

## **APPENDIX F**

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Yolo Bypass Wildlife Area Agricultural Plan

## Executive Summary

On April 14, 2004 the California Department of Fish and Game (DFG) entered in a Master Ground Lease Agreement with the Dixon Resource Conservation District (RCD) to provide management, reporting, and recommendations for the Yolo Bypass Wildlife Area's (YBWA) agricultural leases. Under the Agreement, which runs until March 2009, the RCD is responsible for determining the agricultural production capabilities and the optimal crop and grazing rotations on the leased premises that are most appropriate given DFG's objectives of flood control, management of habitat for ecological value and public use, and revenue creation. Specifically the RCD is required to submit crop and grazing plans, water system plans, and budgets to the DFG YBWA Manager annually, at least thirty days prior to implementation (by February 1<sup>st</sup>). The RCD hopes to use this opportunity to draw on its understanding of and contacts within agriculture with the goal of highlighting where there are mutual benefits between production agriculture, flood protection, and wildlife habitat. The Department's primary objective with the management of the agricultural lands within the Yolo Bypass Wildlife Area is the improvement and expansion of wildlife habitat. The Department plans to use agricultural activities as tools in improving the habitat and intends to reinvest rental income from these activities toward improvement of existing and production of additional habitat.

The various properties that make up the leased premises are unique in their ownership and production histories, manners in which they were acquired, and various other aspects that affect management. Much of the RCD work in the first three years of the contract has focused on gathering and organizing this information into a useable format in order to establish baselines as well as to identify critical information gaps and to address any immediate needs (i.e. water use facilities improvements, researching informal legal agreements with neighboring landowners and existing leaseholders.) The reports and accompanying information included in this binder document the progression of RCD responsibilities from information gathering to making recommendations for future management of the YBWA agricultural lands.

The binder is broken into five sections that reflect required reporting and additional management considerations. The Property Information Section gives a brief description of the overall property and specifics for each management unit (location, acreage, soils, USDA program history, and recent crops). The Annual Crop & Grazing Plans Section includes the required annual plans (with proposed cropping /grazing rotations, rental rates, and tenants by field), information on the specific production activities by crop, lease contacts, and government program information. The Water System Section describes the complex system of water use, sources, and agreements, specific to management units, through tables and maps. The Evaluation Section contains the required annual evaluation reports that summarize growing conditions and any unique management factors and compare the projected vs. actual cropping acreages, budgets, and average vs. actual yields. Finally the Financial Section includes itemized budgets for each year. The property make-up, tenants, and crops will continue to change frequently. Therefore this binder should be considered a snapshot in time that will be an active management tool. Please pay special attention to the "updated" dates on each page.

## General Property Descriptions

The Yolo Bypass Wildlife Area has a total farmland base of 16,421 acres according to the Yolo County Farm Service Agency. This farmland has historically been divided into six management units as follows:

<u>Management Units</u>	<u>FSA Farmland Acres</u>	<u>APN Acres</u>
<b>FSA FARM 5874</b>		
Glide Causeway Ranch North	190.0	181.71
Causeway Unit	172.0	421.59
Glide Causeway Ranch	3394.0	2944.55
Original YBWA	3668.0	3171.15
<b>FSA FARM 5877</b>		
Los Rios Farms Complex	907.0	942.48
Tule Ranch	8090.0	8979.02
<b>Total</b>	<b>16,421.00</b>	<b>16,640.50</b>

The FSA farmland acres do not reflect the actual acres of the properties. These acreages are based on field measurements made many years ago and many have not been updated to reflect changes in property ownership through sales or other changes to the properties. Over the next few years we can request that these acreages be updated to reflect the actual farmland acres.

### ***Glide Causeway Ranch North***

The Causeway Ranch North is located North of the Union Pacific Railroad trestle and has two productive farm fields GN 1 and GN 2 with a total of 162.7 farmable acres. The balance of this unit consists of roads ditches and a narrow point of trees and vegetation along the Union Pacific Railroad trestle on the Eastern point of this unit. The dominant soils are sandy loams to silty clays with clay subsoils (Sacramento *flooded* and Riz Loam *flooded*). These soils are somewhat poorly drained with slow permeability. Management considerations for these soils include proper tillage to minimize compaction, drainage of surface water and the clay subsoil. The same tenant has been farming the Causeway Ranch North for many years. Recent crops have been sunflowers, safflower, and corn.

The property has a program history of 147.8 acres (corn and safflower) under The United States Department of Agriculture (USDA) Farm Service Agency (FSA) Direct and Counter-Cyclical Program (DCP) program (see USDA Programs).

### ***Causeway Unit***

The Causeway Unit (Department of Transportation Land) lies between the Union Pacific Railroad trestle and Interstate 80. The property consist of 421.587 acres of which, approximately 95.3 acres is farmable land on the Eastern portion of this property. The

balance of this land consists of the old interstate and a mixture of vegetation and trees. The dominant soils are sandy loams to silty clay loams with clay subsoils (Sacramento Soils *flooded*, Brentwood Silty Clay Loam, Valdez Complex *flooded*). These soils either have improved drainage or are somewhat poorly drained with slow permeability. Management considerations for these soils include proper tillage to minimize compaction, drainage of surface water and the clay subsoil.

