wildlife Refuge San Luis National Wildlife Refuge Grasslands Wildlife Management Area

Prepared By:

U.S. Fish and Wildlife Service San Luis National Wildlife Refuge Complex 7376 S. Wolfsen Road Los Banos, CA 93635

July 2024

Page Intentionally Blank

Appendix L: Public Involvement – Responses to Comments on the August 2023 San Luis NWR, Merced NWR and Grasslands WMA Draft Comprehensive Conservation Plan/Environmental Assessment

1. Introduction

This appendix contains a detailed summary of all comments received in response to San Luis NWR, Merced NWR, and Grasslands WMA Draft Comprehensive Conservation Plan/Environmental Assessment during the public comment period. The Draft CCP/EA and its appendices were available for public comment for a period of 45 days from September 11, 2023 to October 26, 2023. Once the comment period was closed, all written and oral comments received on the Draft CCP/EA were reviewed and analyzed. More information on public involvement for the CCP/EA is provided in Chapter 1, 2 and 5 of the CCP.

The USFWS received 15 comment letters during the public comment period for the San Luis Complex draft CCP and EA. Staff read and analyzed every comment letter. Of those 15 letters, 11 were determined to contain substantial comments; those comments and responses are listed below in Section 5. Substantive comments are those that meet at least one of the following criteria: 1) challenge the accuracy of information presented; 2) challenge the adequacy, methodology, or assumptions of the environmental or economic analysis and supporting rationale; 3) present new information relevant to the analysis; 4) present reasonable alternatives, including mitigation, other than those presented in the document.

The San Luis Complex and USFWS Sacramento Regional Office would like to thank everyone who submitted comments on the Draft CCP and the Draft EA. Many commentors iterated their support for the ongoing management of the San Luis Complex refuge lands, and commentors suggested potential refuge management improvements and changes.

2. Qualitative and Quantitative Analysis of Comments Received

2.1 Summary of Comments Received on the Draft CCP/EA and the Response Process

On July 11, 2023, San Luis NWRC staff sent letters to affiliated Native American tribes to provide them advanced notice and opportunity for providing comments and reviewing the Draft CCP/EA. On September 11, 2023, a Notice of Availability was published in the Federal Register announcing the public comment period and that the Draft CCP/EA was available for viewing and downloading online at https://www.fws.gov/refuge/san-luis. The Service received a total of 15 comment letters (via email) on the Draft CCP/EA during the comment period. On September 27, 2023, a public meeting at the Community Center in Los Banos, CA was held during the public comment period to provide and their comments were captured. To facilitate comments on the Draft CCP/EA, the Service distributed a planning update to a mailing list that included: individual members of the public, neighboring landowners, state agencies, other federal agencies, nonprofit organizations, and elected officials. The update invited the public to contact the Service with any questions or requests for additional information about the alternatives in the Draft CCP/EA.

2.1.1 Commentor Affiliations

Comment	
Document #	Commentor Affiliation
1	Private Individual
2	CA Dept. of Conservation
3	CA Dept. of Transportation
4	California Waterfowl Association
5	Private Individual
6	Environmental Advocates Group
7	Environmental Protection Agency
8	Private Individual
9	Private Individual
10	Private Individual
11	Merced Irrigation District
12	Private Individual
13	Private Individual
14	Private Individual
15	Private Individual

Table L-1. Comment Letter Total and Affiliations

Affiliation names of letters received from individual commentors are labeled "private individual". The Environmental Advocates Group consisted of signatures from representatives of: Planning and Conservation League, Pacific Coast Federation of Fishermen's Association, Center for Biological Diversity, Winnemem Wintu Tribe, Sierra Club California, Restore the Delta, California Sportfishing Protection Alliance, AquAlliance, Friends of the River, California Water Impact Network, Institute for Fisheries Resources, California Save Our Streams Council, Southern California Watershed Alliance and North Coast Rivers Alliance.

Comment letter number 15 is comprised of the comments received during the September, 2023 Los Banos public meeting hosted by USFWS staff.

2.1.2 Comment Topics

Table L-2. Comment Topic and Number of Substantial Comments Received

	Number
Comment Topic	Received
Hunting Alternatives	7
Project Design/Alternatives	4
Water rights/delivery	21
Wildlife and Vegetation	17
Project Operations	8
Climate Change	3

3. Summary of Changes

Other changes to the CCP and CCP appendices:

Appendix C: *Compatibility Determinations and Findings of Appropriateness*: San Luis NWR Complex staff performed an additional review of Merced NWR Agricultural Uses CD and added information in the section about when the use would occur to account for greater sensitivity to ground nesting birds when mowing, cutting hay and harvesting crops.

Appendix G *Visitor Services Plan*: San Luis NWR Complex staff performed an additional review and made minor technical corrections in the North and South Freitas hunt unit sections to update descriptions regarding hunter access times and permit drop-off locations with current, accurate information.

4. Comments and the Service's Responses

Comment #3-1 The [environmental] assessment includes the placement of several deer-crossing signs on SR 165. The Department has the following comments:

An Encroachment Permit will be required for any work done within the Department's right of way. This work is subject to the California Environmental Quality Act. Therefore, environmental studies may be required as part of the encroachment permits application. A qualified professional must conduct any such studies undertaken to satisfy the Department's environmental review responsibilities. These studies may include an analysis of potential impacts to any cultural sites, historic properties, biological resources, hazardous waste locations, scenic highways, and/or other environmental resources within Caltrans Right of Way, at the project site(s). Ground-disturbing activities to the site prior to completion and/or approval of required environmental documents may affect the Department's ability to issue a permit for the project. Furthermore, if engineering plans or drawings will be part of your permit application, they should be prepared in standard units.

Response: Signs were already installed by CalTrans at this location. The sign on the east shoulder directed toward northbound traffic has been struck and is down. The sign on the west shoulder directed toward southbound traffic is intact. This objective to install additional deer crossing signs has been removed from the CCP to reflect current signage conditions.

Comment #4-1 Open at least a portion of the 1900-acre Snobird unit of the Merced NWR to waterfowl hunting (especially geese). It is our understanding that public access (walk-in) could be provided to this unit, and that there are adjacent areas suitable for parking. We also acknowledge that additional wetland restoration work is needed, and that budget issues may limit Service capacity to flood wetlands. However, given that significant waterfowl concentrations can already be found there at times and that there are no conflicts with other priority wildlife-dependent recreational uses, we believe the Snobird unit offers an excellent opportunity to provide new hunting access.

Response: In coordination with CWA, CDFW, and other waterfowl hunting interest groups, we will explore opening a portion of the North Snobird unit to waterfowl hunting, subject to compatibility, the NWRS Improvement Act, and if funding and resources allow. Opening is contingent on law enforcement availability, sanctuary requirements, funding being available for

habitat restoration, and visitor access. Implementing this potential action would be accompanied with future revision of the Complex's Hunt Plan after further analysis of potential impacts and hunting access, and after sufficient resources to support the possible expansion have been secured.

Comment #4-2 Flood managed wetlands as early as possible both within the hunt area and sanctuaries, which would allow for increased hunter quotas and help to attract more waterfowl to the Grasslands early in the season. (Note that we acknowledge that annual water allocations and drought conditions may limit this ability, however.) While we recognize the logica behind delayed flooding and the desire to have sufficient food resources for waterfowl later in the season, please note that available food is generally not a limiting factor for waterfowl in the Central Valley. This was recently demonstrated by body condition surveys in January during the last several drought years which showed little impact on waterfowl body weights compared to other water years.

Response: Staff have added, "Begin flooding up seasonal wetlands as early as practicable each fall, given constraints with evaporation, flow through considerations, drought, water availability, delivery schedules, rehabilitation schedules, infrastructure repairs, and other necessary management actions." to the CCP Chapter 4, Seasonal Wetlands Management Strategies under Objective 1.1 of Goal 1: Migratory Birds and Biological Diversity.

Comment #4-3 To the extent possible, maintain an equitable balance of free roam, assigned ponds and blind areas within the NWRs of the San Luis NWR Complex, both in terms of quantity and quality of hunt opportunities. As you are aware, preferences on hunting sites vary amongst waterfowl hunters. Our own surveys suggest that public area hunters want an array of options. The Complex has done a good job providing diverse opportunities for waterfowl hunting, including boat hunting opportunities, and we urge it to continue to do so as referenced in Hunt Program Strategy 4.2.1.

