

Against All Odds...

**The History  
of the  
Grassland  
Water District**

**Protecting  
the West's  
Largest Wetland**

By Peter J. Ottesen





Grassland Ecological Area  
and Cover Northern Pintail photo  
courtesy Gary Zahm

**T**HIS BOOK IS DEDICATED to the countless hunter conservationists, environmentalists, landowners and everyone who has unselfishly “fought the good fight” to protect the Grasslands Ecological Area of western Merced County, California, the largest wetlands complex west of the Mississippi River. It is a classic story of private concern for a public resource and the Herculean effort that continues today.





Cinnamon Teal  
photo courtesy Gary Zahm

# Who We Are

## Grass Lands Water Association—1939

**R**EPRESENTING cattle-ranching interests and duck clubs and more than 62,000 acres, the San Joaquin Grass Lands Mutual Water Users Association was formed on March 15, 1939. The name was quickly shortened to Grass Lands Association. Officers and board of directors of this new organization were men of influence.

From its inception, through 1944, the Grass Lands Association delivered water to its members through an old Miller & Lux canal system. Duck clubs received federal free water, but tensions mounted when cattle ranchers had to pay as much as \$3.<sup>50</sup> per acre-foot of water to irrigate their pastures.

The result of this split between cattlemen and duck hunters was the formation of a new mutual water company called the

Grass Land Water Association. It was formed to reconnect the two major user groups and its 5,000 landowners. However, the federal water would only continue until the Central Valley Project was completely operational.

The association had many bargaining sessions with the U.S. Bureau of Reclamation to secure a permanent agreement to receive Central Valley Project water for privately-owned wetlands but were rebuffed time and time again. Federal officials believed private landowners should develop their own sources of water.

In 1953, the association turned over all assets to a soon-to-be-formed Grasslands Water District, the only district in California created solely for the preservation of waterfowl and the wetlands they depended upon.



## GRASSLAND WATER DISTRICT—1954

**T**HE DISTRICT DELIVERS water to the 75,000 acre Grassland Resource Conservation District that is made up of privately-owned wetlands and public wildlife refuges.

Grasslands Water District is a California Water Agency, formed under Section 34000 of the State Water Code, to receive and deliver federal Central Valley Project water. Its primary function is to protect, secure and deliver water to the critical wetland habitat within its boundaries, and to maximize food and habitat availability to meet the needs of migratory birds.

The district also delivers water, on behalf of the U.S. Bureau of Reclamation, to state wildlife areas that include Los Banos, Volta and units within the North Grasslands Wildlife Area that include Mud Slough, Gadwall and Salt Slough; and to the federal San Luis National Wildlife Refuge Complex, including the Freitas and Kesterson units.

The district is governed by a five-member Board of Directors. To serve on the GWD board, an individual must be a landowner within the district or be a designated representative. Directors serve four-year terms, elected by landowners.

## GRASSLAND RESOURCE CONSERVATION DISTRICT—1972

**T**HE GRCD is comprised of privately-owned wetlands and public wildlife refuges that covers 75,000 acres in western Merced County, part of the largest, contiguous block of wetlands west of the Mississippi River, that serves as a major wintering ground for migratory waterfowl and shorebirds along the Pacific Flyway. Water for the resource conservation district is provided by the Bureau of Reclamation and delivered through the Grassland Water District.

The Grassland Resource Conservation District is made up of 160 duck clubs that range in size from 20 acres to as much as 2,523 acres, and its vast size is considered the “most important complex of wetlands in the San Joaquin Valley,” by the U.S. Fish and Wildlife Service. In 1991, the Western Hemisphere Shorebird Reserve Network recognized the Grasslands as an Internationally Significant Shorebird Site. The district is also designated a Globally Important Bird Area by the American Bird Conservancy and the National Audubon Society.

In 2005, Grasslands was designated as Wetlands of Importance under the Ramsar Convention on Wetlands of International Importance, making it one-of-22 sites in the United States.

The U.S. Fish and Wildlife Service ranks the habitat provided by the GRCD as the most important complex of wetlands in the San Joaquin Valley and is one-of-five continental focus areas of Ducks Unlimited.

Additionally, the district is known to support 550 species of birds, animals and plants, which includes 40 species that are federally listed as sensitive, threatened or endangered, including the giant garter snake, California tiger salamander, western pond turtle, tri-colored blackbird and Swainson’s hawk.

Lands within the GRCD are primarily managed for waterfowl habitat. Land

uses include seasonally flooded wetlands, permanent wetlands and irrigated pasture. Conservation easements have been acquired by the U.S. Fish and Wildlife Service to protect these lands from development in perpetuity. More than 90% of district lands are under easement.

The GRCD was formerly known as the Grassland Soil Conservation District, which had been formed in 1959.

A five-member governing board is chosen by voters who reside within the GRCD boundaries. Directors serve four-year terms.

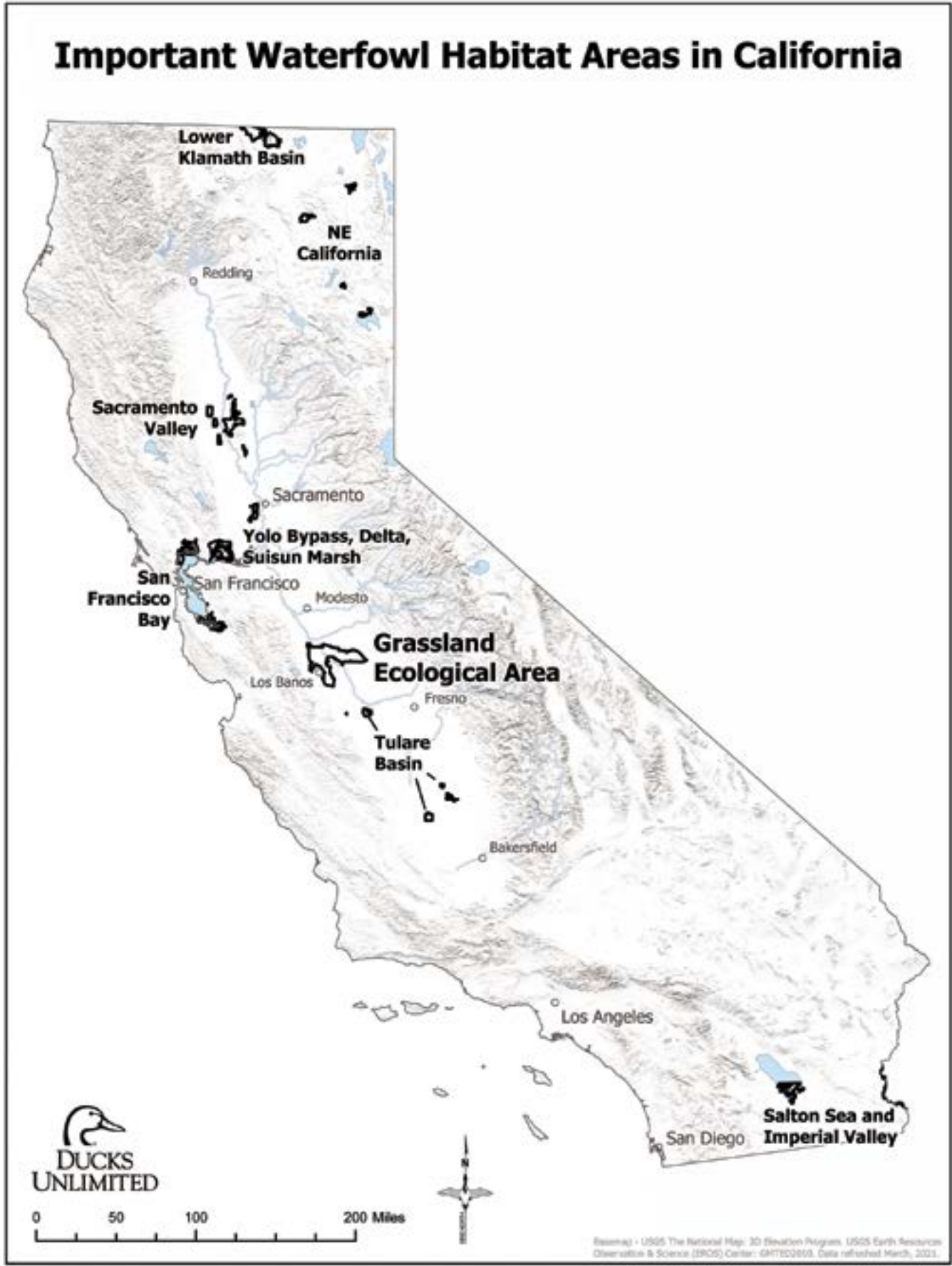


Perigrine Falcon  
photo courtesy Gary Zahm

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Black-necked Stilt  
photo courtesy Gary Zahm



# INTRODUCTION

**SINCE TIME IMMEMORIAL**, in late-summer, fall and winter, countless millions of waterfowl, shorebirds, raptors, wading birds and neotropical birds migrate along the Pacific Flyway to spend their winters in the Grassland Ecological Area, a 240,000-acre expanse of wetlands in western Merced County—the largest complex of its kind in the entire West.

It must be noted that the GEA is a mere remnant of the four million acres of wetlands that existed in California back in the 1880s, and the reason why it must be vigorously protected.

Nearly 550 species of birds, plants and animals use the Grasslands, including 40 that are federally listed as sensitive, endangered and threatened. The U.S. Fish and Wildlife Service cites more than 30% of the Central Valley migratory waterfowl use the Grassland Ecological Area, with more than one million relying upon its wetlands during the winter months.

Located in California’s Central Valley—in an overpopulated state with more than 42 million inhabitants and growing—efforts to preserve and maintain the Grassland wetlands and the wildlife that depend upon it, are under constant siege.

Securing and maintaining water allocations and pushing back against encroachment to critical habitat are battles that never seem to end for “*Protecting the West’s Largest Wetland*”, the Grasslands Water District.