This property has DCP program history totaling 107.2 acres for corn.

***Glide Causeway Ranch***

The Glide Causeway Ranch is located immediately South of Interstate 80 and has 24 productive farm fields totaling 2,784.8 acres and one field of 21.9 acres dedicated to wildlife exclusively. The crops grown from 1998 to 2003 were corn, hay, safflower, tomatoes, rice, wild rice, and wheat, see table 1. Planted acres ranged from a high of 2,760.2 to a low of 1,837.5 with a four-year average of 2,434.0 acres. This property has DCP Program history totaling 1245.6 acres for wheat, rice, corn and safflower. The dominant soils are sandy loams to silty clay loams with clay subsoils (Sacramento Soils *flooded*, Sacramento Silty Clay Loam *drained*). These soils either have improved drainage or are somewhat poorly drained with slow permeability. Management considerations for these soils include proper tillage to minimize compaction, drainage of surface water and the clay subsoil.

Irrigated acres on the Glide Causeway Ranch have ranged from a high of 2,176.4 acres in 1998 to a low of 1,665.1 acres in 2003, not including the 266.2 acres of the shorebird project, which was irrigated as water was available.

Table 1: Historical Cropping

<b>Crop</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>6 Year Average</b>
Corn	1436.3	94.3					765.3
Hay	125.1	125.1	125.1	125.1	125.1	125.1	125.1
Safflower	216.2	962.8	613.9	700.6		172.4	533.2
Tomatoes					637.5		637.5
Rice		225.0	324.9	550.5	862.0	604.0	513.3
Wild Rice	615.0	1224.0	1612.0	1384.0	548.0	936.0	1053.2
Wheat	133.7						133.7
<b>Total Crops</b>	<b>2526.3</b>	<b>2631.2</b>	<b>2675.9</b>	<b>2760.2</b>	<b>2172.6</b>	<b>1837.5</b>	<b>2434.0</b>
Wildlife Project	21.9	21.9	21.9	21.9	21.9	288.1	66.3
Fallow	258.5	153.6	108.9	24.6	612.2	681.1	306.5
Non-Crop Land*	137.85	137.85	137.85	137.85	137.85	137.85	137.85
<b>Total Acres</b>	<b>2944.55</b>	<b>2944.55</b>	<b>2944.55</b>	<b>2944.55</b>	<b>2944.55</b>	<b>2944.55</b>	<b>2944.55</b>
<b>Total Irrigated Crop Acres</b>	<b>2176.40</b>	<b>1668.40</b>	<b>2062.00</b>	<b>2059.60</b>	<b>2172.60</b>	<b>1665.10</b>	<b>1967.4</b>
* Not Cropped lands Are Areas Such as Roads, Ditches, Etc.							

### **Original Yolo Bypass(Vic Fazio) Wildlife Area**

The original Wildlife Area consists of 3171.15 acres that have been owned and managed for wildlife habitat by DFG since the early 1990's. DFG has worked with tenants from the other properties to assist in wildlife habitat enhancement through weed control and/or prescribed grazing. The dominant soils are sandy loams to silty clays with clay subsoils (Sacramento Soils *flooded*, Clear Lake Soils *flooded*), although there are also significant portions of other soils types (Brentwood Silty Clay Loam, Riz Loam *flooded*, Capay Soils *flooded* mixed in. The dominant soils are somewhat poorly drained with slow permeability. Management considerations include proper tillage to minimize compaction, drainage of surface water and the clay subsoil. This property has DCP Program history of 2943.20 acres for wheat, corn, barley, rice, and sorghum.

### **Los Rios Farms Complex**

The Los Rios Farms Complex is 942.48 acres. The first 823.39 acres were purchased in 2001 and previously owned by several different persons. A second 119.09 acre piece, that had a long-term DFG easement for wildlife habitat was purchased from Alhambra Pacific in 2005. These properties are located west of the original Yolo Bypass Wildlife Area, also known as the Vic Fazio Wildlife Area. Putah Creek bisects these properties. They include nine productive fields with a total of 696.5 farmable acres. The prior owner had entered into a perpetual easement for the Wetlands Reserve Program (WRP) (see USDA Programs) with the USDA's Natural Resource Conservation Service (NRCS). This WRP easement consists of 153.6 acres. The balance of this unit consists of roads ditches and portions of Putah Creek totaling 92.38 acres. Variable soil textures are present with no clear dominant soil type on this property (Riz Loam *flooded*, Sacramento Soils *flooded*, and Sycamore Complex *flooded*, Sycamore Silt Loam *drained*, and Sycamore Silty Clay Loam, *drained*). Management considerations include drainage of surface water, soil compaction, and the clay subsoil. Permeability is variable throughout the property.