Response: As detailed in Hunt Program Strategy 4.2.1, the Complex will continue to offer a balanced diversity of hunt formats.

Comment #4-4 Regarding Hunt Program Strategy 4.2.19 for the Blue Goose unit, we would urge that the Service first solicit hunter input and feedback on any proposal that would reduce hunting hours, days or opportunity. Maintaining hunting quality is an important goal, but any loss of hunter opportunity should also be fully mitigated.

Response: Under Chapter 4, Objective 4.2 off the CCP, the following has been added, "The San Luis Complex will continue to solicit hunter feedback and comments for any future proposals containing changes to hunting days, opportunities, and access." The intent of objective 4.2.19 of the Visitor Services Plan is to consider testing a trial-based proposal to assess if there is improvement in hunting quality in the Blue Goose Unit.

Comment #4-5 Provide annual deer and elk hunting opportunities for the public in appropriate areas. Please note that the manager(s) of several State Wildlife Areas in the Grasslands have determined that deer hunting could be safely and sustainably provided on those areas, and that regulatory changes currently pending before the California Fish and Game Commission would, in fact, allow for that additional hunting opportunity. **Response:** The Complex would consider further opportunities for ungulate hunting aligned with the state wildlife management areas within the Grasslands. The USFWS closely coordinates with CDFW and the immediate neighbors of the Complex in the Los Banos area to provide consistency among species that are open to hunting in California. The following has been added in the CCP in Chapter 2 under Ungulate Management, "This does not exclude ruling out the possibility of herd expansion, or a possible special hunt" and "Any future hunt program expansion to include deer or elk will be considered in close coordination with CDFW and other partners."

Comment #5-1 The issues of agricultural drainwater and disposal resulted in the development and implementation of the multi-agency San Joaquin Basin Action Plan. I would suggest including mention of that plan in this section. The SJBAP was the mechanism by which large amounts of lands were acquired in the early to mid-1990s (Freitas Unit and the East and West Bear Creek Units as well as adjacent California Fish and Wildlife Department lands). This not only made San Luis and Kesterson contiguous, but also created a large block of contiguous Federal and State lands dedicated to conservation purposes. This was the genesis of the concept of the Grasslands Ecological Area.

Response: Thank you for your comment, we have incorporated your suggestion by including a brief discussion of the SJBAP plan in San Luis NWR Acquisition History section of Chapter 2 of the CCP.

Comment #5-2 I would suggest reviewing the farm program files from the early to late 1990s. The 1993 review of the farming program was driven not just due to the loss of our existing farming cooperator, but to a great extent by the recent acquisition of the Reinghaus property which more than doubled the amount of native uplands and croplands available to the refuge. As a result of the review, the grazing and farming operations were incorporated into a single program with a single cooperator through a Cooperative Land Management Agreement. As stated in the draft alfalfa production was eliminated. The block of irrigated pastures on the NE side of the original Merced Unit and the irrigated pastures on the south side of the former Reinghaus property were maintained in a regime of cattle grazing in the summer with goose and crane foraging in the winter. Individual pastures could be temporarily rotated into another crop if necessary to rehabilitate the pasture grass. Other cropland on the original Merced Unit and the Reinghaus tract are planted on a rotational basis to corn for goose and crane forage or winter wheat for goose forage in the winter and nesting habitat for tricolored blackbirds in the spring/summer. Some of the croplands on Reinghaus were restored to managed wetlands. Grazing was used for several years on small blocks of uplands not convenient for cattle grazing but was eventually phased out.

This might be a good place to briefly describe the CLMA program. For example, instead of getting onethird of the crop planted under a share-crop arrangement (as described on page 30) the value of grazing owed by the cooperator was used to pay for the costs of producing corn and wheat on Refuge fields and the Refuge got 100 percent of the forage produced on those fields.

Response: Comment noted and thank you for additional background information on the farming program. For further descriptions regarding croplands, please see the Irrigated Pastures and Croplands sections of Vegetation and Habitat under Biological Resources in Chapter 3 of the CCP.

Comment #5-3 You might want to re-check the acreage figures. I think the combined acreage of the irrigated pastures on the northeast side of the original Merced, irrigated pastures north of Sandy Mush Road, and the two irrigated pastures in the hunting area exceed 104 acres. Also I think the unirrigated grasslands being grazed north of Sandy Mush Road exceeded 562 acres. Also, you should include the acreage being grazed on the Arena Plains Unit in the late 1990s (separate CLMA). Additionally to better describe the extent of the grazing program on Merced NWR you should include the acreage grazed on the Lonetree and Snobird Units (acquired in 1999 and 2004 respectively).

Response: The referenced section regarding crop acreages, grazying and haying on Merced NWR has been revised to reflect a general summarization of the history of land management practices and how they continue today to benefit wildlife habitat management.

Comment #5-4 Suggest replacing the word "occasional surveys" with "regularly scheduled surveys". At the time, aerial surveys of public and private lands in the Grasslands were conducted by CDFG (now CDFW) on a monthly basis from August through March. Refuge ground surveys were terminated in 1993 due to the disturbance it caused and the inaccuracy of counts compared to aerial surveys. By the early 2000s CDFG aerial surveys were greatly reduced due to budget and other constraints. Because of that, Refuge staff began systematic ground surveys in 2007.

Response: The referenced paragraph in Chapter 2 of the CCP under San Luis History has been revised to, "Waterfowl ground surveys were conducted regularly (i.e., two-week intervals) since 1967, but were replaced by regularly scheduled aerial surveys in cooperation with CDFW in 1993 (USFWS 1993). Aerial surveys were abandoned and due to funding limitations and ground counts were reinitiated on the refuge in the fall of 2007 to provide improved data on waterfowl and waterbird use to inform management decisions. In addition, an intensive study concerning moist soil wetland plant composition, structure and seed production was initiated in 2007. This was a first step in quantifying wetland plant productivity across all seasonal wetland basins on the refuge."

Comment #5-5 Although fuels reduction is a important factor, management activities on a National Wildlife Refuge are primarily done to meet wildlife/resource management goals. I suggest leading this paragraph discussion with stating that the most important goal of using prescribed fire is to create habitat conditions to benefit wildlife and natural resource communities, then include the goals/benefits of fuels reduction and other resource benefits.

Response: On Page 68 under Refuge Management in Chapter 2 of the CCP, the referenced paragraph has been revised to, "While hazardous fuel reduction is a primary objective of all prescribed burns, this is not the sole reason or benefit for conducting prescribed fires. There are many resource benefits to implementing prescribed fires, including removing invasive plant species, reducing the overall amount of vegetation for wildlife habitat improvement, enhancing desirable species and recycling nutrients."

Comment #5-6 You might want to include that deer populations are expanding beyond the refuge boundary. Deer are being observed on private lands both east and west of the San Joaquin River. For example in recent years deer have been photographed and deer tracks frequently seen on the Tracy Duck Club in the North Grasslands.

Response: The referenced section in the CCP has been revised to reflect the current state of expanding and thriving population of black-tailed deer.

Comment #5-7 The heading level for "San Joaquin River Restoration Program" needs to be changed. As written, it is in the same heading levels as all the invasive plant species listed in pages 120 through 124.

Response: The referenced formatting edit in the CCP has been made.

Comment #5-8 Previous section of draft (page 108) states that 59 deer were re-introduced on refuge and state parks lands. Suggest using that figure instead of 20-35 to keep figures consistent.

Response: After further reviewing CDFW reports, 57 deer were reintroduced. Corrections to both CCP sections that the comment are referring to have been made. The population of black-tailed deer on the refuge continues to expand and thrive today.

Comment #5-9 Suggest checking goose population records. I think goose numbers at Merced NWR (including all units) often exceed 50,000.

Response: The wording of the referenced data has been adjusted to reflect more accuracy for this approximation of goose populations.

Comment #5-10 MWS in the Grasslands area cover Federal, state, and private lands. Does the 0.8-1.4 million waterfowl exclude the counts from state lands. If not the sentence should revised to include State Wildlife Areas.