Since its inception in 1954, after succeeding the Grass Lands Water Association, the GWD is a state governmental organization that has led the fight to obtain and keep a supply of well-timed, good-quality water for 75,000 acres that compose the Grassland Resource Conservation District—the heart and soul of the larger Grassland Ecological Area.

This history of the Grassland Water District, for the first time, chronicles this noble cause, spanning more than a century, back to the days of the native Northern Yokuts; “Cattle King” Henry Miller; the construction and operation of the Central Valley Project; the de-watering of the San Joaquin River and killing of a mighty run of the famed Chinook salmon; the poisoning of wildlife due to selenium contamination; the threats of zero water for critical wetlands and the ultimate triumphs of the “Father of the Grasslands,” J. Martin Winton.

Readers will admire the endless battles fought by the GWD, its hunters, whistle-blowing scientists, conservation partners and private landowners to pre-

serve the irreplaceable wildlife resource—the Grasslands.

There are many individuals and organizations who enthusiastically contributed to the history of the Grassland Water District. They are noted in the Appendix as are lists of landowners, board members and general managers who have served the Grassland Water and Resource Conservation districts.

I am indebted to professional photographer Gary Zahm, retired project leader of the San Lus National Wildlife Refuge Complex, whose color images of the Grassland Wetlands and its inhabitants, are featured.

Also, to Dan Nelson, director of the Mil-  
liken Museum, who provided vintage black  
and white photos, as well as the California  
Waterfowler’s Hall of Fame, for its collec-  
tion of archival photos; to Professor Brett  
DeBoer of the University of the Pacific,  
who graphically designed the book and  
readied the pages for publication; and to  
Jessica Wright, administrative assistant of  
the GWD for her historical knowledge  
and ability to provide old records, board  
minutes, photographs and documents that  
added to this history.

Special thanks to Ric Ortega, general man-  
ager of the GWD, who offered suggestions,

criticisms and insights that were of  
immeasurable help, and to three individu-  
als who suggested I take on a project  
of such historical significance—Pepper  
Snyder and Fritz Reid, directors of the  
GWD and Jeff McCreary, director of  
operations for the Western Regional Office  
of Ducks Unlimited.

Be sure to peruse the references used as  
a basis for this history, and a list of  
organizations that may be contacted for  
in-depth study.

As with any research, this history should  
not be considered an end-all, but rather,  
a start for additional investigations. Per-  
haps, another book will be penned when  
the Grassland Water District turns 100  
years old in 2054. I sincerely hope so. It  
will be an inspiring story worth telling  
and memorializing.

—Peter J. Ottesen, Author  
Stockton, California  
October 2024



Gary Zahm



Dan Nelson



Ric Ortega



Pepper Snyder



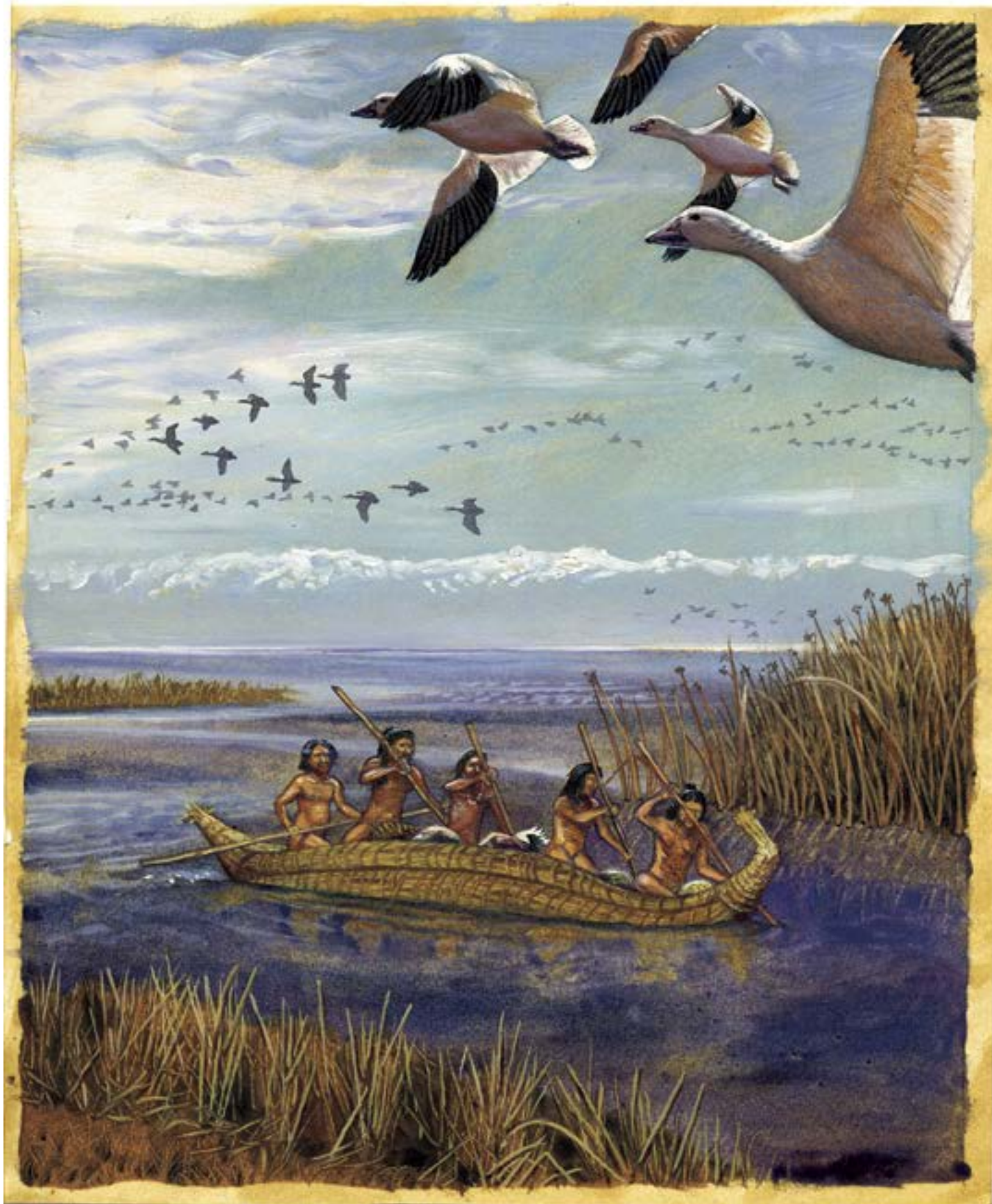
Fritz Reid



Jeff McCreary



Gate Tending



*Yokuts Men in a Boat*—painting by Laura Cunningham, © 2024

# EARLY TIMES

**WHEN THE EARLY EUROPEANS** got their first glimpses of the San Joaquin Valley, they were often confounded by dense tule fog that covered seemingly endless miles, riparian lowlands that teemed with wildlife, and tule marshes filled with water in an undulating labyrinth of hollows, swales, sloughs, streams and river plains. Waterfowl blackened the sky in the morning haze while countless other ducks and geese rested undisturbed in the shallows, waiting their turns to spring aloft.

Cranes, ibis and herons moved with stealth among the reeds, sedges and wire grass. On the mudflats, an array of skittish shorebirds scurried about to impale a meal. Massive tule elk, with horns that protruded the tule tops, slogged slowly through the swamp. Black-tailed deer, beaver, pronghorn antelope and black bear wandered as they pleased, and co-existed with maybe 35,000 Northern Yokuts, who had dwelt in these parts—now known as western Merced County—dating back more than 10,000 years, from the end of the last ice age to the mid-19<sup>th</sup> century.

Imagine what the newcomers thought when they saw the primeval grasslands, with the salmon-choked San Joaquin River to the east and the 800 square-mile Tulare Lake to the south? The Spanish came in about 1772 and by 1823, missionaries had established settlements. Gabriel Moraga discovered a primary trading trail used by the Indians to travel west of the valley to the coast, now known as the Pacheco Pass. The route that connected the Central Valley to the Pacific Coast was named for Francisco Pacheco, owner of the wealthiest rancho in Monterey County.

John Muir once described the Pacheco Pass: “The scenery and all of nature is enchanting. Mountains are strange and beautiful. Ferns are there, low in the canyons. There are high, rocky sunlit peaks, banks of blossoming shrubs and gatherings of flowers, precious and pure as ever enjoyed.”

In 1827, Jedediah Smith, the “Bible Totter,” led a party of 17 trappers, soon to be followed by a party of Hudson Bay and French-Canadian trappers, and later the Gold Rush of 1849, which would forever change the valley.

Fur traders, trappers and those seeking their fortunes brought “never heard before” fiddles, Jew’s harps, banjos and upright pianos, and introduced traditional work songs. “Turkey in the Straw” and sweet tunes by Stephen Foster were heard around campfires, much to the puzzlement of Native groups.

The Northern Yokuts comprised 63 tribes in the valley who actively traded with other native groups, such as the Monarchs and Shoshone on the eastern side of the Sierra; the Miwok and Winton in the Sacramento Valley; and the Chumach on the coast, the latter via the

Pacheco Pass. The Yokuts particularly sought obsidian to make arrowheads and knives and abalone and Pismo clam shells for money and jewelry.

The Yokuts culture evolved through the abundance of food and fiber found in the valley. Waterways provided waterfowl, fish, turtles and freshwater clams. Furbearers inhabited the riparian areas, making use of dense cattails and tule. Tule elk, pronghorn antelope, beaver, raccoon and rabbits were abundant. Natives were sophisticated and used bow and arrow, spears, nets and decoys to deceive game, and creatively used tule and wood to fashion boats for transportation.

The largest roundhouses in the west were situated along Mud and Salt sloughs. The Yokuts were good stewards of the land, setting fires to increase productivity of the wetlands and setting back succession by eliminating old growth and encouraging moist soil plants and new stands of tule to spring forth.