The USDA Farm Service Agency (FSA) indicates that this property has 907 acres farmland with 850.10 cropland acres. These properties have an estimated DCP Program history totaling 674.5 acres for corn, wheat, barley, sorghum and safflower.

### **Tule Ranch**

The Tule Ranch is located approximately one mile South of Putah Creek and consists of 8979.02 acres. The property is divided into two rental units. The Northeastern portion consists of approximately 3,549 (FSA) acres and the Southwestern portion consists of approximately 4,541 (FSA) acres. These estimates are from FSA records and an accurate survey is needed for each lease to confirm the total acres rented to each tenant.

The tenant on the Northeastern portion currently grows organic tomatoes and grazes the rest of the property. Recent crop history on the Northeastern portion has been wheat corn and tomatoes. The dominant soils are sandy loams to silty clay loams with clay subsoils (Sycamore Complex *flooded*, Clear Lake Soils, *flooded*, and Capay Soils *flooded*. These

soils either have improved drainage or are somewhat poorly drained with slow permeability. Management considerations for these soils include proper tillage to minimize compaction, drainage of surface water and the clay subsoil.

The tenant on the Southwestern portion only grazes the acreage he leases. Grazing has been the primary use of this portion for many years. The dominant soils are sandy loams to silty clays (Capay Silty Clay, Clear Lake Soils *flooded*, and Pescadero Soils *flooded*) These soils either have improved drainage or are somewhat poorly drained with slow permeability. Management considerations for these soils include proper tillage to minimize compaction (when soil is not too dry or too wet), drainage of surface water and the clay subsoil. Irrigation must also consider slow infiltration and permeability.

The USDA Farm Service Agency (FSA) indicates that the Northeastern portion of this property has 3,523.5 cropland acres with a DCP Program history of 2,847.50 acres for wheat, corn, sorghum, and safflower. The FSA indicates that the Southwestern portion of this property has 4,541 acres. However this portion has no DCP acres and is not eligible for any DCP payments.

## USDA Programs

The United States Department of Agriculture (USDA) offers several programs to eligible agricultural landowners and/or producers determined by the most current Farm Bill (updated every five years). When the Department of Fish and Game (DFG) took ownership of some of the current Yolo Bypass Wildlife Area some of the properties were already enrolled in the Direct and Counter-Cyclical Program (DCP) and/or the Wetland Reserve Program (WRP) from the 2002 Farm Bill. For a comprehensive list of other USDA programs visit USDA websites: <http://www.nrcs.usda.gov/programs/> or <http://www.fsa.usda.gov> In order to enroll properties in programs FSA assigns Farm and Tract numbers (see FSA #'s Table). In order to receive the program benefits the landowner and producer must file reports, 1) annual signups (October 1 – June 1), 2) fall planting report (April 30), and 3) spring planting report (July 15).

### DCP Program

The FSA has a commodity program, know as the Direct and Counter-Cyclical Program (DCP), which pays the farmers a commodity payment based on the properties historical crop production (see FACT sheet and tables).

The USDA limits the total number of public agencies that are eligible to receive payments from the DCP and currently the Department of Fish and Game is not an eligible agency. The determination for eligibility is made by annual drawing. Since there is no guarantee that the Department would be drawn in the lottery, a cash lease structure allows the tenants to receive 100% of the program payments. When property is owned by non-public entities the landowner is entitled to receive the USDA payments in the amount equal to their crop share rents, for example if the rent for wheat was a 25/75 split the landowner would receive 25% of the gross crop proceeds and 25% of the DCP payment. The tenant would receive the remainder of the payment.

However, with multiple tenants on the property the Department can allocate the DCP payments in several ways by assigning portion of land that is fallowed in exchange for services. An example would be that the tenant farms 100 acres of eligible crops but the department assigns him 150 acres in payment acres. The tenant would receive a payment for these additional acres in exchange for planting some wildlife food plots for the Department. Currently the tenants are farming most of the eligible acres. However, it is anticipated that as lands are converted to seasonal habitat the farmed acres will be less than the eligible acres so the Department will be able to make these kinds of assignments.

It will be important for DFG to consider possible loss of DCP payments in any future cropping rotations and to fully understand the eligibility requirements of the program. The DCP payments are an incentive for current and prospective tenants that can partially offset the unique challenges of farming the YBWA. Below is a description of the available DCP contract payments by management unit. These DCP payments are allocated to the tenants based on eligible cropping patterns and consistent with the USDA Farm Services Agency's program rules.

**Glide Causeway Ranch North**

This property has program history totaling 147.8 DCP acres for corn and safflower. The total DCP annual payment for this property is \$3,925.44.

**Causeway Unit**

This property has program history totaling 107.2 DCP acres for corn. The total DCP annual payment for this property is \$3,418.82.