Response: We have revised the referenced numbers in the CCP to reflect data from the Service Midwinter Waterfowl Survey 2019 report.

Comment #5-11 Did you want to include bobcat in the present but rarely encountered? Refuge staff recovered a road-killed bobcat on Hwy 165 at the Freitas Unit (year?). Also since mountain lion warnings are posted on some of the tour routes at San Luis NWR should mentions of past sightings of that species be mentioned?

Response: The referenced section in the CCP has been revised to reflect these uncommon wildlife encounters and the reported sightings of these species.

Comment #5-12 Perennial pepperweed should be included in this section. It is one of the most problematic invasive plant species on the refuge. It definitely has more adverse impacts than the black mustard included in this section. Also poison hemlock and black mustard are forbs not tree/shrubs. You should include "forb" in the objective title or have a separate invasive forb objective.

Page 249. Invasive Plant Management Strategies in Riparian Habitat Strategies:

Second listed item: Why do you want to remove coyote brush (bush?). I thought it is a native plant. That species was part of the mix of shrubs planted on refuge riparian restoration projects in the past. It is found on the upper slope of riparian corridors but does not persist in lower more frequently inundated portions of the riparian corridor. Effort would be better spent on controlling species such as poison hemlock and

milk thistle. Wild rose is a great species. But past experiences in riparian restoration efforts at San Luis has shown it is hard to establish on certain soil types.

Page 250 Objective 1.23

I hate poison hemlock. However listing it as an objective at the same general objectives categories such as Invasive Tree/Shrub Management in Riparian Areas (Obj 1.22) and Monitoring (Obj 1.24) doesn't seem appropriate. Should it be listed as a strategy under Objective 1.22 or under a separate invasive forb objective? Personally I think a specific strategy listing perennial pepperweed is needed here. It causes more adverse impacts in both riparian and upland habitats that most other non-native forbs.

Response: The sections in the CCP these comments are referring to have been edited to reflect updated invasive plant objectives and strategies. These invasive species have also been added into the invasive plant sections of the EA.

Comment #6-1 In January 2001, Reclamation issued a long-term water supply agreement (MOU) for refuge water supplies to the San Joaquin River Basin and Tulare Lake Basin (Contract. No. 01-WC-20-1758)5 and final NEPA for these agreements.6 As described on page 7 of the contract, the term of the MOU is from March 1, 2001, through February 28, 2026. Upon request from the Service, the MOU shall be renewed for successive periods of twenty-five (25) years each, subject to the terms and conditions mutually agreeable to the parties. The Service shall request renewal of the MOU at least two (2) years prior to the date on which this MOU expires. The CCP/EA needs to reference this contract. Further the issues and current conditions that need to be incorporated in the next MOU should be provided for public review and comment in the CCP/EA. FWS needs to review and incorporate the recommendations of the Independent Review Panel of the CVPIA RWSP into the next MOU for long term water supply to the refuge.

Response: Additional text about this referenced contract has been added to the CCP underneath Table 2-2 of Chapter 2. The long-term water supply agreement terms and current conditions of the next MOU are outside of the scope of this CCP/EA, and will therefore not be considered further at this time.

Response #6-2 Water Quality of Refuge Water Supplies Need Protective Standards. As described several times in the CCP, securing adequate water supplies at "acceptable water quality levels, while also maintaining the water conveyance system, has been critical to refuge management." However, FWS has not identified what is "acceptable water quality" that would be protective of fish and wildlife beneficial uses at the refuges. Page 138 of the CCP references a 2007 paper by Paveglio et al 2007 that recommends that the SLNWR Complex should strive toward securing the best quality water supplies including a monthly mean selenium objective of <2 parts per billion ($<2 \mu g/L$). Note EPA revised the national chronic aquatic life criterion for the pollutant selenium in fresh water in 2016. In addition, in 2018 EPA published a Proposed Rule in the Federal Register to establish a federal Clean Water Act (CWA) selenium water quality criterion applicable to California that protects aquatic life and aquatic-dependent wildlife in the fresh waters of California.8 The 2018 Proposed Rule arbitrarily exempted the San Luis and Merced National Wildlife Refuges and Grasslands Wildlife Management Areas leaving these refuges and the species they are entrusted to protect vulnerable to reproduction failures and deformities. These water quality threats must be addressed and are discussed in further detail below. On July 13, 2016, the USEPA published a Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh

water. The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. Draft versions of the criterion underwent public review in 2014 and 2015 and external peer review in 2015. EPA considered all public comments and peer reviewer comments in the development of the 2016 final selenium criterion document. EPA's water quality criterion for selenium provides recommendations to states and tribes authorized to establish water quality standards under the CWA. The USEPA's chronic aquatic life criterion for lentic water habitats (stillwater) are the appropriate criterion for refuge water supplies. EPA's national selenium criterion for lentic waters is 1.5 µg/L. Page 99 of the CCP states, "Complex staff must remain vigilant to ensure that any potential relaxation of water quality standards do not adversely impact migratory birds or their habitat." Yet, there is no further explanation of how or why water quality standards would be relaxed. As noted above, CVPIA mandates that Reclamation provide firm water supplies of "suitable quality to maintain and improve wetland habitat areas on units of the National Wildlife Refuge System in the Central Valley of California; on the Gray Lodge, Los Banos, Volta, North Grasslands, and Mendota state wildlife management areas; and on the Grasslands Resources Conservation District in the Central Valley of California." We recommend that FWS identify what suitable water quality standards would be for use at the SLNWR Complex, including a selenium criterion of 1.5 μ g/L in refuge water supplies delivered to the refuge. We further recommend that water quality standards that would be protective of fish and wildlife uses be identified in the renewal of the long-term water supply agreements for refuge water supplies in the San Joaquin Basin which will expire in 2026.

Response: Thank you for the comment and bringing attention to the importance of water quality data monitoring and delivery standards set by the EPA in coordination with Bureau of Reclamation and local water district suppliers. Edits to better reflect how water quality thresholds and deliveries are outside the scope and control of the Complex have been made under the section Waterfowl and Waterbirds on approximately page 130 of the CCP.

Comment #6-3 Water Quality Objectives for Selenium from Grassland Bypass Project (GBP) Waste Discharge Requirements Are Not Protective of the SLNWR Complex. On page 133 the CCP states, "...the USBR and its partners developed the Grassland Bypass Program, which has been in effect for two decades." Yet on page 138 the CCP states that the GBP "was undertaken in 1996." Further, on page 138 of the CCP there is a description of the Grassland Bypass Project (GBP) that references a 2004 document. The GBP has undergone numerous and significant changes since 2004 and the CCP/EA should be updated accordingly with current information.

Thank you for your comment and concern about water quality and drainage within the San Joaquin Valley of California. The referenced Water Quality Objectives section of the CCP has been edited to, "A separate issue is the USBR's San Luis Drain. This artificial waterway carries agricultural drainwater from lands to the south of the GEA and empties into Mud Slough on the San Luis NWR, which then leaves the refuge and eventually enters the San Joaquin River. This is a long-standing issue and originally received attention due to a selenium contaminant identified in the 1970s and 1980s that caused wildlife die-offs. To address this issue, the USBR and its partners developed the Grassland Bypass Project (https://www.usbr.gov/mp/grassland/) that has been in effect since 1996. The purpose of this program is to reduce the amount of drainwater and select contaminant loads that impact the Grassland Ecological Area. The program and modifications to it are ongoing actions of the USBR to provide a long-term solution to the problem of contaminants

associated with agricultural drainwater. Selenium concentrations in Salt Slough have been reduced from 16 ppb to 2 ppb since 1996 (https://www.usbr.gov/mp/grassland/). USBR's monitoring program for the Grassland Bypass Program is available for review online at (https://www.usbr.gov/mp/grassland/docs/gbp2013rev-mon-plan.pdf). More information about the San Luis Drain and the Grassland Bypass Project is available by referring to the California Regional Water Quality Control Board Central Valley Region Order R5-2019-0077.