With the coming of the trappers, Spanish missionaries and early American settlers also came disease, principally cholera and smallpox, to which the Yokuts and other groups had no immunity. By 1833, the valley Natives died in catastrophic numbers, with entire villages succumbing to disease. Those that survived were killed by Spanish soldiers, placed on reservations or forced into slavery by Franciscan missionaries. Those who fled forced labor or relocation were hunted down. The indigenous way of life disappeared. Historians and academics offered their own observations. Not all of them were flattering, nor consistent.

Andrew J. Grayson, who gained fame as the Audubon of the West, wrote, “The whole country is totally unfit for any purpose. The marshy region is unhealthy and infested with mosquitoes in incredible numbers and of unparalleled ferocity, and waterfowl that blacken the sky.”

Historian Frank Latta, in 1864, wrote “*Little Journeys in the San Joaquin*,” in which he commented, “The San Joaquin is a valley of contrasts. It was comprised for the most part of barren desert. Throughout the length and about the rim of the San Joaquin were a hundred or more oases, abundantly watered, shaded with beautiful trees and filled to overflowing with game and migratory fowl of all kinds. At all times these lakes and connecting sloughs, as well as the San Joaquin River, were bounded with times of high water, the basin filled to a great depth with flowing water, presenting a barrier passable with stock at probably not more than three places once runoff waters subsided”.



Heinrich Alfred Kreiser  
Later Known As Henry Miller  
image courtesy the Milliken Museum



Charles Lux  
image courtesy the Milliken Museum

# MILLER & LUX, INC.

**AS WILD, UNTAMED AND INHOSPITABLE** as the San Joaquin Valley might have seemed to most, it provided riches to a clever, hard-working 19-year-old butcher boy by trade, from Germany, who migrated to the United States in 1847. His name was Heinric Alfred Kreiser. It is because of this lad, who would be ultimately known as the “*Cattle King*” by the time he passed away in 1916, that the Grasslands of western Merced County exist today.

Kreiser landed in San Francisco in 1850 and had taken up the name of a shoe clerk named Henry Miller, who gave him a non-transferable ticket for passage on a ship leaving New York for California, via the Isthmus of Panama. Eight years later the California Legislature authorized this name change.

Miller realized money was to be made by slaughtering and marketing his own cattle and, as the story goes, saddled a horse and headed south along the El Camino Real, before turning east and crossing the Pacheco Pass, where he got his look at the grasslands. He purchased one-fourth (8,835 acres) of the 48,823-acre Sanjon de Santa Ranch, a Mexican land grant, for \$1.<sup>25</sup> an acre, as well as 7,500 cows at \$5 apiece.

For the next 30 years, after forming a partnership with another German immigrant, Charles Lux—a livestock dealer who was well connected with the Bank of California—Miller bought approximately 1.5 million acres of land, from Bakersfield to southern Oregon, as well as in Nevada. Miller wisely bought land bordering either side of the valley’s major rivers and streams and meandering watercourses, gaining the riparian rights. His acquisitions included 125 contiguous miles along the San Joaquin River and a 50-mile stretch along the Kern River containing 100,000 acres that was largely acquired through the Overflowed and Swamp Land Act.

With the help of speculators and 400 laborers, horses and mules, Miller & Lux built a system of canals from Tulare Lake to the San Joaquin



Canal Building 1870–71  
image courtesy the Milliken Museum



Los Banos station  
image courtesy the Milliken Museum



Market Hunting  
image courtesy the Milliken Museum

River that brought water to a thirsty landscape. In 1880 he completed construction of the Main Canal from Firebaugh to Orestimba Creek with dimensions of 30 feet deep cross the bottom, widening to 50 feet at the top, with a depth of seven feet, built by men using plows, wheelbarrows and wooden slip scrapers edged with iron.

Fortunately for ducks and geese, Miller & Lux converted 109,000 acres of lowlands riparian to the San Joaquin River and alkali desert dotted with shrub brush into manmade wetlands and swamplands, irrigated to native pasture for cattle and flooded into duck ponds. This served to mitigate for loss of wetlands in the Tulare Lake Basin where, the largest lake in California, had been completely drained and converted to agriculture by 1893.

By 1904, Tulare Lake Basin supported the largest wheat farms in the world. Gone were millions of waterfowl and water birds counted by the Yokuts Chief Wahtake, just a half century before.

## COMING OF THE RAILROADS

Meanwhile, the Central Pacific Railroad—later to become Southern Pacific—had pushed its main line from Oakland to Modesto in 1870, reaching Fresno in 1872 and Bakersfield in 1874. Five years later it completed what was known as the “West Side Line” from Newman to Los Banos. The rail expansion ended extensive cattle drives and the grain barging to river settlements of Grayson, Hills Ferry, Dover and Dickenson’s Ferry.

However, Southern Pacific had a competitor, Claus Spreckels, the “Sugar King,” who provided financial support to build the San Francisco & San Joaquin Railroad in 1888 and extended it to Bakersfield in 1889. It was heralded as the “People’s Railroad,” that eventually was sold to Santa Fe.

An eternal question asked by Grassland waterfowl hunters is the origin of the Santa Fe Grade, which transects both the north and south Grasslands and provides access to many duck clubs. Historian Howard Leach, a former manager for the Department of Fish and Game explained, “This came about through the vindictiveness of Henry Miller, who once asked Spreckels for a loan and was refused.”

Later, with the snub firmly in his mind, Miller granted Spreckels a right-of-way through his marshlands. However, once graded, Miller gave a much-preferred right-of-way on higher ground to Southern Pacific, which proceeded to push its Westside route to Los Banos and Fresno. This event forced Spreckels to abandon his Westside route, but the Santa Fe Grade he created remained, and became a public graveled county road, with access to the wetlands.

## MARKET HUNTING

Market hunting was in its hay day, and the railroad provided means to ship the daily kill to marketplaces in Los Angeles and San Francisco. Between October and March, a proficient market hunter could shoot 300 to 500 ducks a day that would fetch up to \$6 a dozen. Snow geese—because of the clamor for their white feathers—brought even more. The most coveted species were sandhill cranes, which were sought after by the Chinese at \$2.<sup>50</sup> apiece.

In 1889, Henry Miller told his superintendents and yard bosses of his Miller & Lux land spread along the San Joaquin River, to promote “getting rid of dem ducks.” Miller said, in broken English, “Vee got to do something about dose ducks and geese eating up our crops. Vat I want you to do is contact dose hunters who are shooting ducks for the markets

and give dem permission to hunt our lands. Vee will provide our wagons to haul dem ducks to the nearest railroad station in return for their keeping the birds off our grain. In addition, I want to lease our best hunting ponds to dose sportsmen who want a duck club.”

The great grasslands slaughter grounds for waterfowl, shorebirds, herons and cranes continued, unabated. In January and February of 1892, market hunters from the Los Banos area shipped 475 sacks of ducks and geese that weighed upward of 15 tons to San Francisco. Green-winged teal dominated the kill. The demand for wild game was insatiable.

Market men hunted by day and night with repeating shotguns, four-to-eight-gauge single or double bore swivel guns, or the most lethal weapon of the age, the punt gun that measured six–nine feet in length with magazines that held up to one-pound of powder and two pounds of shot. Punt guns were an enormous 50–200 pounds in weight and usually were mounted onto the bow of a punting skiff.

Repeating shotguns allowed hunters to kill larger numbers of waterfowl before having to reload. Christopher Spencer unveiled the first repeating pump gun in 1872, followed by Winchester’s Model 1887 lever action repeater. Then came John M. Browning’s Winchester



Henry Miller  
image courtesy the Milliken Museum



Looking west main street, Los Banos, 1911  
Lighted sign celebrated the coming of electricity  
image courtesy the Milliken Museum



Howard "Bluejay" Blewett  
Market Hunter  
image courtesy the Milliken Museum



Congressman George Shiras III

1893 pump gun and the Model 1897, built for smokeless powder. The celebrated Browning Automatic A-5 made its appearance in 1903, the first semi-automatic ever produced. Is it any wonder that so many waterfowl were killed?

It wasn't until the "protective laws" of 1904, introduced by Congressman George Shiras III, that the state began to conserve its natural resources. The legislation was called, "A Bill to Protect the Migratory Birds of the United States."

Soon, those who sought to protect and preserve migratory fowl organized into the California Associated Societies for the Conservation of Wildlife and worked together with the Board of Fish Commissioners and the state Legislature. Laws were passed to set seasons, bag limits, prohibit sale and out-of-state shipment of game, and to set up a Fish and Game Preservation Fund with revenues from fines levied against violators. Fifty game wardens were hired.

To protect waterfowl, a daily bag limit was established at 50 ducks, a closed season and a prohibition against common carriers transporting more than a bag limit of game per day per person. Southern Pacific Railroad and Wells Fargo handled most of the game freight to San Francisco and Los Angeles. In 1911, wild game dealers were required to be licensed and to keep records of the game received.

Despite the new game laws and the alarming decrease in waterfowl populations, market hunting continued with reckless abandon. Millions of birds were killed and marketed in California every year, most coming from the Grasslands.

Legal marketing of waterfowl came to an end in 1915 when state laws were made to conform with the Federal Migratory Bird Treaty Act of 1913. Seasons and bags were reduced, "bull" hunting was outlawed, use of live decoys prohibited, and restrictions placed on firearms. In 1916 shorebirds, except for jacksnipe, were given protection.

Although there were arrests for over limits and illegal sale of game, Los Banos magistrates and citizens made a mockery of the enforcement of game laws in state court. They simply carried on with their nefarious ways. Commercial interests sought to overrule the state and federal game laws but were unsuccessful.

Peddling ducks by local residents was not considered unlawful in many Merced County communities. In the 1930s, it was largely a question of economics. The Great Depression was in full force and money was difficult to come by. Boot-legging alcohol and providing ducks to the bars of San Francisco paid well. Buyers in San Francisco could use all the ducks, wine and wash tub booze the Los Banos citizens could supply. Some of them had been in the market hunting business since the 1880s.