**Glide Causeway Ranch / Original YBWA**

The USDA Farm Service Agency (FSA) indicates that this property has 3394.0 acres farmland with 2,806.7 cropland acres. In 2002 the FSA program farm for the Glide Causeway Ranch and the Original Yolo Bypass Wildlife Area Farm were combined to increase the total value of the farm payments available to the tenants. The combined farm has program history totaling 1872.30 DCP acres (1,314.6 acres Glide Causeway and 557.7 acres Original YBWA) for barley, corn, safflower, sorghum, rice, and wheat. The total DCP annual payment for this property is \$74,673.09.

**Los Rios Farms Complex**

These properties have a program history totaling 403.4 DCP acres for barley, corn, grain sorghum, rice, safflower and wheat. The total DCP annual payment for these properties is \$10,273.98.

**Tule Ranch**

***Northeastern Tule Ranch***

This property has program history totaling 2847.5 DCP acres for corn, grain sorghum, safflower, and wheat. The total DCP annual payment for this property is \$71,708.53.

***Southwestern Tule Ranch***

This portion has no DCP acres and is not eligible for any DCP payments.

**Wetland Reserve Program -**

When the State purchased the Los Rios Complex properties 153.6 acres adjacent to Putah Creek had been enrolled in the USDA's Wetland Reserve Program (WRP), see FACT sheet for description of program. The restoration of the WRP site will be coordinated and funded by the USDA Natural Resources Conservation Service (NRCS). Restoration work is scheduled for 2005 and 2006.



## **Water System Descriptions**

### **Water Rights**

The properties that now make up the Yolo Bypass Wildlife Area have unique ownership and crop histories and consequently a complex water rights situation. For this reason we have not included water rights information in this document. For information regarding water rights on the YBWA please contact: DFG, Dave Feliz or Paul Forsberg (916) 323-7215.

### **Glide Causeway Ranch North**

The source of irrigation water for the Causeway Ranch North is the Willow Slough Bypass and the drain along the Eastside of the West Yolo Bypass Levee. The water from these sources enters a borrow ditch along the Union Pacific Railroad trestle and flows east towards the Toe Drain. Approximately one mile east of the West Level the tenant uses a diesel pump to lift water from the borrow ditch for irrigation. The water level in the ditch is controlled using an earthen dam with a culvert and flashboard riser located on or adjacent to the DFG property, approximately 1.6 miles east of the West Levee. This pool of water is also used by the Swanston properties located north of the DFG property. The tenant maintains the pump, dam, and ditches on this unit. DFG is not required to participate in any of the maintenance.

### **Causeway Unit**

The source of irrigation water for the Causeway Unit Lands is primarily from the Toe Drain. The Toe Drain pool is tidal water that is trapped behind the Lisbon Weir and includes limited amounts of drain water from the Willow Slough Bypass and the Tule Canal. Approximately 0.2 miles North of Interstate 80 at the east levee the tenant uses a diesel pump to lift water from the toe drain. The Lisbon Weir maintains the water level in this pool. The Lisbon Weir is located approximately 6.75 miles south of Interstate 80 along the east levee. This pool of water is also used by the adjacent Harvey property located east of the DFG property. The tenant maintains the pump and ditches on this unit. DFG is not required to participate in any of the maintenance.

### **Glide Causeway Ranch**

The source of irrigation water for the Glide Causeway Ranch is primarily the Toe Drain. The Lisbon Weir maintains this pool of water.

Two primary pumping plants (G 52, G 55) and two secondary pumping plants (G 32, G 20) serve the portion of the Glide Causeway Ranch located within the Yolo Bypass. The northern most pumping plant G 52 in the Toe Drain serves 609.5 acres in the northeast corner of the property. The next pumping plant G 55 serves the balance of the property of 1847 acres. This pumping plant can serve 939.9 acres by gravity. The balance of the property is irrigated out of the Green's Lake pool by means of secondary pumping plants. The northern center portion comprising 637.1 acres is served by pumping plant G 32. The southwestern 80 acres of field G 20 is served by a secondary diesel lift pump.

Since the Department of Fish and Game purchased the Glide Causeway Ranch significant improvements have been made to insure that irrigation could continue on this property. These improvements were necessary to insure adequate water for both agriculture and wildlife habitat. The first improvements made were to the pump stands at G 32 and G 52. These improvements consisted of new pump stands in fall 2002 and spring 2003 to raise the electrical panels above the flood plain as required by PG&E. Then in the fall of 2003 new pumps were added to these pump stands to replace the pumps that were being rented from Los Rios Farms.

In addition to the replacement pump stands and pumps there has been extensive improvements to the irrigation delivery system. These improvements consisted of enlarging and cleaning the irrigation ditches. New turnouts, drain pipes and rice boxes were constructed. The improvements to the ditches and control structures were necessary in order to deliver and drain water in a timely manner, thus enabling proper water control. The proper control of water is critical for rice production and habitat flooding while minimizing the production of mosquitoes. See Section VI for a detailed list of the nature and cost of each improvement. Generally speaking these improvements were accomplished using the rice rents from 2002 and 2003. Furthermore, the tenant provided operators, fuel, and maintenance in exchange for the use of DFG excavator, tractor, and scraper to accomplish several components of these improvements.