Comment #6-4 Inexplicably, and contrary to the commitments and terms and conditions of the CTR and Grassland Amendments biological opinions, EPA determined that the proposed rule does not apply to the San Joaquin River from Sack Dam to Vernalis, Mud Slough, or Salt Slough because they have selenium criteria from the NTR and/or approved CVRWQCB site-specific criteria (objectives): 5 μ g/L and an acute maximum criterion of 12 μ g/L. This proposed rule also does not apply to the constructed and reconstructed water supply channels in the Grassland watershed listed in Appendix 40 of the CVRWQCB's Basin Plan. The CVRWQCB's Staff Report for the Basin Plan amendment indicates a chronic 2 μ g/L monthly mean selenium objective and an acute maximum selenium objective of 20 μ g/L. The EPA proposed rule does not apply to the waters of the San Luis National Wildlife Refuge and the Los Banos State Wildlife Refuge with a chronic selenium objective 2 μ g/L monthly mean and an acute maximum criterion of 12 μ g/L. Given these exemptions by EPA in their 2018 proposed rule, the FWS should request reinitiation of the CTR and Grasslands Amendments consultations pursuant to 50 CFR 402.16. The proposed management plan must disclose and analyze the impacts of the proposed selenium exemption and take into account the failure of the CVRWQCB site-specific criteria standard to protect the refuges' fish and wildlife.

Response: Thank you for your comment. This consultation process is outside the scope of these documents.

Comment #6-5 GBP Stormwater and Drainage Management Plans Present Significant Risks to the Refuges and Must be Disclosed in the CCP/EA for the SLNWR Complex. The effects of drainage management to wildlife at the SJRIP and stormwater detention basins have not been permitted in the GBP WDRs. Nor are the waters of the state and nation protected from these contaminants being discharged to land in this more than 6,000-7,550-acre disposal site. This disposal site so close to the SLNWR refuge complex must be analyzed and disclosed in the CCP/EA.

Response: Thank you for your comment. Underneath an added section in Chapter 2 of the Environmental Assessment titled "Grassland Bypass Project" within the Management Actions Considered but Eliminated from Detailed Analysis as Part of the Alternatives section, the following has been added, "The ongoing operation and maintenance of the GBP is beyond the scope of the CCP and EA for the Complex. However, the Complex will continue to provide decision makers with information regarding the effects of the GBP on wildlife and habitat in the Complex." Additionally in the Cumalative Effects Section of the EA in the Infrastructure/Development Projects paragraph, the following has been added, "The San Luis Drain/Grassland Bypass Project drains stormwater from outside the Complex and runs it through the Complex. This drain could affect water quality and quantity downstream."

Comment #6-6 2015 Changes to GBP Monitoring Requirements Fail to Protect Refuge Water Supplies— Resulting Impacts Need to be Disclosed. The monitoring and reporting program for the GBP36 that was approved by the Regional Board in 201537 is inadequate to determine the level of pollution being discharged by the GBP and adjacent agricultural lands, and the harm it is causing to the environment. We have provided comments three times on the inadequacies of the Revised Monitoring and Reporting Program for the GBP. We hereby incorporate by reference our coalition letters of August 11, 2011, April 22, 2013, and November 26, 2013, and June 22, 2015.38 We refer to comments submitted to the Regional Board by FWS on the Revised Monitoring and Reporting Program for the GBP dated June 25, 2015.39 FWS recommended that the Regional Board reinstate weekly water quality monitoring for selenium at GBP Stations J, K, and L2 as exceedances of 2 µg/L are still occurring in those wetland channels, those channels are still listed on the State's 303(d) list as impaired for selenium and elevated selenium in those channels could be resulting in harm to aquatic-dependent fish Unfortunately, nothing has been done to bring these lands that are discharging into the Grassland wetland channels into the jurisdiction of the GBP, and they are not included in the current WDRs. Except for stormwater events, these sources of drainage-water contamination in wetland supply channels are currently not being regulated or monitored. In addition, the Hills Ferry monitoring site (Site H) was moved to China Island (Site R). There is a comprehensive database with documented selenium water quality violations at Hills Ferry. Site R is located closer to the mouth of the Merced River than Site H, allowing for greater dilution during certain flow conditions and underrepresenting the contaminant threat in the San Joaquin River upstream of the Merced River. The FWS should recommend that a vigorous monitoring program be reinstated in the Grasslands wetland channels-a program that does not hide or understate the discharge of selenium and other toxins through stormwater discharges into Mud Slough and the San Joaquin River. In addition, FWS should recommend that monitoring and reporting for total mercury and methyl-mercury concentrations in water and biotic tissue be required at all sampling locations of the GBP to establish a mass-balance of sources of mercury in this watershed. We further recommend FWS add these monitoring requirements in the renewal of the longterm water supply agreements for refuge water supplies in the San Joaquin Basin which will expire in 2026.

Response: Please see response to comment 6-5.

Comment #6-7 The Mud Slough Restoration Project Impacts Need to be Addressed and Disclosed. As noted earlier in these comments, the 2019 WDRs for the GBP require compliance with the selenium water quality objectives for Mud Slough (north) as specified in the 2010 Basin Plan Amendment (5 μ g/L, 4day average, 20 μ g/L acute maximum). The existing water quality objectives from the 2019 WDRs for Mud Slough (North) are not protective of aquatic fish and wildlife, not based on the best available science, and will result in harm to fish and wildlife resources at Newman Lake and China Island. Under the 2019 WDRs which allow discharges into Mud Slough (north) for the next 25 years, selenium (and other harmful drain water pollutants, such as salt, sulfates, boron, molybdenum, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into Mud Slough (North). These stormwater and agricultural drainage discharges can affect the quality of water provided to China Island and Newman Lake associated with this Project. The Newman Land Company is under federal easement with the USFWS at San Luis National Wildlife Refuge.44 Therefore, impacts associated with the project called the "Mud Slough Restoration Project" on Newman Lake should also be considered under a NEPA review. Yet, to date, this has not been done. The CCP/EA should include discussion of the Mud Slough Restoration Project under the cumulative effects section.

Response: The mud slough restoration project is part of the Grassland Bypass Project. Please see response to comment 6-5.

Comment #6-8 Cumulative Effects: The combined, incremental effects of human activity, referred to as cumulative impacts, can pose a serious threat to the environment. While they may be insignificant by themselves, cumulative impacts accumulate over time, from one or more sources, and can result in the

degradation of important resources. Because federal projects cause or are affected by cumulative impacts, this type of impact must be assessed in documents prepared under NEPA. The EA should reflect the cumulative effects in the vicinity of the SLNWR Complex. The Cumulative Effects section should include a discussion of the GBP including the SJRIP drainage reuse area, use of the San Luis Drain to convey contaminated water across refuge lands into Mud Slough (north), the Mud Slough Restoration Project, and inadequate water quality standards in the Grasslands wetland water supply channels, Mud Slough (north) and the San Joaquin River from Sack Dam to Vernalis. All of these actions contribute to an overall degradation of the environment, and result in harm to fish and wildlife resources.

Response: The mud slough restoration project is part of the Grassland Bypass Project. Please see response to comment 6-5.

Comment #6-9 Conclusion: FWS needs to update the CCP/EA discussion of the Affected Environment to include current information provided in the references cited in our comments. Further, FWS needs to augment the description of the Affected Environment, discussions on refuge water deliveries, and water quality to assist the public and decisionmakers' review. In addition, data tables documenting refuge water deliveries by year (Level 2 and Incremental Level 4), and water quality of water delivered by month to the SLNWR Complex would greatly assist review of both water supply and water quality aspects of the refuge management across time. The CCP/EA should reference the long-term water supply agreement (MOU) for refuge water supplies to the San Joaquin River Basin and identify issues or conditions that need to be incorporated in the next MOU when it renews in 2026 including: • recommendations of the Independent Review Panel of the CVPIA RWSP; • identify water quality standards that would be protective of fish and wildlife uses; • reinstate a robust monitoring program in the Grassland wetland channels to confirm suitable quality of refuge water supplies delivered to the SLNWR Complex. Finally, the CCP/EA should disclose the impacts of EPA's 2018 effort to propose selenium water quality criteria applicable to fresh waters in California and document the likely impacts of the exemption by EPA to the waters in the Grasslands Area and the San Joaquin River from the proposed rule. The CCP/EA should recommend that FWS request reinitiation of the CTR and Grassland Amendments consultations pursuant to 50 CFR 402.16.