The most notorious of the market hunters was Howard Blewett, known as "*Bluejay*," who concentrated his efforts north of Los Banos in a very large, open and roadless area called San Luis Island. Blewett was aided by a well-trained horse, from which he would dismount and lead it by touch to encircle unsuspecting birds. At

close range he would fire over the horse's neck, using a 12 ga. shotgun equipped with a "*long Tom*" extension that held nine shells. Blewett could kill 100 to 200 birds in a single drag.

Wardens caught up to Blewett in 1932 and charged with possession of wild ducks and geese out of season. Local citizenries were outraged. At a jury trial in the Los Banos Justice Court, despite of overwhelming evidence, Blewett was acquitted.

Three years later, federal and state agents masterminded an investigation that broke the backs of market hunters, arresting 13 violators. Blewett, the most egregious of them all, was given 18 months in federal penitentiary. However, it took another 20 years for market hunting to be totally eradicated by a final, massive arrest in 1954.



Busting Market Hunters

## An “EDUCATIONAL OPPORTUNITY”

“Poaching, shooting over limits and selling waterfowl were part of the Los Banos culture,” said Ryan Broddrick a former state fish and game warden, who later became director of the Department of Fish and Game. “Western Merced County was a market hunting center, a practice imbued by all.”

“Town’s people communicated with the local water master to learn which pastures would be flooded and where the birds

would be next,” Broddrick said. “Everyone was involved to one degree or another. It was part of their personality and identity. Illegal activities were still going on in the 1960s, when I was in high school. Young people would take ducks and exchange them for gas or flowers for the senior prom.”

Of all the guys he attended Los Banos High School with—including duck slayers and trespassers—Broddrick said 90% of them had cleaned up their acts by the time he returned as a game warden in 1981.

For those that hadn’t reformed—another

group of wannabe market hunters—he’d sit on them with a spotting scope and provide what he called, “an educational opportunity.” “It was an evolution away from law breaking they had to go through, or go to jail,” Broddrick said.

“Over time, a growing number of people in Los Banos believed that tolerating game violations was a poor influence on young people and a detriment to the resource.

Today, there is much more stewardship of the land and the wildlife it supports. The citizens are much more astute and value this unique flood plain that is the Grasslands.”

## WATER RIGHTS AND SHENANIGANS

Before his death on October 4, 1916, Henry Miller built a cattle empire that extended over three states—California, Oregon and Nevada—and encompassed more than 1 million acres, the largest livestock operation in the world.

He also profited in the early 1900s by leasing 5,000 acres to 150 duck hunters from the cities who were willing to pay for a place to hunt. This would be known as the Gustine Duck Club, managed by Jack Biancho who, not coincidentally, also operated the Gustine Hotel.

However, after Miller’s passing, his heirs had to contend with death taxes and a downturn in profitability among its vast holdings and cattle operation, necessitating liquidation of its least productive land, high in alkalinity and of poor quality—the Grasslands. In 1926, Miller &

== WAR-SAVING STAMP CAMPAIGN ==  
**BIG WILD DUCK MULLIGAN**  
 AND  
**GRAND BALL**  
 GIVEN BY  
**The Market Hunters of Los Banos and Vicinity**  
**I. D. E. S. HALL**  
**LOS BANOS, JANUARY 30, 1918**  
 Big Feed at 10:00 P. M.  
 MUSIC BY GRAHAM & ROSS AUGMENTED ORCHESTRA  
**Price--For Dance, Mulligan and One 25c Thrift Stamp--50 Cents**

image courtesy the Milliken Museum



Ryan Broddrick

Lux began advertising its property in western Merced County for \$25 per acre. The former Gustine Duck Club was among the first to be purchased outright and became known as the Gustine Land and Cattle Company.

By 1936, 44,200 acres of the Grasslands had been sold to cattlemen and hunters. City-named clubs, from as far away as San Francisco, dotted the landscape, including the Santa Cruz, Hollister, Salinas, Santa Clara, San Rafael, Manteca, Los Banos, Oakland and Newman, among others. However, there was a hitch in the land sales few recognized at the time. Miller & Lux sold these lands but retained the water rights.

In 1939, Miller & Lux sold the “surplus” water rights to 250,000 acres—including 98,234 acres in the Grasslands—to the federal government for \$2.45 million. This was the first block of water acquired by the federal government which allowed them to construct Friant Dam. The water to be held behind Friant Dam was this surplus water predominantly taken from the Grasslands.



Miller & Lux Chuckwagon, 1907  
image courtesy the Milliken Museum

Miller & Lux continued to provide winter water through their various canal companies until 1944. When the Central Valley Project was fully operable in 1951—and with completion of the Delta-Mendota Canal—San Joaquin River water that used to flood the grasslands was designated for agricultural purposes. The Grasslands were left high and dry, without a guaranteed source of water.

Faced with a new reality that there would be no water for either ducks or cattle coming from the San Joaquin River, a coalition of hunters and cattlemen was forged. A fierce fight for Grasslands water was about to explode.

# FIRST MUTUAL WATER ASSOCIATION FORMED

Early in March 1939, Harold Ickes, Secretary of the Interior and Jon Page, Commissioner of Reclamation, were in Fresno to discuss the Friant Dam Project. Representatives from Fresno County’s Sportsmen’s Association, California Conservation Congress and other sportsmen and duck hunters arranged to meet with the federal bureaucrats to provide information concerning the water situation on the West Side duck lands after the completion of the Central Valley Project.

The sportsmen’s coalition said, in part, “Our famous 110,000-acre waterfowl wintering ground is undoubtedly the most important in the “Great Pacific Flyway’, accommodating 60% of the flyway’s estimated 9.5 million migratory birds.”

The local sportsmen were advised to immediately form some public body for the purpose of applying for water. They were told that prompt action was necessary and that when definite plans were approved and submitted for bids, no changes could be made, and duck clubs and duck lands would have very little chance for water unless an application submitted by a recognized body was on file and included in the plans.

Realizing the importance of taking fast action, a meeting of duck clubs was held at the Californian Hotel in Fresno on March 15, 1939. At that meeting, a general committee was appointed, with Al Jessen selected Chairman and William Turpin, secretary.

The original name chosen for the group was San Joaquin Grass Lands Water Users Association. For brevity, the name was changed to Grass Lands Association, and two subsequent meetings were held in Los Banos that attracted



Original Stock Certificate  
image courtesy the Milliken Museum

more than 200 participants.

In 1944, The Grass Lands Water Association, Inc., was formed as a non-profit, mutual water association under laws of the State of California. Its leaders included Al Jessen, president; H. B. Wolfson, vice-president; D.E. Bambauer, secretary and George W. Fink, treasurer. Rounding out the Board of Directors were John Erreca, R.L. Puccinella, William Turpin, Axel P. Holm, George Devaney and Claude Rowe.

The original printed by-laws of the Grass Lands Water Association are in the library of the San Joaquin College of Law in Fresno.



Al Jessen

President Jessen set the stage by penning a scathing letter, one that foretold the dire situation caused by the impounding of water behind Friant Dam that caused the San Joaquin River to dry up. He wrote, “Salmon coming up the river are dying by the tens of thousands and there is not enough drinking water for the thousands of cattle pasturing in our district. Our great and natural wintering ground for millions of wild ducks, geese and so many other water birds is threatened with extinction.”

At its first meeting, the directors filed an application with the Commissioner of the State of California for a permit to sell 110,000 shares of stock at par value of \$1 cash. Each share presented one-acre of wetlands. Within a year, sales of stock had grown to \$61,418.45 and the association adopted a rule: No stock buy, no water delivery.

By 1947 the association served 61,370 acres of which 53,747 acres were owned by 139 duck club/livestock interests. The expressed purpose of the association was to purchase water from the Bureau of Reclamation and distribute it

throughout the Grasslands for waterfowl habitat, sport hunting and cattle pasturage.

However, an entirely different schedule of water deliveries had been proposed by the two groups: Water for duck ponds or shooting purposes was desired in the fall, while water for irrigated pasture was needed in the spring and summer. This caused some undercurrent of dissention between the two principal groups. Later, when duck water was delivered free of charge, but cattle interests were charged \$1.<sup>25</sup> per acre-foot, the situation became more aggravated.

The water would be released into the San Joaquin River from Friant Dam, delivered to the Mendota Pool and distributed to the Grasslands by Miller & Lux through the San Joaquin-Kings River Canal system. At that time, the Grass Lands Water Association was advised by the Bureau of Reclamation that this interim water would only be available until the Tracy pumping Plant was constructed and put into operation, thus completing the Central Valley Project.

## A COOPERATIVE RELATIONSHIP, FOR A WHILE

In the early days of the Central Valley Project development the water association's relationship with the Bureau of Reclamation was congenial. That was because the Grass Lands Water Association and the Cattlemen's Emergency Committee—a group of local cattlemen and sportsmen—were instrumental in obtaining clearance in 1944 from the War Production board for the Bureau of Reclamation to store 83,000 acre-feet of water for the coming irrigation season. For this assistance, the federal agency was greatly indebted.

Unfortunately, Charles Carey, regional director of the Bureau of Reclamation in Sacramento died unexpectedly, before the spillway at Friant Dam became operational and before completion of the Delta-Mendota Canal. Historian Howard Leach speculated, “Had Carey lived, perhaps, the water supply problem in the Grasslands may have been resolved without the bitter battle which was to follow.”

Richard Boke, became the bureau's regional director. He wasn't inclined to provide water for the Grasslands. Each year the water association lobbied for San Joaquin River water, and while some interim water was provided, it was less than adequate.

Finally, the Grass Land Water Association was told by the federal government, in no uncertain terms, that water deliveries from Friant Dam's Millerton Lake were to end. As interim deliveries began to wind down, the bureau would provide water “for waterfowl purposes only,” and nothing for irrigated pasture for cattle.