## **Original Yolo Bypass Wildlife Area**

The source of irrigation water for the Original Yolo Bypass Wildlife Area is the Toe Drain and Putah Creek. The Lisbon Weir maintains the Toe Drain pool of water. During the development of the original YBWA unit the US Army Corp of Engineers constructed a removable flashboard dam in Putah Creek to replace the earthen dam that was installed by the Mace Ranch Irrigation System on an annual basis.

The Mace Ranch Irrigation System serves the original YBWA unit within the Yolo Bypass and other properties to the west of the Yolo Bypass which are owned by Los Rios Farms and Alhambra Pacific (now owned by AKT). The YBWA unit and all adjacent state properties' water use is restricted, by an agreement and grant of easement dated December 5, 1991, to irrigation of wildlife habitat. The Mace Ranch Irrigation System is operated by Los Rios Farms per a March 25, 1991 agreement. The parties of this agreement are Los Rios Farms, Alhambra Pacific and the Department of Fish and Game, as the successor of a portion of Alhambra Pacific's interests. The agreement specifies that Los Rios Farms is to operate and maintain the irrigation system. The cost of operation and maintenance is shared on a pro rata basis determined by the number of acres each party owns. The power cost for pumping of water is shared based on water usage for each crop planted and the number of lifts required to the deliver the water. Mace Ranch Irrigation System facilities located on the YBWA unit consist of the Lisbon Weir, the Putah Creek Dam, the First Lift Station, and approximately 4.5 miles of open canals.

## **Los Rios Farms Complex**

The Los Rios Farms Complex consists of several properties that were owned by Los Rios Farms, PG & E Properties, and L. Parker. The source for water on these properties historically has been a combination of wells and Putah Creek. These properties are located on either side of Putah Creek and adjacent to the original Yolo Bypass Wildlife Area. The water in Putah Creek (Putah Creek Pool) is controlled by the new dam in Putah Creek. Irrigation water is drawn from the creek in several places to serve these lands. The eastern most lift pump is located on Putah Creek approximately 1.65 miles west of the Toe Drain and 0.8 miles north of the Tule Ranch's north boundary. This pump provides water to approximately 350 acres south of Putah Creek. A well located approximately 200 feet southwest of the lift pump is used when needed to augment the Putah Creek Pool. On the north side of Putah Creek there are three fields (parcels) inside the levee. The two eastern fields have been served either by a well (currently non-operational) or by a lift pump located approximately one mile upstream of the Putah Creek Dam.

## **Tule Ranch**

The Tule Ranch consists of two distinct units. The Northeastern unit consists of a mixture of irrigated crops and dry pasture, while the Southwestern unit consists of irrigated pasture and dry pasture.

### ***Tule Ranch – Northeastern Unit***

The Northern portion of the Northeastern unit has historically received water from the Toe Drain pool; above the Lisbon Weir through a series of two lift pumps. The first station was located approximately 0.9 miles west of the toe drain along the unit's North boundary. The Second lift is located 1.65 miles west of the Toe Drain along the unit's North boundary. Currently there are no lift pumps at this location. David Feliz has submitted a proposal to rebuild the first lift station. Once the water was lifted it flowed through a series of highline ditches to the various fields. The ditches are the responsibility of the tenant to maintain. Currently, the tenant has constructed a highline ditch from the Putah Creek Dam to deliver water to the Tule Ranch. A lift pump located on Putah Creek located approximately 1.65 miles west of the Toe Drain and 0.8 miles north of the Tule Ranch's North boundary is lifting the water into the highline ditch. This lift station is further described above in the Los Rios Properties section. The highline ditch has enabled parts of the Northeastern unit to be irrigated from the Putah Creek Pool. Further investigation is needed to determine the effect of delivering water from the Mace Ranch Irrigation System to the Tule Ranch.

The Northeastern unit also has historically received water from the Toe Drain below the Lisbon Weir. This South portion of the Eastern unit had two lift stations in the Southern Pool, as described below. These lifts are located approximately .2 miles and 1.65 miles west of the Toe Drain. Currently only remnants of these lift stations remain. It has not been determined how long these sites have been out of use. No irrigated crops have been planted on this portion of the unit in 2004.

### ***Tule Ranch – Southwestern Unit***

The Southwestern unit consists of irrigated and dry pasture. The irrigation water is first lifted directly from the Toe Drain below the Lisbon Weir. The first lift consists of two electric pumps located approximately 8.8 miles South of Interstate 80 and 5 miles East of County Road 104. The First lift pumps water into the South Pool (a 2.5 mile canal which flows west to the Second Lift). The Second Lift consists of two electric pumps located approximately 8.8 miles South of I-80 and 2.5 miles East of County Road 104. This pool also receives drain water from farms to the West of DFG property from the lands within RD 2068 and DRCD. While the volume of water varies over the irrigation season, this drain water reduces the total amount which is pump from the Toe Drain.