Response: This comment is concise summary of the comments provided by the groups representing commentor number 6. Please see responses to comments 6-1 through 6-8.

Comment #7-1 The CCP and Draft Environmental Assessment discuss the many effects that climate change could have on the Complex and its inhabitants, especially in Chapter 2. Objective 3.3 of the CCP is to develop and implement strategies for assisting wildlife and plants in adapting to climate change. The strategies involve primarily monitoring and study and refer to planning actions that will occur later. It isn't readily apparent how the CCP planning has integrated existing knowledge regarding climate change effects already occurring or the adaptive capacity of the biological resources at the Complex. The climate change discussion in Chapter 2 identifies a 2007 workshop by the U.S. Climate Change Science Program focusing on the Refuge System, including recommendations from its follow-on report, but whether and how these suggestions are incorporated in the CCP is not always clear or apparent and some may be implicit in the planning, but without an overt presentation, it is not clear that every effort is being made to prepare the Complex for potential future conditions.

More focus on specific vulnerability of the refuge or landscape to climate change and what actions would be taken could offer valuable information when selecting alternatives or prioritizing individual actions.

For example, how would increasing ungulate reintroductions be affected by reduced forage from a multiyear drought or by extreme precipitation events? What adaptations would the Complex take to help ungulates survive? The CCP does state that biologists would monitor and feed stranded riparian brush rabbits and/or rescue riparian brush rabbits in jeopardy of drowning or starvation during extreme climate events (p. 261), but it does not describe how other species would be supported.

The 2014 report Planning for Climate Change on the National Wildlife Refuge System states that "[w]ithout question, revisions of CCPs will need to significantly increase attention to craft management responses to climate change." Climate change will continue to bring precipitation and temperature extremes. Specific projections could be made with management responses identified, so that a more climate-informed planning process can occur. Since the CCP is intended to provide long-term direction, we recommend that discussions on how the Complex could adapt to climate change and increase the adaptive capacity of wildlife be prominent in the CCP. We note that past studies at the Complex, even those that have provided decades worth of data, may not represent future conditions that have no historical baseline.

Response: Please see Chapter 4, Objective 3.3 Climate Change on page 277 for further discussion regarding Complex objectives to adapt to climate change for future conditions.

Comment #7-2 The CCP and Draft EA would be improved by a more thorough examination of vernal pool management, particularly in the context of drought conditions and landscape fragmentation. We suggest specifying the following in the Vernal Pool Habitat Management Strategies on page 231.

- Identify land use practices that would render the upland habitat unsuitable for vernal pool species.
- Identify fragmenting features that may obstruct the movement of migrating amphibians.
- Define corridors that connect vernal pools to nearby permanent wetlands and streams; and
- Define corridors that connect vernal pools to nearby vegetated riparian patches, especially in fragmented landscapes where pools have inadequate riparian habitat surrounding them.
- Where consistent with management actions, create a buffer to protect the core vernal pool habitat which includes the vernal pool basin and the uplands that immediately surround it.

A minimum 200 foot no-disturbance zone is recommended for good quality pools in vegetated riparian settings. The Service may want to consider using the California Rapid Assessment Method (CRAM) tool for vernal pool habitat restoration and protection for the Central Valley. The tool includes standardized vernal pool mapping methods that support mitigation project planning and performance tracking. Additionally, the Service may want to explore establishing a mitigation banking site in the management area, which may be especially beneficial for vernal pool creation and restoration. Please contact us with any questions regarding how mitigation banking could occur in this area.

Response: Thank you for your suggestion to include the aforementioned strategies for comprehensive vernal pool habitat management. The additional strategies have been added to the Vernal Pool Habitat Management Strategies section under Objective 1.10 Vernal Pool Habitat Management in Chapter 4 in the CCP.

Comment #7-3 We appreciate that one of the climate change strategies in the document is to "[r]educe carbon footprint through fleet replacement with comparable electric-type vehicles, increase solar power footprint and utilize best energy conservation practices for facilities" (p. 273). The impact assessment does not appear to account for this and simply identifies the pollutants in equipment and vehicle

emissions and concludes that they would be minor when compared to all the emissions in the San Joaquin Valley Air Pollution Control District. We recommend this climate change strategy be pursued due to the extreme and serious nonattainment status in the air basin for Federal ozone (8-hour) and particulate matter less than 2.5 microns (PM2.5), respectively.

Response: This is a strategy the Complex intends to continue to pursue. Updated language in the Environmental Assessment references the positive impact of decreased air pollution from transitioning fleet and heavy equipment to more environmentally friendly options.

Comment #7-4 Preferred Alternative C includes adding a children's nature exploration area near the picnic pavilion outside the visitor center to encourage visitation by families with young children. Noise levels are certain to rise during visitations considering this new exploration area, the new 400-foot boardwalk addition to the wetland trail, construction of the 1/2 mile riparian trail, implementation of a program of weekend guided nature walks, evening lecture program, and a cadre of new volunteers. The noise impact assessment does not fully address these increases and only evaluates increases in traffic noise for Alternative C. It states "average noise levels from increased visitation would be imperceptible" (p. D-43) or "may be imperceptible" (p. D-53). Additionally, the impact assessment cites to an EPA document in stating that increased sound levels less than 5 decibels are generally not considered significant (p. D-53). We note that this EPA reference regards risks to hearing impairment and is not being appropriately applied to this impact assessment. We recommend the reference be removed and the impact assessment include all noise sources from increased visitation under Alternative C. Additionally, the draft Compatibility Determinations in Appendix C state that screening may not effectively buffer noise impacts to birds; and visitors should be educated on the effects of noise and that noise restrictions should be enforced (p. C-26). We recommend the Service ensure outreach materials and signs at the visitor center and children's area indicate it is a quiet zone.

Response: Thank you for the comment. The locations where these activities would occur are already open to the public. The proposed children's exploration area site already features a trailhead parking lot and major information kiosk that have both been in place as the primary entrance orientation/welcoming site for over 30 years. A trail and section of boardwalk at the site have been in place for 13 years. A picnic pavillion has been in place at the site for 4-5 years. With the proposed children's exploration area, we are not necessarily anticipating a significant increase in visitation; rather, we are hoping to reach a new audience that includes families with young children in the community -- we do not expect it will result in a major increase in visitation annually, and any additional usage the site receives is expected to be low-density. Additionally, this site is already influenced by the higher vehicle and foot traffic associated with the visitor center, refuge main entrance road and trailhead (i.e., the area has historically received a level of disturbance -- we are not proposing to introduce a new level of disturbance in a pristine portion of the refuge with this project). Weekend nature walks have been offerred on the refuge for the previous 30-40 years. The walks generally occur on nature trails that are already open to the general public.

Comment #7-5 The EJ analysis in the Draft EA indicates that the Hispanic or Latino population in Merced County is 62.5 percent, as compared to 40.2 percent at the state level. Consider including Spanish language educational information in Complex materials and interpretive signage to ensure educational benefits to all members of the community.

Response: To better welcome, orient, and encourage visitation by local residents, the refuge has developed dual language outreach materials and intends to continually develop and improve bilingual English/Spanish interpretive signage and other outreach materials going forward. Additionally, the refuge is working towards making outreach events (nature walks, school visits) available in both English and Spanish language formats.

Comment #8-1 Figure 2-5 shows a map of San Luis NWR with the type of marsh management. Yet, the map does not represent the actual management that is occurring. For example, the map shows several wetland units that are listed as permanent wetlands. In reviewing landviewer on July 3rd, most of the permanent and reverse cycle wetlands shown on the map were dry. As this was a very wet year with 100% water supply, the map does not coincide with the actual management that is occurring. Summer wetlands do require periodic drying to revitalize and to allow control of unwanted vegetation. But, to have almost all of the summer flooded wetlands listed on the map as actually dry, reflects that there are inconsistencies in what is provided as a plan vs what is being implemented.

Response: The figures of wetland management units (Figures 2.5 - 2.10) represent desired conditions that are not always achieveable during any given year due to a variety of factors including drought and flood cycles, and management capacity.