The Grasslands would receive 30,000 acre-feet in 1951, 20,000 acre-feet in 1952 and 10,000 acre-feet in 1953. And that would be it. Now abandoned by the dominating federal government, private landowners in the Grasslands were supposed to develop, at their own expense, irrigation drainage and ground water sources, including the digging of wells, to sustain cattle operations and maintain their wetlands habitat and sustain the Pacific Flyway's migratory wild ducks and geese.

The mighty clout of the federal government—with all its arrogant and dictatorial policies—was on full display in operating the Central Valley Project. Wildlife had little standing after the needs of urban and agriculture.

In 1951, a lawsuit, Rank vs. Krug, came about when farmers, duck hunters and fishermen sued the Bureau of Reclamation to increase flows in the San Joaquin River below Friant Dam.

In response to the lawsuit and in support of the federal government, State Attorney General Edmund G. “Pat” Brown declared, “the U.S. is not required by State law to allow sufficient water to pass Friant Dam to preserve fish life below the dam. The federal government is exempt from State interference.”

Brown, who would later become Governor of California, with his single judgement in favor of agriculture, dewatered the San Joaquin River in two stretches—at Mendota and at Firebaugh. Four distinct runs of the mighty Chinook salmon that numbered as many as two million fish, and another anadromous species, migratory steelhead, were lost forever, extinct, by man-made causes, and gone the way of the passenger pigeon.



Governor Edmund “Pat” Brown

It wasn't until 1974, 23 years later, that the California attorney general saw fit to overturn the 1951 opinion, ruling that Brown's opinion 50–89 was contrary to existing statutes.

Would millions of migratory ducks and geese that depended upon the Grassland wetlands be next? What would happen to the 60 miles of waterfowl habitat on the west side of the San Joaquin River between South Dos Palos and Newman?

## A NEW BATTLE FOR WATER

In response to the federal edicts, in 1947, Claude Rowe, a Fresno attorney, director of the Grass Lands Water Association and member of the Hollister Land and Cattle Company filed suit against the Bureau of Reclamation. The suit: Hollister Land and Cattle Company and Yellowjacket Cattle Company versus Secretary of the Interior, Julius A. Krug, BOR Commissioner Michael Straus, and the bureau's Regional Director, Richard Boke.

Both Hollister and Yellowjacket properties were within the Grass Lands Association and owners of lands riparian to the San Joaquin River. Rowe argued the lands had used riparian water for more than 60 years and claimed the federal government had illegally taken water away. Thus, the intense fight between Grass Lands and the Bureau of Reclamation reached a new level of ferocity.

Soon, new players emerged in gathering power to fight for a guaranteed water supply for the Grasslands. Key among them was J. Martin Winton, a pharmacist from Fresno, member of the Hollister Land and Cattle Company and

Chairman of the Waterfowl Committee of the Sportsmen's Council of Central California.

Influential individuals stepped forward to join the cause that included the ever-present Claude Rowe, who also was a member of the National Board of Directors of the Isaac Walton League; George Philpott, president of the Sportsmen's Council of Central California; George Difani, vice-president of the Associated Sportsmen of California and Earl Harris, a director of the Grass Lands Water Association. Their constituents included a well-organized band of sportsmen, dairymen and cattlemen.

In 1951, with support of Senator William Knowland and Congressman Jack Anderson of San Juan Bautista, an avid duck hunter and member of the Hollister Land and Cattle Company, and Congressman Allen Oakley Hunter, Congressional Hearings were held in April and May, in our nation's capital, Washington, D.C.

Congressman Clair Engle, Chairman of a Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs, set up the hearing on "The Central Valley Project Water Problems Relating to the Grasslands Area in the San Joaquin Valley, California."

Heated testimony characterized the hearings in which Boke reasserted his decision not to provide even 10,000 acre-feet of spring and summer water to the Grasslands because there was insufficient water to meet all irrigation demands, and that no permanent water supply would be forthcoming from the Central Valley Project.

Frustrated over Boke's response, Chairman Engle summed up the hearings: "The protest has often gone up among people at the state

level that the Bureau of Reclamation and other federal agencies are exercising too much domination. This Committee, I think, should make it clear it is not the intention of the committee that the Bureau of Reclamation or any one man should control the distribution of a natural resource belonging to the state."

With Committee approval, a letter was sent to Governor Earl Warren pertinent to the Grasslands water problems. Seth Gordon, then a consultant to the Wildlife Conservation Board, was in support, believing the Grass Lands Water Association was "going in the right direction" in applying pressure for a water contract with the Bureau of Reclamation.

## CONGRESS CONVENES

When the 82<sup>nd</sup> Congress convened in January 1952, several pieces of legislation were introduced by Congressmen Clair Engle and Jack Anderson, including the notion of providing water supplies for waterfowl management on state wildlife areas and national wildlife refuges.

But the Grass Lands Water Association was perplexed. The bills did not provide a water supply to private lands in the Grasslands. In response to J. Martin Winton, Congressman Anderson said that if he could get sportsmen support for the bill, H.R. 7177, in its present form, it could be amended later to meet the water requirements for the Grasslands. Indeed, amendments were adopted in June 1952 favorable to Grasslands interests, but the amendments died in committee. Close, but no cigar.

Congressmen Engle, Anderson and Hunter were reportedly disappointed the legislation didn't pass, so much so, that Engle promised to reintroduce legislation in the 83<sup>rd</sup> Congress in 1953.



Congressman Clair Engle

With this flurry of legislative activity in the Congress, albeit halting, the Grass Land Water Association approved a contract for temporary service from the Bureau of Reclamation. The agreement called for 20,000 acre-feet of water to be delivered by October 1<sup>st</sup>, to flood the duck clubs for the 1953–54 season.

On December 2<sup>nd</sup> at its annual meeting of stockholders, directors Winton, Fink and Jessen held enough proxy votes to pass a resolution requesting the Board of Directors of the Grass Lands Water Authority to circulate a petition for formation of the Grassland Water District and to dissolve the authority.

## PRESIDENT EISENHOWER SIGNS LEGISLATION

Back in Congress, Clair Engle followed through with his promise to reintroduce the Grasslands Water Bill, to be known as H.R. 4213. It was 1954, the year General Dwight D. Eisenhower became President. With a Republican now in charge, many of the federal bureaucrats appointed to office by Democratic presidents were out of a job and fortunes for the Grasslands turned positive. Shortly thereafter, additional wording was added to the legislation to clinch the deal for the Grasslands and its private land holdings.

The new Section 4 read, in part: Subject to the priority of deliveries of water for agricultural purposes, the Secretary of the Interior is authorized to contract for delivery, between September 13<sup>th</sup> and June 1<sup>st</sup> annually, an amount of water not to exceed 50,000 acre-feet but not less than 25,000 acre-feet with a duly constituted district or districts in an area known as the Grassland Area of western Merced County. The rate charged shall not exceed

\$1.<sup>50</sup> an acre-foot.

With J. Martin Winton leading the campaign for passage, along with Congressmen Engle and Hunter and retired Congressman Anderson, support for the legislation picked up steam. The final linchpin was gaining support from Senator Thomas Kuchel, who voiced approval.

Optimism for an early passage of the Grassland Water Bill was dampened when the legislation was tabled by a Senate subcommittee. Once again, Winton jumped into the fray and requested the assistance of Senator William Knowland to bring the measure to a vote of the full Senate. The legislation was passed on August 11, 1954.

When the legislation was sent to the White House for President Dwight D. Eisenhower's signature, the omnipresent Winton was on hand for the ceremony. The ceremonial pen used by Eisenhower was presented to Winton, who displayed it in his modest hunting cabin at the Hollister Club for the remainder of his life. The pen is now proudly displayed at the Grassland Water District office along with a signed plaque from the Eisenhower administration.

Public Law 674-68, Statute 879 reauthorized the Central Valley Project declaring, in part, that one of the purposes of the project is the use of waters for fish and wildlife. Grassland interests had finally prevailed in a long 10-year battle that had begun in 1944.



President Dwight D. Eisenhower

# GRASSLAND WATER DISTRICT FORMED

The newly formed Grassland Water District came about in 1954 when the Grass Lands Water Association sold its corporate assets to the new government organization permitted by the California Water District Act.

In support of the changeover, J. Martin Winton, acting secretary of the non-profit Grass Lands Water Association wrote, “It is in the best interests of this association and its shareholders that all of its property and assets be sold to the Grasslands Water District, in the sum of \$10, and written consent of the shareholders that possess 25,859.48 shares.”

Assets included deeds, easements and rights of way, principal assets, pumping plants, wells, conduits, canals, pipelines, dams and all other structures and property, including all leasehold and water rights.

Roy Lower, an attorney and manager of the Grass Lands Water Association in its final eight years gave an impassioned speech to Merced County officials that read, in part: “I have ridden the canal banks and ditches, and the Miller & Lux canal banks, and I have watched the water run. If the district organizes, and I hope it will, I may continue until the new district gets on its feet.

“I have no reason to be working for this new district nor the old district. My age is such that I have just about devoted my lifetime to water and water distribution, and the effort is eventually going to get me down. We haven’t been able to successfully distribute water because of our old organization. With the formation of a

new water district, we expect to provide service for each parcel of land within the boundaries of our district. We have justly perfected legislation in Congress to provide the district with 50,000 acre-feet of water.”

Lower’s impassioned words set the stage. The formation of the Grassland Water District was approved by the Merced County Board of Supervisors and after a public hearing conducted on February. 17, 1954, the organization was officially constituted. The first board of directors included Earl Harris, president and directors J. Martin Winton, George Bacon, Walter Christensen, and George Fink. Lower would remain attorney and general manager of the GWD until 1983, when he was replaced by his right-hand-man, Don Marciochi, who had served the district in a supervisory capacity.