The Southern most portion of the Southwest Unit includes a low area which was historically used as a Duck Club known as the Fireman's Pond. Currently this area is not intentionally being flooded, however occasionally DFG receives excess overflows from RD 2068. In the future it may be possible for DFG to purchase water from RD 2068 to more actively manage the area for the purpose of habitat production.

Water Usage from this system is approximately 764 acres of irrigated pasture on the Tule Ranch. Per the agreements that DFG inherited when it purchased these parcels, water is provided to the Bull Sprig Outing, Senator Outing, H-Pond, Skyrakers, and Glide-Inn Ranch duck clubs. Their water usage is 330 acres of summer waterfowl habitat and 1290 acres for hunting ponds. Maintenance and power cost for the first and second lift stations along with the maintenance cost for approximately 3.3 miles of canals is shared by DFG's tenant and the Duck Clubs. We have developed a ratio to determine the share based on the water usage. See Water Usage Tables and Section IV for a list of the improvements and maintenance cost since January 2002 that will be charged back to the users of the system.

### ***Tule Ranch – Duck Club Agreements***

When the Department of Fish and Game purchased the Tule Ranch it inherited two types of existing agreements with Duck Clubs located to the South of the Tule Ranch. The first type of agreement allowed the Bull Sprig and Skyrakers to use the Department's Road and to receive water from the Department's irrigation system. The second type of agreement allows H Pond and Channel Ranch to use the Departments Road. There are also two additional clubs (Senator Outing Duck Club, Glide In Ranch Duck Club) that apparently did not have agreements with the Glide Colby estate but do use the Department's road and receive water from the Department.

The current operating understanding which is being memorialized with new agreements is that the duck clubs pay their portion of the expenses related to their use of the water and road systems. The duck club agreements require that the Duck Clubs pay their prorata share of all expenses required to operate and maintain the water system. The agreement also requires the duck clubs to pay their pro rata share of road access. The distribution of road maintenance cost needs to be considered in greater detail to determine the basis for the prorata shares.

Yolo Bypass Wildlife Area

<b>2006 Crop Plan FSA Farm 5874</b>		
<b>Glide Causeway Ranch North</b>		
Fields	Crop	Acres
<b>TR7703</b>		
1	Safflower	84.5
2	Safflower	78.2
Total Rented		162.7
Non Rented Land		19.0
<b>Total Acres / AP Map</b>		<b>181.71</b>
<b>Causeway Unit</b>		
Fields	Crop	Acres
<b>TR 6743</b>		
1	Fallow	95.0
2	Fallow	73.9
Total Rented		168.9
Non Rented Land		252.7
<b>Total Acres / AP Map</b>		<b>421.59</b>
<b>Glide Causeway Ranch</b>		
Fields	Crop	Acres
<b>FSA TR7008</b>		
G20/1	F-SB	287
G30/2	Wild Rice	130
G31/10	Wild Rice	190
G32/11	Fallow	87
G33/12	Fallow	93
G34/8	F-SB	33
G35/7	F-SB	27
G36/6	F-SB	35
G37/3	F-SB	35
G40/4	Wild Rice	186
G50/5	Fallow	108
G51	Fallow	130
G52/9	Fallow	106
G55/13	Fallow	250
G60/22	F-SB	97
G61/20	Fallow	120
<del>G62/48</del>	Field Combined into 61 and 63	
G63/17	Fallow	150
G64/14	Fallow	92
G65/15	Fallow	103
G66/16	Fallow	102
G67/21	F-SB	120
G68/19	F-SB	145
<b>FSA TR 7006</b>		
G5A	Grazing	75
G5B	Fallow	42.18
G6/2	Fallow	21.9
Total Rented		2765.1
Non Rented Land		179.5
<b>Total Acres / AP Map</b>		<b>2944.55</b>
<b>Original YBWA Property</b>		
<b>YBWA Original (FSA)</b>		2943.2
Non Rented Land		228.0
<b>Total Acres / AP Map</b>		<b>3171.15</b>

Yolo Bypass Wildlife Area

<b>2006 Crop Plan FSA Farm 5877</b>		
<b>Los Rios Farms Complex</b>		
<b>Tract &amp; Field #s</b>	<b>Crop</b>	<b>Acres</b>
<b>182</b>		<b>91.1</b>
1	Fallow	91.1
Total Rented		91.1
Non Rented Land		28.0
<b>Total Acres / AP Map</b>		<b>119.09</b>
<b>TR7732</b>		<b>111.6</b>
2/1	Flyway Center/Grazing	59.4
3/2A	Sunflower	44.0
3/2B	Fallow/damaged	8.2
Total Rented		111.6
Non Rented Land		8.4
<b>Total Acres / AP Map</b>		<b>120.0</b>
<b>TR 6395 &amp; 5882</b>		<b>188.4</b>
1 (TR6395)	Vine Seed	81.2
2 (TR6395)	Fallow	2.9
R1 (TR5882)	Grazing (irrigated)	104.3
Total Rented		188.4
Non Rented Land		41.1
<b>Total Acres / AP Map</b>		<b>229.54</b>
<b>FSA TR1095</b>		<b>289.48</b>
1	Tomatoes (organic)	35.38
29/5	Tomatoes	124.5
38/5	Grazing (irrigated)	129.6
Total Rented		289.48
WRP		153.6
Non Rented Land		30.77
<b>Total Acres / AP Map</b>		<b>473.85</b>
<b>Total Los Rios Ranch</b>		
Total Rented		680.6
<b>Total Acres / AP Map</b>		<b>942.49</b>