Comment #8-2 Based on page 131, the desired water per wetland acre is 10-38 acre feet per acre. This seems high compared to other wetland management in the local area where 1.5-6 AF/Acre is desired for seasonal wetlands, 5-9 AF/Acre for millet production, and 10-12 AF/Acre for summer brood water. These estimates that I'm providing are without recirculation systems, so overall water budgeting varies based on the ability to recycle water into other managed wetlands which could reduce the water budget even more. Objective 1.4 Water quality and quantity. Again as listed, there is over 80,000 acre feet of water listed to manage 6,500 acres of seasonal wetlands, and 860 acres of permanent wetlands. Even if adding in that there are generally 20% losses in delivery, this number far exceeds all other wetland manager objectives for the Grasslands. It does not make sense that so much water is needed for habitat management, especially when there is such a huge reduction in flooded acres when water allocations are reduced. 1.2.1 to 1.2.4 state that permanent, semi-permanent, and reverse cycle would be managed when level 4 water supplies are available. What is proposed during years when 100% of level 2 supplies are available? What is being proposed when 75% of level 2 is provided? Permanent, semi-permanent, and reverse cycle are essential for some wetland dependent wildlife. There are some species that depend on water presence to survive, and not providing summer water could significantly impact species presence. The least bittern has been found on summer wetlands on private and state lands by the nutria eradication program, and is likely present on summer wetlands on federal lands. Other species like western pond turtles also rely on summer water and this water must be present on an annual basis or the populations are impacted. Providing summer water only when level 4 water supplies are available would have a major impact on those species that rely on summer water.

Submergent aquatics management is not necessarily complimentary to other typical summer water goals. In my experience, management of summer wetlands to grow submergent aquatics requires a different water application timing than just making sure water is present. In testing flooding dates, the best submergent aquatic production occurred when the flooding occurred in May or June. This is too late for nesting birds, and not compatible with other goals typical for summer wetlands. Submergent aquatic management should be considered in addition to the minimum summer water needs for other wildlife. Submergent aquatics can be managed on a variety of soils and different water quality. Wigeon grass can be grown on the saltiest

areas, sago pondweed grows on brackish, and horned pondweed grows on the freshest waters. There are other pondweeds, but these are the most abundant submergent aquatics in Merced County.

Response: The goal of average water use allocation is approximately 4 acre-feet per acre. Different wetland management strategies may require more or less than this amount. Confusing water allocation language in the Water Management section under Wetland Management of Chapter 2 in the CCP was deleted. We have updated our language in objective 1.2 to reflect how the Complex strives to implement these wetland types in all years, reflective of how much water is supplied.

Comment #8-3 The growing of corn should be reconsidered and evaluated as to the need and potential for impacting other uses. When and if appropriate, corn should be managed so as to not impact waterfowl hunting. In some years, the USFWS has mowed the corn field on Merced NWR just after the regular waterfowl season closes. There have been years when this mowing of corn redistributed geese in the grasslands and effectively eliminated any opportunity for goose harvest for the youth waterfowl hunt days and the late goose season. Since artic nesting goose populations are at or above management objectives, impacting harvest has a detrimental impact on hunter opportunity, recruitment (discourages youth participation), the perception of the USFWS by the hunting public, and decreases harvest on populations that are at or above objectives. If corn is grown, it should not be manipulated until after the last goose season is closed.

The growing of corn should also be evaluated for the potential benefit or potential for harm. Corn is high energy, but lacks many of the essential amino acids and trace elements also needed by wildlife, especially those wildlife species that are about to migrate north.

The pastures on Merced NWR have not had any refurbishment recently. When the pastures where put in the hunt area, the hunting public was told that these pastures would be on a 7 year cycle. But, it has been much longer than 7 years since the pastures have been refurbished. What was once excellent pasture grasses is now mostly Bermuda grass. These pastures are in need of refurbishment. I suggested this to the refuge manager about 8 years ago (yes, they have been in need of refurbishment for quite a number of years), and I was told at that time that "these are permanent pastures and will permanently be in pastures". I know that pastures are beneficial of wildlife. But, when a pasture is only irrigated throughout the summer for cattle, the value for wildlife declines as the composition of plants on that pasture change over time. Currently, the pastures (in both the closed and hunt areas) are not providing the same benefit to wildlife they once had.

Response: Corn is planted and mowed for wintering waterbirds, especially geese and cranes, based on energetic needs of waterfowl as they prepare to migrate, adjusted for operational constraints including timing and amount of winter precipitation, and management capacity. This is consistent with the refuge's purposes that include attracting wildlife from nearby agricultural lands to reduce crop depredation. The primary objective of the refuge's agricultural activities, including corn mowing, is to provide important habitat components for wintering waterbirds. Decisions to mow the corn are therefore made independently of any hunt. Given the small footprint of the corn mowing relative to the size of the hunt zone, and relative short duration of corn mowing to the length of the hunting season, any impacts to the experience of waterfowl hunters are expected to be insignificant. Edits to more accurately reflect cropland purpose and management in the Croplands subsection of Vegetation and Habitat in Chapter 3 of the CCP have been made.

Comment #8-4 There should be an annual evaluation of weather, and goose/Sandhill presence each fall. During years when insufficient rainfall has occurred to germinate pasture grasses, and when the arctic nesting geese have arrived, the pastures should be irrigated. This was not included or discussed. Currently, the last irrigation occurs prior to the cool weather which could promote winter pasture grass germination if an irrigation occurred in late October or November. Arctic nesting geese need fresh newly germinated grasses when they arrive after their migration. Dry fall weather can delay germination and impacts habitat availability. Using irrigations on the pastures would greatly enhance arctic nesting goose habitat.

Response: Comment noted, thank you for your comment.

Comment #8-5 Draft Compatibility determination states that "The cutting of grass hay in irrigated pastures must be delayed until June 1 of each year to protect nesting birds." This needs to also include the harvest of wheat and other cereal grains. I have personally witnessed when the USFWS harvested a wheat crop in the spring on Merced NWR. I was shocked to see the field being harvested for grain. Over the field was approximately 15 hen ducks which undoubtedly had nests in this field (and I'm sure these nests were all destroyed). The hard date of June 1st should be sufficient on most years. It would be good to have the field checked prior to harvest to ensure that nesting is not delayed and that nests will not be destroyed.

Response: Thank you for your comment, we have revised the Merced agricultural CD to reflect this suggestion about delayed cutting, mowing and harvesting.

Comment #8-6 Botulism (page 90) states that the last botulism outbreak in the Grassland occurred in the mid- 1970's. A botulism outbreak occurred in the late 1990's at the Gustine Sewage Treatment ponds where approximately 35 dead birds were recovered dead. Although rare, regular examinations should occur to prevent mortality events.

Response: Comment noted and edits have been incorporated into the referenced Avian Botulism section of the CCP.

Comment #8-7 Phragmites, this plant is now present on Salt Slough and the San Joaquin River. Mapping and control will need a cooperative approached between the USFWS, CDFW, and Merced County (who is currently spraying on Salt Slough for hyacinth). Having a cooperative plan to map and treat this plant is important to make sure that the plant does not spread.

Alligator weed and primrose have spread throughout the northern San Joaquin Valley. These plant have major impacts to water conveyance systems and also to wildlife management. These plants should be included in the invasive species list and control efforts.

Response: Thank you for the additional invasive species information. Alligator weed and primrose have been added to this objective 1.6.8 in the CCP.

Comment #8-8 CCP Land Acquisition strategy lists that "Convert 7,580 current and future acres of Grasslands WMA easement acquisition authority to fee-title acquisition authority." The easement program is an excellent way to protect wetland and associated habitats from conversion to other uses. The easement also allows the private landowners to manage the habitat with no cost to the government, and also allows consumptive and non-consumptive uses. The history of the USFWS acquisitions has been a conversion of land uses from uses that allow consumptive uses of harvest to areas where public use is not allowed. As

listed the information does not identify the allowable uses. The Refuge Improvement Act states that; "Required, prior to acquisition of new refuge lands, identification of existing compatible wildlife-dependent uses that would be permitted to continue on an interim basis pending completion of comprehensive conservation planning." Fee-title acquisition would also require additional manpower and costs. There is currently a shortage in private lands for hunting, so having more land converted to government ownership is not desirable. Since nothing is listed on how the change would occur, I object to this change.