The United States and Grassland Water District then entered a 40-year contract on September 13, 1956, for delivery of 50,000 acre-feet of Central Valley Project water from September 15 to December 1 to the 45,924 acres within the district. This was to be Class II water for which the district would pay \$1.<sup>50</sup> per acre-foot.

# WESTERN MERCED COUNTY WETLANDS

By 1960, historian Howard Leach documented 234,153 acres of non-tilled land in the Grasslands Ecological Area. Within this vast area were 297 duck clubs with 210 clubs set west of the San Joaquin River and 87 clubs to the east



Waterfowl Hunting is Our Heritage  
photo courtesy Gary Zahm

of the river.

Leach said these private clubs encompassed 91,240 acres, flooding 58,173 acres for waterfowl hunting with 98,894 Acre-feet of purchased water.

In addition, there were three federal National Wildlife Refuges and two state Waterfowl Management Areas within Grasslands. In 1960 these public areas aggregated 31,829 acres, of which 11,446 were managed for waterfowl.

In the ensuing 64 years, federal presence in the grasslands increased to 45,000 acres on three National Wildlife Refuges, and easements on 90,000 acres of private property—representing about 190 waterfowl hunt clubs—according to San Luis National Wildlife Refuge Complex Project Leader Kim Forrest, who retired in 2023.

“Grasslands Water District receives and wheels water to refuge lands,” Forrest said. “The GWD works closely with the San Luis National Wildlife Refuge Complex staff to juggle the complicated infrastructure, not to mention the accounting of Central Valley Project Improvement Act water. Annually Grasslands Water District, U.S. Fish and Wildlife Service and state Department of Fish and Wildlife coordinate on determining the highest priority and best use of limited water supplies. The precious resource is often shared, despite being allocated separately.”

Forrest said, “The relationship between San Luis NWR Complex and the Grassland Water District is of extreme value and cannot be overstated. GWD has very skilled staff that is not afraid to lawyer, lobby and strenuously advocate for the resources that are of great importance.” She said refuge employees are often

handcuffed when it comes to fighting for fair and appropriate amounts of water and funding.

“Government employees are barred from communications that are political or could be considered lobbying,” Forrest said. “GWD picks up the mantle for all of us and is shrewd and very experienced in the water world. The district stays on top of the myriad of attacks on our water supply, whether those attacks are on quantity or quality. They do what government agencies cannot do.”

She also credited the Grasslands Resource Conservation District for being so supportive of the easement program. “This federal protection has stopped several urban expansion projects and lends greater weight and support for demonstrating CVPIA water needs,” Forrest said.

By 2024, the state Department of Fish and Wildlife footprint in the Grasslands had increased to more than 26,000 acres on the combined Los Banos and North Grasslands Wildlife areas, according to Sean Allen, manager of the Los Banos Wildlife Area Complex, the state’s first designated area for waterfowl that dates to 1929.

“The first people I met when I got to town 26 years ago were folks at the Grasslands Water District,” Allen said. The district was such a big part of the delivery of water to Mud Slough, the Junior Hunter Area and the entirety of Los Banos Wildlife Area. Back in the day, John Beam and Les Howard were mainly involved with the GWD, and that tradition of cooperation has continued.

“Later, along with the legendary Roger Wilbur—who worked for the Department



Dan Chapin

of Fish and Wildlife an unprecedented 62½ years—we worked collaboratively with the GWD and its water master Scott Lower, on so many fronts, including the delivery system through the Volta Wasteway and our shared facilities with San Luis Canal Company, which provides our water to the Gadwall Unit. It has been a great relationship.”

Allen cited the efforts of early GWD staff biologists Joe Hobbs, Craig Isola and Dean Kwasny, who interacted with staff on government lands and at private clubs to improve habitat and facilitate project work through the North American Wetlands Conservation Act, known as NAWCA.

“The biologists helped turn the tide by providing scientific data and studies to support the Central Valley Project Improvement Act, legislation that secured a guaranteed amount of well-timed, good-quality water for the Grasslands,” Allen said.

## CENTRAL VALLEY PROJECT IMPROVEMENT ACT

Perhaps the most significant legislation affecting the privately owned Grassland wetlands and Central Valley state and federal wildlife refuges, was passed by the U.S. Congress and signed into law by President George H.W. Bush in 1992.

Known as the Central Valley Project Improvement Act, the legislation guaranteed a firm supply of clean, well-timed water for wetlands, and authorized the purchase of additional water, at prevailing prices, from willing sellers.

The legislation was years in the making and proved to be the crowning achievement of

Dan Chapin, director of governmental affairs for California Waterfowl Association. The landmark effort bucked seemingly impossible odds, but Chapin won the backing of Senator Bill Bradley of New Jersey and Congressman George Miller of California and began to make headway.

Pepper Snyder, president of the Grassland Water District said the legislation was opposed by formidable water districts south of the Delta and some local agricultural interests, including former board members of the Grassland Water and Resource Conservation districts.

Chapin used the environmental disaster at Kesterson National Wildlife Refuge, where toxic selenium-tainted agricultural drain water killed and deformed thousands of migratory waterfowl, shorebirds and other water-dependent species to gain support on both sides of the political aisle.

“There was no supply of good quality water that was guaranteed to migratory birds and the critical wetlands they required to survive,” Chapin said. “I knew there had to be a solution.”

A master craftsman in statesmanship, Chapin got the 102<sup>nd</sup> U.S. Congress to jam language for the CVPIA inside HR 429, an omnibus bill with 40 sections that dealt with Reclamation, called the “Reauthorization and Adjustment Act of 1992,” said Bill Gaines of Gaines & Associates who, at the time, was Chapin’s assistant.

“With Chapin at the forefront, we were able to add fish and wildlife benefits to the reauthorization package,” said Glenn Olson, Donald O’Brien Chair, bird conservation and public policy for Audubon.



Kim Forrest



Sean Allen

Chapin’s seven league efforts were known and revered by leaders of the Grasslands. Dave Widell, general manager of the Grassland Water District called Chapin, “A renaissance man for his era.”

Chapin’s intellect and wit could transcend political and agency boundaries when other constituents could not find common ground. “Dan was truly the man,” Widell said. “His legacy will never be forgotten.”

Dave Paullin, first coordinator of the Central Valley Habitat Joint Venture called Chapin, “A gentle giant in a pond full of pretty big fish. He was the consummate deal maker and just knew how to get things done to preserve the environment, specifically wetlands.”

At the outset, as the legislation took shape to provide water for state and federal refuges, the Grasslands was not included.

“We worked with Chapin to figure how we were going to be part of the legislation,” said Pepper Snyder. “We had to come up with funds to buy into it.”

Grasslands had no money but convinced Dos Palos rice growers to up their ante for water, from five cents per acre-foot to \$5. That was a start. Then came the highly successful California Waterfowl Association event, “Save the Grasslands Dinner.”

“We got CWA to give all the money to us, which in turn was given to Chapin,” said Snyder. “All of a sudden was had more than \$50,000 to buy into the legislation.” Snyder would Chair the “Save the Grasslands” dinner for 12 years, with all the money going into the CVPIA legislation and protecting it after it was signed into law.

Celebrating its 32<sup>nd</sup> year since its passage, the mandates of the Central Valley Project Improvement Act require 125,000 acre-feet of reliable, good quality, well-timed water and a commitment to acquire an additional 55,000 acre-feet for the Grassland Resource Conservation District, an outcome made possible by “the man,” Dan Chapin.

# FATHER OF THE GRASSLANDS

J. Martin Winton’s passion for the waterfowl resource and water for the wetlands is, without doubt, the major reason why the Grasslands Ecological Area exists today and how he became known as the “Father of the Grasslands.”

Winton, a Fresno pharmacist by trade, was well read, extremely vocal, politically savvy and highly driven, a rare set of attributes for a man who often described himself, “I’m just a duck hunter.” He was the unabashed leader of the Grass Lands Water Association and later the Grassland Water District.

“Martin was a ‘can do’ kind of guy,” recalled Dan Connelly, former waterfowl coordinator for the state Department of Fish and Game. “He would explain the situation and then tell you what to do to take care of the problem. To say he was an indomitable force, would be an understatement.”

David McCabe, former director of both the Grassland Water and Resource Conservation districts, recalled Winton with admiration. “If you ever met Winton, you certainly would never forget him,” said McCabe of their relationship that spanned more than 50 years.



J. Martin Winton

“Martin was an ‘in your face’ fellow, assertive and not afraid to debate issues when it came to waterfowl and the critical need for water. He wouldn’t back down and was a real force to be reckoned with when it came to drumming up support for water to support the Grassland wetlands and the Pacific Flyway.”

Historian Howard R. Leach, a former Department of Fish and Game biologist, said Winton’s love of fishing and hunting led to his lifetime involvement with the Grasslands and its desperate fight to secure water. “He was a remarkable, dedicated person and masterful politician,” Leach said. “He gained the respect of sportsmen, conservationists and politicians through his energy and knowledge.”

Speaking before a Congressional Subcommittee in Washington, D.C., Winton didn’t hold back, declaring, “If it had not been for the Grass Lands Water Association, the ducks and geese of this all-important wintering ground would have vanished.”