Yolo Bypass Wildlife Area

<b>2006 Crop Plan FSA Farm 5877</b>		
<b>Tule Ranch</b>		
<b>Tract &amp; Field #s</b>	<b>Crop</b>	<b>Acres</b>
<b>TR557</b>	<b>Grazing</b>	<b>4777.0</b>
<b>TR646 &amp; TR405</b>		<b>3625.2</b>
50/2	Tomatoes	59.3
51/3	Tomatoes	57.8
52/4	Tomatoes	49.0
53/7	Grazing	49.0
54/8	Grazing	48.9
55/9	Grazing	42.7
56/11	Grazing	19.8
57/12	Grazing	18.5
58/13	Grazing	43.2
60/1	Grazing (irrigated)	68.9
61/1	Grazing (irrigated)	86.4
62/1	Grazing (irrigated)	94.5
63/5	Tomatoes	70.2
64	Tomatoes	67.7
65	Tomatoes	70.5
66	Fallow	69.1
67	Tomatoes	83.1
68/14 A	Grazing (irrigated)	100.0
68/14 B	Grazing (irrigated)	107.7
70/6 A	Grazing	53.2
70/6 B	Wildlife Food Plots?	47.0
71	Grazing	76.4
72	Grazing	77.0
73	Grazing	99.5
74	Grazing	53.9
75/10 A	Grazing	324.2
75/10 B	Wildlife Food Plots?	35.0
80/1 A	Fallow	128.9
80/1 B	Wildlife Food Plots?	15.0
85/2	Grazing	314.9

## 2004 Evaluation Report

### **2004 CROP YEAR** (January 1, 2004 to December 31, 2004)

The crops grown in 2004 included corn, milo (grain sorghum), sunflower, safflower, tomato, hay, rice and pasture with an additional 807.3 acres managed specifically for wildlife. An experimental shorebird habitat / weed control project on the Glide Causeway Ranch proved successful and will be repeated in subsequent years. Crop yields were within expectations, slightly lower than the county averages. Crop yields on the Bypass tend to be lower than county averages due to soil types and the property's flood control functions. The 2004 Crop Year was a relatively 'normal' year with regards to flooding in the Bypass. There was some mid-winter inundation which receded and did not dramatically impact production.

#### SUMMARY BY MANAGEMENT UNITS

<b><u>Property</u></b>	<b><u>Projected Income</u></b>	<b><u>Actual Rental Income</u></b>	<b><u>Crops</u></b>	<b><u>Average Yield</u></b>
Glide Causeway Ranch N.	\$10,569.00	\$10,569.00	Corn Sunflower	4.5 - 5.0 tons/acre 1.3 tons/acre
Causeway Unit	\$0	\$6,175.00	Sunflower	1.3 tons/acre
Glide Causeway Ranch	\$158,253.50	\$171,412.00	Rice Wild Rice Safflower Milo Annual Hay	2.276 tons/acre .65 tons/acre 1 ton/acre 2.52 tons/acre 2.21 tons/acre
Los Rios Farms Complex	\$11,043.16	\$11,043.16	Annual Hay Tomatoes Grazing	2.21 tons/acre 23.69 tons/acre .28 aum/acre
Tule Ranch	\$150,053.00	\$150,053.00	Grazing Tomato Irrigated Pasture	.6 aum/acre 23.69 tons/acre 5.7 aum/acre
<b><u>Total</u></b>	<b><u>\$329,918.66</u></b>	<b><u>\$349,252.16</u></b>		

#### WILDLIFE HABITAT BENEFITS & RENTAL INCOME BY UNIT

*Glide Causeway Ranch North* – Rental income and crops met expectations. Mourning doves and pheasants made significant use of areas planted to safflower after harvest. Public use is limited on this unit due to access issues.

*Causeway Unit* – Rental income exceeded expectations because crops were not originally planned for this unit. About ½ of this unit was farmed and ½ was not actively managed



for farming or wildlife habitat. Irrigation proved difficult. There is potential for increased wildlife habitat benefits in a couple of permanent wetlands on this piece. This unit is open for bicycle and dog use, including one of the permanent wetlands. This is the only area where the Department allows pets access to the wetlands.