Response: Comment noted. This strategy does not change the actual amount of acreage being acquired in the Grasslands WMA, nor is the acquisition boundary changing. This strategy reflects current easement appraisal conditions and allows the Complex to better adapt to changing management resources and capacities, and land acquisition trends.

Comment #8-9 Several things are listed that the refuge either does not have the authority to do, or things where no measurable achievements can be obtained as it could relate to climate change. Some of the things listed have the appearance of promoting local refuge opinions and are not supported as measures that would have any relations to climate change. One examples is "Adjust harvest models of game species to incorporate climate change effects." Since the refuge has no direct input on harvest models of game species, it seems strange that this is even included.

Response: Harvest models of game species are outside the scope of the Complex's jurisdiction. This item has been removed from the list of strategies.

Comment #9-1 Wildlife Management Area was authorized to stop future land conversion and to convince the US Corps of Engineers to stop the planning (and eventual completion) of the very destructive Bear Creek Channelization Project (which had been officially authorized). After recognizing that the federal government was authorized to perpetually protect (via conservation easements) wildlife habitat within the Bear Creek Project area boundaries, the US Corps of Engineers officially cancelled the project. This decision was formally documented by letter which is in the refuge files (and perhaps the appropriate annual narrative report).

Page 31: The hunting of Canada-type geese was banned Central Valley-wide for the 1985-86 and 1986-87 waterfowl seasons to protect the endangered Aleutian Canada goose.

Page 31: The closure of the Merced pheasant hunt allowed the non-hunting public daily access to the refuge auto tour route, thus ending a major incompatible use issue the hunting program had created.

Page 33: The high number of geese in the late 1960's could be attributed to the fact that the San Luis NWR uplands (and the Wolfsen Cattle Ranch contiguous to the refuge's western boundary) were heavily grazed, thus creating short grass habitat, attracting thousands of Cackling Canada and white geese. The entire Cackling Canada goose population was subsequently short-stopped within Oregon's Willamette Valley's commercial rye grass fields.

Page 36: The first pepper weed, as identified by Joseph Medeiros (a botanist under contract to comprehensively survey, identify and list refuge plant species), was observed in the summer of 1981 on a small island in Mud Slough, downstream of the San Luis Drain terminus, on the Kesterson NWR. I was personally with him when the plant was discovered, collected and identified. Medeiros had never seen the plant species growing in the Central Valley

Page 38: Although hunting remains a priority public use at Merced, the total numbers of non-hunting public use far over-shadows current hunter numbers.

Page 38: Perhaps discuss the pre-ownership history of San Luis Island by Henry Miller as part of his extensive cattle grazing operations. There are still contour ditch remnants running westerly from the San Joaquin River in portions of the San Luis and East Freitas Units. The ditches were created to capture and spread floodwaters across the upland habitat to enhance cattle forage production. San Luis Island also supported a commercial waterfowl hunting program, offering the use of blinds (some of which still exist).

Response: Thank you for the additional information pertaining to refuge history.

Comment #9-2 Although controlled grazing of refuge uplands is a desired and necessary management practice, consideration should be given to include periods of rest (a well-accepted treatment in range management) during the active growing season. A year of periodic rest within portions of the uplands will enhance plant diversity and structure needed by rodent species and large arthropods used by local and migrating raptors and predatory mammals. Rest will not produce un-acceptable (and non-treatable) levels of invasive species, but will enhance grass and forb vigor. Also, it must be recognized that many of the expansive properties within the EGWMA are grazed, thus creating supplemental, short-grass habitat sought by cranes and Arctic-nesting geese.

Response: Thank you for your comment. Native uplands and irrigated pastures on the Complex are managed with a rotational grazing system that includes periodic rest intervals.

Comment #9-3 Last sentence on CCP page 125 [Wildlife Habitat alteration due to levy breaching/fish screen project]: [change it to] there may be short-term impacts.

Response: The sentence in the CCP the comment is referring to has been edited to "short- or long-term impacts" to acknowledge the spectrum of potential environmental impacts.

Comment #9-4 Is the reduction of Merced's water supply during drought years (equivalent to other CVPIA-supplied refuges) mandated by law or policy? Groundwater availability (including drought years) is not a major problem and the use of the Merced well field is insignificant to county or state groundwater pools. Merced NWR, the most critical GEA unit for wintering sandhill cranes and Ross' geese, is not restricted by SCMA regulations. Funding for continued pumping at Merced should be a very high Regional and Flyway priority, with sufficient funding allocated to maintain pre-determined (non-drought year basis) habitats. Should funding not become available, all public use (which demands funding and manpower) should be curtailed to minimize wildlife stress and/or potential disease outbreaks from being forced into less available habitat.

Response: Groundwater availablity is a potential limiting factor influencing future wetland management at Merced NWR.

Comment #9-5 The Winton Marsh and South Marsh provide very little wildlife diversity and nonacceptable public observation benefits due to their current management as permanent wetland habitat which produces dense stands of cattail and hard-stem bulrush, with very little open water and natural feed. These units should be managed as seasonal wetlands, a change which will greatly enhance wildlife diversity and wildlife observation during October through March, the period where the majority of both wildlife and public visitation occurs.

Response: Thank you for your comment. Refuge staff will review management strategies at these wetlands to enhance wildlife observation as resources allow. South Marsh across from the visitor center underwent an extensive rehabilitation project in 2023.

Comment #11-1

- MID is required to provide up to 15,000-acre feet (AF) to the Merced National Wildlife Refu&e (MNWR) in accordance with its' Federal Energy Regulatory Commission (FERC) license for FERC Project No. 2179.
- b. On January 15, 1993, MID and the United States Fish and Wildlife Services (USFWS) entered a settlement agreement (Agreement) that each party agreed was a "full and final settlement of their outstanding differences" relating to how and when MID would deliver water to the MNWR.
- c. This Agreement requires MID deliver up to 15,000 AF at a specified delivery point on Deadman Creek between the months of April through September of each year.
- d. Since then, MID has operated in accordance with this Agreement and as shown below, often exceeded the terms of the Agreement.

Response: Above Table 2-2 in the CCP the following has been added to acknowledge there was a settlement agreement, "A 1993 settlement agreement resulted in the MID agreeing to supply 15,000 acre-feet of surface water to the Merced NWR at Deadman Creek during their primary irrigation season that includes the months of April through September only."

Comment #11-2 As stated above [in the letter], On January 15, 1993, MID and the United States Fish and Wildlife Services (USFWS) entered into a settlement agreement (Agreement) that each party agreed was "full and final settlement of their outstanding differences" relating to how and when MID would deliver water to the MNWR. MID has met all its commitments regarding the Agreement terms.

Response: In the CCP just above Table 2-2 the following text has been added to correct the accuracy of the settlement agreement, "A 1993 settlement agreement resulted in the MID agreeing to supply 15,000 acre-feet of surface water to the Merced NWR at Deadman Creek during their primary irrigation season that includes the months of April through September only."

Comment #11-3 It [Page 72] states "In recent years, surface deliveries from MID have been reduced further. During 2007 through 2013, an average of 11,164 acre-feet was delivered from MID, with 67 percent of the water used. However, during 2014 through 2018-which includes three drought years-water deliveries were reduced to an average of 3,165 acre-feet, or 19 percent of the total water used. Even in the post-drought years starting in 2017, surface deliveries were still reduced to less than 4,000 acre-feet, or about 23 percent of water used."

i. MID Comment: This statement is misleading. In all years, except 2015 during which MID had no water deliveries, MIO has met its commitment to the MNWR. Although the MNWR provides a preliminary flow/volume schedule to MID prior to April, it regularly requests changes to its water deliveries throughout the season for various reasons, mainly due to system constraints or failure

within its system. The volumes shown as reductions are all due to the MNWR requesting reduced flows or no flows throughout the irrigation season.