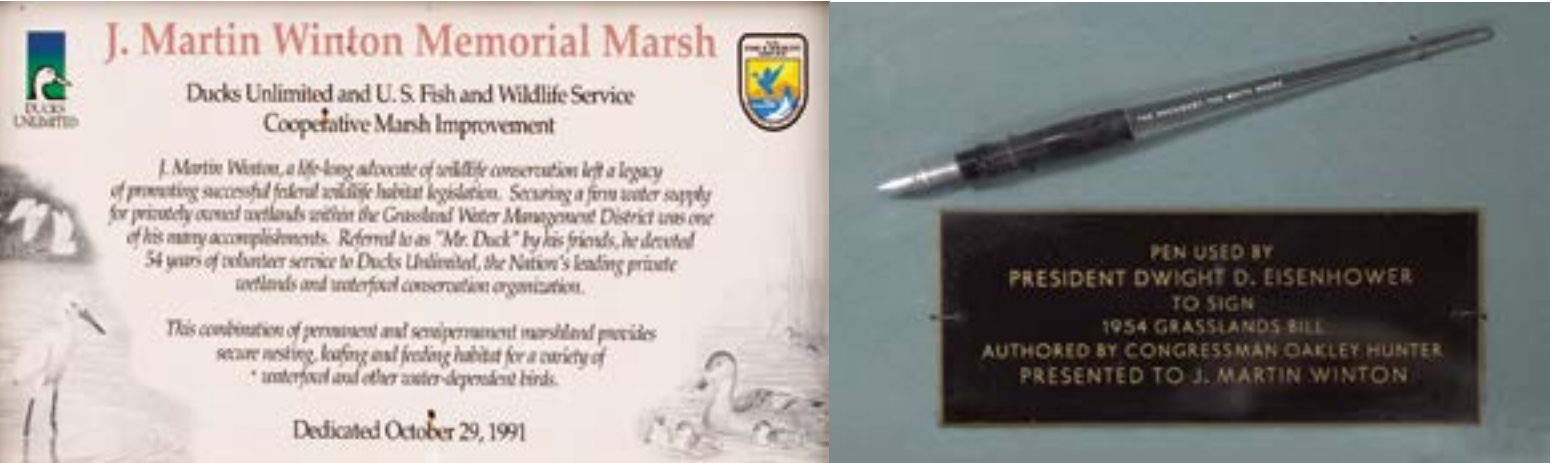
Due to his unceasing efforts that spanned a decade, the House of Representatives passed the Grasslands Development Authorization Act on August 11, 1954, mandating the Central Valley Project to annually deliver 50,000 acre-feet of water “for fish and wildlife purposes.”

For being the most unrelenting supporter of water for the Grasslands, President Dwight D. Eisenhower presented the pen he used to sign the historic legislation to Winton, who kept the memento in his cabin at the Hollister Land and Cattle Company.

Winton’s dedication to the Grasslands is memorialized by the naming of the Winton Memorial Marsh at San Luis National Wildlife Refuge and induction into the California Waterfowler’s Hall of Fame. The Winton Collection of papers, speeches and background materials to support his long struggle for water, are part of the permanent archives held at the San Joaquin College of Law, Clovis, California.



Dan Connelly





Shorebird Flock of  
Long-billed Dowitchers and Dunlin  
photo courtesy Gary Zahm

# GWD1954

**T**HE CENTRAL CALIFORNIA IRRIGATION DISTRICT is one of four agencies that make up the San Joaquin River Exchange Contractors Water Authority, that includes San Luis Canal Company, Firebaugh Canal Water District and Columbia Canal Company. The Exchange Contractor history dates to the early 1870s, when the San Joaquin River and Kings River Canal Company partnered with Miller & Lux to construct canals to divert water from the San Joaquin and Kings rivers to irrigate the westside of Fresno, Madera, Merced and Stanislaus counties.

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Chris White

CCID is essential to the Grasslands Water District said Chris White, who served as general manager of the Central California Irrigation District for 25 years, and now serves as executive director of the Exchange Contractors.

“Over the years Miller & Lux developed 250 miles of canals and spurs, the same engineering that developed canals in the Grasslands. This allowed pure San Joaquin and Kings River water to be brought into western Merced County for crops, pastureland and duck club ponds.”

Today Central California Irrigation District wheels most of the water to the headgates of

the Grassland Water District. The San Luis Canal Company and the San Luis-Delta Mendota Water Authority also deliver water directly to habitat.

White said it was the only way to get the federal water from the Mendota Pool, including the guaranteed 50,000 acre-feet negotiated by J. Martin Winton, and later the 180,000 acre-feet under the Central Valley Project Improvement Act to the Grasslands.

The Exchange Contractors are also heavily involved with the 55,000 acre-feet of the Grasslands “Level 4” supplies, which are required

Miller and Lux Main Canal, 1920  
photo courtesy the Milliken Museum



to be purchased from willing sellers. “We sell water to the Bureau of Reclamation to provide to the Grasslands and refuges,” White said.

## INSUFFICIENT WATER

The Grasslands was still starving for water, despite the commitment of 50,000 acre-feet in 1954. With a need of 180,000 acre-feet, the guaranteed federal water penciled out to just 28% of what was required to maintain the wetland ecosystem.

To make up the deficit, the Bureau of Reclamation urged the Grasslands to enter into drainage agreements with adjacent agricultural lands to receive their drainage, called tail water. That is how the Grasslands persisted through the 1950s, 1960s and 1970s.

What Reclamation and the Grasslands didn’t know about tail water, and in particular, tile drain water, was that the water quality wasn’t suitable for wildlife. Salts and trace metals concentrated and began to cause problems.

Selenium was the biggest culprit, but so were other trace elements like cadmium, boron and arsenic, and heavy salts, that were being spread over the Grasslands wetlands, and poisoning the ecosystem. and silently poisoning the entire eco-system.

“It wasn’t good water,” said Dan Nelson, former executive director of the San Luis-Delta Mendota Water Authority, who had previously worked on the drainage agreements between the Broadview Water District and the Grasslands.

“The Grassland Water District Board of Directors allowed other districts to drain into the wetlands, as well,” Nelson said. “They even

re-engineered channels and weirs so they could take what turned out to be tainted water.”

Gary Zahm, retired Project Leader of the San Luis National Wildlife Refuge Complex, confirmed that the impacts of selenium-contaminated drainage water began when agricultural districts south of the wetland complex began to employ a network of sub-surface tile drain water collector systems. The ag districts removed poor quality perched water away from their crops and sent it into the Grassland Water District for delivery to wetland habitat.

Signed contracts between the ag districts and the Grassland Water District were led by Director Carl Van Atta, and guaranteed a continual source of water, free of charge to the Grassland wetlands.

“The use of drain water seemed like a great idea until migratory bird atrocities began to emerge at the Kesterson National Wildlife Refuge, an overlay on a U.S. Bureau of Reclamation Project,” lamented Zahm. “The lands were held in fee title by the BOR.”

The Westlands Water District, along I-5, began irrigating and attempting to farm on land that had never received water before. What growers didn’t know was that the land had a “perched” water table. Plants didn’t like their roots wet, so nothing would grow. The water table was not only very shallow, but it was also very salient, a reminder that ancient seas once covered the landscape and left marine deposits.

To rid Wetlands of its tile drain water, the federal government built the San Luis Drain, which originated in Kettleman City, with the plan to carry drain water all the way to the Sacramento-San Joaquin River Delta near Pittsburg. The tile drains, like a big leach line,

J. Martin Winton,  
“Always the Teacher”



Congressman George Miller

were to move the perched water table into pipelines, to be carried to San Francisco Bay.

San Luis Drain was constructed up to Reclamation’s 1,238-acre Kesterson Reservoir but, with the U.S. economy in the dumps and strenuous objections by Congressman George Miller, the pro-environment Chair of the House Subcommittee on Water and Power Resources, who didn’t want to see poisonous tile drain water dumped into the bay. Thus, the concrete-lined ditch conveniently stopped on lands already owned by the Bureau of Reclamation, sister agency to the U.S. Fish and Wildlife Service, both within the Department of the Interior.

“The federal government built evaporation ponds and allowed the poisonous tile drain water to concentrate and bioaccumulate,” explained Ric Ortega, general manager of the Grassland Water District. “The government saved millions of dollars but caused an environmental disaster.”

As the water evaporated, it changed the composition of the selenium that filtered into the soil and entered the food web. Decomposing plants containing selenium were ingested by invertebrates in the soil that were eaten by shorebirds. Black-necked stilts and avocets

had the greatest exposure as their diet consists primarily of the soil invertebrates.

Within a year or two, while accepting and impounding tainted drain water, biologists started to see hideous appearing malformed birds. Kesterson Reservoir coots exhibited white wing feathers, a definite impact of selenium contamination, before most died.

“The bio-accumulation of selenium was so toxic that a western grebe landed in one of the southern cells of the reservoir, began actively feeding on mosquito fish and died within an hour,” said Zahm, who continues to believe the unexplained drop in northern pintail numbers during the early 1980s was associated with several years of pintail hens feeding in the Grasslands and Kern National Wildlife Refuge, migrating north, nesting early and hatching less than half of the normal-sized brood to flight stage.

In 1982, environmental disaster exploded at Kesterson NWR (now the Kesterson Unit of the San Luis NWR Complex) and surrounding lands owned by James and Karen Claus and Frank and Janette Freitas, where the effects of taking pure tile drain water took its toll on wildlife and even domestic livestock.

Deaths and deformities in birds—grotesque and appearing of another world—were recovered by biologists and photographed by the national press.

(see Appendix: 1987 Readers Digest)

At the same time, the Grasslands Water District had a flow through its wetlands that mixed tile drain with surface water, that was dumped into Salt Slough, Mud Slough and Los Banos creek that ultimately passed through to the San Joaquin River. While the tile drain water used on Grassland wetlands didn't exhibit the horrors of Kesterson, the habitat across the privately held duck clubs was deteriorating and the water quality was also unsuitable for wildlife and the humans that consumed them.

# SCIENTIST'S FINDINGS REVEAL THE TRUTH

San Luis NWR Project Leader Gary Zahm saw the worst of times in the Grassland Wetlands. He would later concede, however, that the nev-

er-ending problems with contaminated water, punctuated by the debacle at Kesterson Ponds, were the "best thing that ever happened in the Grasslands" because it brought national attention to the environmental disaster in the largest wetland complex in the entire West, and the need for a supply of good quality water.

Suddenly, the operation of the Central Valley Project was under intense scrutiny. Federal scientists discovered the inconvenient truth: Tile drain water stored at the Kesterson Ponds was dangerously selenium contaminated. Their findings were squelched for nearly three years, due in large part to disputes between the Bureau of Reclamation and the U.S. Fish and Wildlife Service, sister agencies of the U.S. Department of the Interior.