Kinder-Morgan installed a petroleum pipeline and constructed an access road on this unit. In the process they dismantled a drip irrigation system that was part of a riparian habitat restoration project. The Department will request compensation from Kinder-Morgan.

*Glide Causeway Ranch* – Rental income exceeded expectations. A total of 1700 acres (829 acres wild rice and 871 of white rice) of rice were planted. One tenant harvested a milo crop on 35 acres then flooded up after harvest in the fall for waterfowl. The other two tenants planted food plots and did not harvest in those areas. The shore bird project consisted of preparing fields 67 and 68 for rice. Since no organic rice contract could be obtained in time for planting in 2004 and mosquito abatement costs were too high, the fields were flooded with approximately one inch of water in June. Weed control was provided by germinating the weed seeds and then disking these weeds in late fall. Due to this flooding a vast number of shore birds used these fields during the summer months while the tenant was able to reduce the weed pressure for future rice crops. As a result of this successful habitat and weed control project we plan to incorporate this program in future years.

We are finding the rice production infrastructure to be very versatile in providing options for wildlife habitat benefits. This unit is the southern most piece of the YBWA that can support rice crops due to climate.

Water quantity was the only limitation on this unit. Water from the Mace Ranch Irrigation System cannot be used for agricultural irrigation purposes. The Department installed their own new pumps on the Toe Drain (utilizing historical riparian water rights to the Toe Drain) which allowed flooding in October, right after rice harvest, for duck habitat instead of waiting until January. This attracted large numbers of waterfowl to the Causeway Ranch, which provided a highly visible display of the benefits of the ag/wildlife partnership to the Hwy 80 Causeway traffic. In addition the bat colony under the Causeway grew a lot this year for unknown reasons. This increased the public visitors to this site.

Roughly 500 acres of rice habitat was made available for public waterfowl and pheasant hunting in this first year as well.

The Department aims to have a series of permanent brood ponds within this area dispersed at roughly one mile apart in order to maximize chick survival.

*Original Yolo Bypass* - There was no rental income expected or realized from this unit. Tenants from other units planted food plots (safflower, milo, wheat, vetch and corn) at the Department's request which also provided nesting habitat. The Department will work

with the USDA Farm Services Agency to reconfigure the farm and tract designations to maximize the commodity payments available for this unit.

Grazing was used as an experimental tool in vegetation management. Cattle were brought in to eat down the joint grass prior to disking and spraying. Cattle were also used to graze sweet clover after being swathed in areas where it was too thick and compromising hunting. We will experiment more with this in the future.

*Los Rios Farms Complex* – Rental income and crop acreages met expectations. This unit includes the confluence of Putah Creek with the Bypass which provides important riparian wildlife habitat. There is the potential to improve this riparian habitat with tree plantings etc. Grazing on 259.5 acres was managed specifically for wildlife habitat benefits. Although birds of prey found increased food sources during field prep and harvest of the tomato crops, overall we found tomatoes offer less options for exploring the Department’s wildlife habitat goals.

*Tule Ranch* – Rental income and crop acreages met expectations. The northeast portion of the property (north of the railroad tracks) had 176.6 acres specifically managed for wildlife with food plots and grazing to improve habitat.

On the southwestern portion grazing management on roughly 1000 acres was conducted in a manner consistent with the Department’s goal of protecting vernal pool habitat. The western part of this unit contains vernal pools and rare plant communities.

*General Wildlife Habitat Notes* – Milo crops can be grazed by cattle for short periods and then flooded for ducks or pheasant hunting. Sunflowers have potential dove habitat benefits. Prior to construction activities, cattle can be used to clear vegetation with potential for \$10/acre rents versus paying \$25/acre to have area disked and mowed. Cattle can be used prior to herbicide applications or prior to disking for control of joint grass, furthering mosquito abatement and invasive species management goals. The portions of the property that are in a weed management area have added considerations regarding import of seeds in gravel, hay, animals etc.

**2004 – 2005 Fiscal Year**  
**(July 1, 2004 to June 30, 2005)**

General Breakdown of Expenses:

Improvements	\$271,900
Supplies & Misc.	\$31,598
Equipment & Maintenance	\$26,173
Utilities & Services	\$78,429
DRCD Land Management Fees	\$52,097

Fiscal year 2004 income was \$431,126 and expenses were \$460,197. Settlement of rents and reimbursement of tenant expenses from the 2002, 2003 and 2004 crop years were included in this budget. Overall rental income for the 2004 fiscal year exceeded what

was anticipated due to changes in cropped acreages on the Causeway Unit and Los Rios Farms as well as unanticipated water system charges collected from Duck Clubs. Expenses were higher than anticipated due to water system improvements made on the Glide Causeway Ranch and to higher than expected utility and maintenance costs as well as facility (household) expenses.

Water Usage Reimbursements:

The grazing tenant and five duck clubs reimbursed the Department for their prorata usage share of water costs. All duck clubs, except for one, used water for both seasonal wetlands and summer irrigation and the tenant used water for irrigated pasture. The water reimbursements totaled \$29,382.16