- b. It is stated that most irrigation districts have shorter windows of "just a few weeks" of nonoperation compared to MID, which closes its facilities between October and March.
- ii. MID Comments:
 - 1. MID has discussed with USFWS on numerous occasions that the request for an extended delivery season, particularly its request that MID be required to provide flows to the MNWR during the months of November through February, is not possible. MID operates a water conveyance system consisting of over 800 miles of interconnected conveyance facilities, consisting of diversion dams, manmade canals and pipelines, creeks and flow and level control structures. This water conveyance system serves multiple purposes, primarily irrigation water supply and flood control operations.
 - a. During the irrigation season, these vast majority of facilities typically have water running through them. Therefore, MID performs its maintenance and capital improvement projects during the non-irrigation season. MID does not commit any MID facility to a dedicated water supply purpose during the non-irrigation season.
 - b. During the non-irrigation season, many of MID's facilities are used for flood control purposes under authority of the California Department of Water Resources and the Army Corps of Engineer. Due to these flood control operations, MID is unable to send water to the MNWR during the non-irrigation season.

Response: The suggested text revision has been incorporated into the CCP under Table 2-2 within the Water Management subsection of the Merced NWR section of Chapter 2.

Comment #11-4 On Page 130, it is stated "For example, delivered water Is unavailable to the MERCED NWR during the months of October through March when it is critically needed for management purposes." Please add to this sentence the following clarification, "due to conflicts with system maintenance and flood control requirements." See comments related to Page 72 for further information.

Response: The clarifying language suggested in this comment and the suggested edit have been made in the CCP above Table 2-5 in the Water Quantity section of Chapter 2.

Comment #11-5 On Page 223 states that MID provides a 16,000-acre-foot water allotment.

a. MID Comment: In fact, the water supply source being discussed in this section is derived from the Central Valley Water Project, not MID. We believe this is a typo. MID is required to provide up to 15,000-acre feet to the refuge in accordance with its' Federal Energy Regulatory Commission (FERC) license for FERC Project No. 2179.

Response: This was indeed a typographical error to reference MID in this objective. In Chapter 4 of the CCP under Water Quantity Strategies of Objective 1.4, the reference to MID having responsibility for securing and maintaining the full 16,000 acre-feet authorized to the Merced NWR by the CVPIA has been deleted. As noted in this comment, MID is required to provide up

to 15,000-acre feet to the refuge in accordance with its Federal Energy Regulatory Commission (FERC) license for FERC Project No. 2179.

Comment #11-6 [CCP] Page 224 states:

- a. "Clarify the water delivery schedule for the Merced NWR to determine whether MID can prematurely stop delivery due to water shortages or other causes under the FERC settlement and CVPIA."
 - 1. The Agreement states "For any season in which MID schedules irrigation deliveries to begin after March 31 or to end prior to September 30, MID shall notify the Service as provided in paragraph A, and shall, at the request of the Service and subject to the following terms, deliver a portion of the 15,000 A/F of water to other National Wildlife Refuge System lands designated by the Service and accessible through MID's conveyance facilities."
 - 2. There are only three years (2014-2016) since execution of the Agreement where water deliveries were not available by April 1. In 2014, water deliveries were available by April 18. There were no water deliveries available in 2015. In 2016, deliveries were available by April 4. There is only one year (2015) during which water deliveries were not available through the end of September.
 - 3. USFWS did not request alternate delivery points in 2014 nor 2016 (There were no available water deliveries in 2015 as a result of the historic drought.)
 - b. "Participate in the FERC re-licensing process for MID to secure an extended water delivery season without limits on CFS"
- iii. MID Comments:
 - 1. Deliveries without limits on CFS are unattainable. All water conveyance facilities have capacity limitations.
 - 2. USFWS has actively participated in the FERC re-licensing process. MID has discussed with USFWS on numerous occasions that the request for an extended delivery season, particularly its request that MID be required to provide flows to the MNWR during the months of November through February, is not possible. MIO operates a water conveyance system consisting of over 800 miles of interconnected conveyance facilities. The system in comprised of diversion dams, manmade canals and pipelines, creeks and flow and level control structures. This water conveyance system serves multiple purposes, primarily irrigation water supply and flood control operations.
 - a. During the irrigation season, these vast facilities typically have water running through them. Therefore, MID performs its maintenance and capital improvement projects during the nonirrigation season. MID does not commit any MID facility to a dedicated water supply purpose during the non-irrigation season.
 - b. During the non-irrigation season, many of MID's facilities are used for flood control purposes under authority of the California Department of Water Resources and the Army Corps of

Engineer. Due to these flood control operations, MID is unable to send water to the MNWR during the non-irrigation season.

c. "amounts as well as extending the water delivery area (to include the Lonetree, Snowbird, Arena Plains and East Bear Creek units)."

MID Comment: MID's only obligation regarding providing flows to a refuge is to the MNWR and ends at its point of delivery, per the Agreement.

Response: Thank you for your clarifying comments. Updates aligned with this comment have been made to Chapter 2 of the CCP under Table 2-2 within the Refuge Management Section to more accurately reflect MID's water delivery responsibilities to the refuges.

Comment #12-1 Regarding the Snobird and Arena properties. The Snobird property can easily have a controlled hunting program much like what is successful nearby at East Bear Creek: large assigned areas that allows hunters to set up in the best location within their zone. Access for this can be accomplished from Highway 140. We were told 15 plus years ago this property would have public hunting since it historically was hunted for decades as a club. What has occurred instead is it has become a large, new sanctuary, which has detrimentally affected the historic bird traffic patterns west of the San Joaquin River. These properties being public, need to be finally accessible to reasonable, controlled hunting.

Response: Please see response to public comment 4-1. Staff are exploring options, and determining necessary resources required, to open a portion of the Snobird unit for limited waterfowl hunting, consistent with FWS policies.

Comment #12-2 Regarding Blue Goose: This property historically had a small sanctuary next door, Swan Lake, as well as the normal November flood up of the West Bear Creek unit just north. Swan Lake was the only holding area between the Gustine and Hollister Gun Club's sanctuaries farther north, and the Volta, San Luis and Los Banos closed zones to the south. Returning to early fall flooding of Swan Lake, as well as maintaining West Bear Creek's normal flood schedule, along with good moist soil management on the unit itself, will absolutely help restore productive hunting at Blue Goose.

Response: Thank you for interest in Swan Lake Unit. The Complex will continue to enhance wetland habitat within the unit for wintering waterfowl. Management strategy aligns closely with the content in this suggested comment.

Comment #12-3 Throughout the Grasslands, there have been many successful brood water ponds and habitat set asides on both public and private lands through various fund sources for decades. All of these have been huge success stories for our local mallards, gadwall, and cinnamon teal as well as other wildlife that needs this habitat. The USFWS, with all of the acreage in the Grasslands, is in an excellent position to greatly assist with this need!....Any new brood habitat that is viable, needs to become one of the priorities. Thank you.

Response: Thank you for your interest and comment on brood habitat. The refuge annually provides both managed and unmanaged brood habitat.

Comment #13-1 Private Individual reiterated CWA's comments and expressed his support for those comments.

Response: Please see response to comment 4_1. Staff are exploring options, and determining necessary resources required, to open a portion of the Snobird unit for limited waterfowl hunting, consistent with FWS policies.

Comment #14-1 Is there any possibility for a hunting opportunity at Snobird? What are the specific compatibility concerns? The Complex could offer a small, limited program similar to East Bear Creek. Access could happen from the bottom end. There could be assigned zones to accommodate a couple of small parties. Our interest if primarily in the northwest complex of wetlands at Snobird near Modesto properties.

Response: Please see response to comment 4-1. Staff are exploring options, and determining necessary resources required, to open a portion of the Snobird unit for limited waterfowl hunting, consistent with FWS policies.

Comment #15-1 We have interest in establishing a public access working group.

Response: Comment noted, we appreciate your interest.

Comment #15-2 Could riparian brush rabbit translocation affect San Luis hunt programs?

Response: The potential transfer of Riparian Brush Rabbits will be covered under a separate future Environmental Assessment. This future effort would include a environmental impact scoping of the process, including effects to the hunting program.

Comment #15-3 Is it possible for clubs in the Grasslands to get exemptions from SGMA?

Response: While this comment subject is outside the scope of the CCP, public wetlands provide important benefits. The San Luis Complex does not have the authority to grant exemptions regarding SGMA.