Their research threatened ag districts and their abilities to drain. It would also cut off the Grassland Resource Conservation District and the public refuge water supply. The powerful Bureau of Reclamation was outraged, and in denial.

Refuge Manager Zahm said the effects of four years of accepting poisoned drain water into the discharge ponds had caused algae blooms. Cattails and most every species of fish died, and many less waterfowl were observed to use the area.

Fisheries biologist Michael Saiki learned that the once diverse and viable San Luis Drain fish populations had disappeared, except for mosquito fish. He collected and tested mosquito fish from the San Luis Drain and found selenium levels 100 times greater than ever documented, and the highest ever recorded in a living fish. The Bureau of Reclamation squelched his data.

Harry Ohlendorf, the director of the Patuxent Wildlife Research Center's field station at U.C. Davis, and Felix Smith, a Fish and Wildlife Service biologist, found hundreds of dead and dying chicks from a diversity of wading bird and duck nests at Kesterson. One-in-10 nests had deformed chicks. When their data was resented by farmers, the Bureau of Reclamation downplayed the findings, which were later proven accurate. By 1990, both Ohlendorf and Smith had left the Fish and Wildlife Service.

William Sweeney, manager of the Sacramento area office of the USFWS was a vocal and steadfast opponent to not expand Kesterson Reservoir and destroy natural habitat. He ardently supported the scientific findings and was featured on a CBS "60 Minutes" program which presented the high-profile migratory bird atrocities that were occurring at the reservoir and painted the Bureau of Reclamation and California regulatory agencies in a poor light.

During a speech delivered to the Grassland Landowners Meeting at the Los Banos Fair-

grounds, Sweeney said "the bureaucratic construction and operation of the Central Valley Project has turned the San Joaquin River into the lower colon of California—a stinking sewer contaminated with salts, heavy metals, trace elements and the residue from the annual application of hundreds of tons of insecticides, herbicides and fertilizers."

Zahm recalled, "Sweeney went toe to toe with the BOR's regional director in Sacramento and wouldn't back down." Sweeney's position was eliminated shortly thereafter.

Based upon the skepticism regarding the initial selenium research, the USFWS requested "neutral" assistance from the U.S. Geological Survey in 1983. Ivan Barnes and Theresa Presser arrived on site to conduct independent research. Their collective data showed record high levels of selenium at Kesterson Reservoir and their expanded investigations found elevated selenium from Los Banos to Kettleman City. Barnes later told Felix Smith that he would rather work at the edge of an active volcano than at Kesterson Reservoir.

# WILDLIFE ACTIVIST WINS BATTLE

As the disastrous effects of spreading contaminated tile drain water onto wetlands and into evaporation ponds at Kesterson National Wildlife Refuge began to gain national attention, federal government agencies failed to act and covered up facts.

The precedence of giving good quality water to agriculture and sending tainted drain water throughout the Grasslands continued unabated. Scientific studies that proved contaminated water was destroying fish and wildlife were



Effects of  
Selenium Bioconcentration  
photo courtesy of the USFWS



Jim Claus

shuffled aside by bureaucrats.

But the largest landowner in the Grasslands—a tough-minded, Montana cattleman and attorney, with a Ph.D. from Stanford—fought back tooth and nail. His name was Jim Claus, who had an extreme dislike for anyone who lied to him. He had no patience for it.

“The federal scientists had more than 50 studies that showed the environmental destruction going on here,” claimed Claus. “They all knew what was going on in the Grasslands, but their findings were suppressed by the Bureau of Reclamation. They lied to us.

“Reclamation was giving pure, good quality Shasta Lake water to farmers who, in turn were the giving their toxic, contaminated tile drain water to the Grasslands.” Claus called the practice, “organizational insanity.”

Claus operated a fully integrated business, owning about 5,000 acres in the Grasslands and about 1,250 head of cattle, while owning another 6,000 acres in Panoche for growing hay. Part of Claus’ holdings included the Kesterson and Zimmerman duck clubs, set immediately next to the refuge’s evaporation ponds.

“One day my Chesapeake retriever brought in a tundra swan and carried it into the compound,” said Claus, who wondered what was going on here. “How did this bird die?”

He called the U.S. Fish and Wildlife Service and started raising hell and carried his rants to the service’s regional office in Portland, and claimed, “You are killing my cows and cows owned by my neighbors, Frank and Janette Freitas, with selenium toxicity that has poisoned the soil,” he said. “They didn’t give a damn about fish and wildlife, or livestock or people,

for that matter. Ultimately, they were going to ship this contaminated water all the way to San Francisco Bay and pollute it, too.”

Claus paid dearly for his claims, which shook the foundation of the Bureau of Reclamation and struck fear in farmers and ranchers that their water might be cut off because of an inability to drain. For upsetting the agricultural communities that had been receiving good quality water, Claus got two bullet holes through the windshield of his truck and was told by his favorite local restaurant to “never come back.” The pressure was that intense.

Claus was not to be deterred. He contacted Ed Bradley of the CBS television documentary, “60 Minutes,” to come out to the Grasslands and see the environmental destruction, first-hand and to share it with millions of television viewers. The evaporation ponds at Kesterson were closed shortly after the broadcast.

“Unless we protect anadromous fish, like Chinook salmon, and wildlife, we’re going to poison this planet,” Claus said. “If we don’t have clean water, we’re going to poison our kids and kill society.”

Claus won the battle. He had sued the federal government and prevailed and is considered by many one of the true heroes of the Grasslands, that include landowners Jeff Kerry and Pepper Snyder.

“Jim was by far the most effective person I have ever met, read about or heard about on water and waterfowl issues,” Kerry said. “With his own money he helped create the original wetland waterfowl easement and was a big reason why the federal program was originally placed in the Grasslands.

“He discovered selenium poisoning in agricultural drain water, researched and drafted his conclusions and met with biologists and water experts. He had the ability to understand their findings and to force the federal government to act and stop the proliferation of contaminated drain water that was entering the biomass.”

Claus also led an overthrow of the Grassland Resource Conservation Board of Directors, replacing directors who were in denial about the poisoned water they were using to flood wetlands.

(see Appendix: SF Examiner)

Jeff Kerry recalled, “In the 1970s Grasslands was totally controlled by agriculture. The Grassland Water District had water quality standards that were not considered nor enforced, even when our water contained 2500 total dissolved salts and 6 parts boron. The GWD even fired its waterfowl biologist, Roy Leach, because his findings indicted that GWD was being salt poisoned by ag drain water.”

Assemblyman Rusty Areias told him, “All the ag drainers are in denial. Get them to admit we have a problem, and we’ll get this solved.”

“Claus led the charge through the Grassland Action Committee, made up of landowners who didn’t want to see their wetlands poisoned to death,” said Kerry. “We were very disruptive to the GRCD Board of Directors.”

Both Pepper Snyder and Kerry ran for the GRCD board and won election. Soon, thereafter, the resource conservation district, in a complete about face, passed a resolution to get drain water out of its system of canals and force the government to provide a clean and adequate water supply.

This resolution and plenty of media coverage helped set the stage for passage of the Central Valley Project Improvement Act in 1992.

The U.S. Justice Department obtained the Freitas Ranch via a Grant Deed because of a condemnation settlement in 1990. The property was transferred to the Bureau of Reclamation and shortly thereafter, stewardship was given to the Fish and Wildlife Service. The service obtained the 5,600-acre property through fee title in 1991, is now known as the North and South Freitas Units.

The former Claus property, consisting of 555 acres, was purchased in fee title in 1990. Today the property is identified by the Fish and Wildlife Service as the Blue Goose Unit.

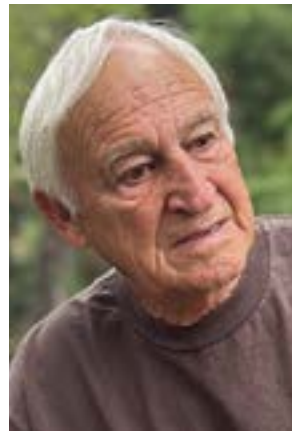
A settlement was also reached with Frank and Charles Schwab, brothers who owned 179 acres adjacent to Kesterson Reservoir.

The combined units are part of the sprawling Kesterson NWR, 10,621 acres in all, that are within the historic floodplain of the San Joaquin River and included in the San Luis National Wildlife Refuge Complex.

The Kesterson Reservoir—a series of holding ponds developed by the Bureau of Reclamation—ceased to take toxic drain water in 1986. The ponds were filled in 1988 with one million cubic yards of soil to eliminate wildlife exposure to selenium contamination and are not part of the refuge.

While selenium contamination at Kesterson only occurred over a few years, remediation efforts took more than 20 years. Total remediation costs exceeded \$21 million.

Claus, now 83, lives in Oregon. In 1992, he conceptualized and proposed creation of the



Jeff Kerry



Pepper Snyder



Gary Zahm

1,856-acre Tualadin River National Wildlife Refuge on the outskirts of Portland. “The urban refuge is an example of what land use should be for the long term,” he said. “I think we’re finally on the right track, doing something for fish and wildlife. I really believe refuges are the key to a healthy America. We got it done in western Merced County and the outskirts of Portland. Now let’s get water back into the San Joaquin River and restore the Chinook salmon run.”

## ZAHM, SANSONI, NELSON PLAN

The sole source of water used to manage the San Luis NWR was a senior appropriative license that allowed the diversion of up to 19,900 acre-feet from Salt Slough. This water would be co-mingled with operational spillage at three locations from the San Luis Canal Company’s ag-delivery ditches. This system had been in place and used since the refuge was acquired in 1966, an acquisition which was strenuously opposed by Carl Van Atta, a board member of the Grasslands Water District.

Following the finding of selenium impacts on migratory birds and domestic livestock, the USFWS mandated that no waters containing more than 2 parts per billion could be applied to federal lands. The co-mingled water from the Grassland Water District that ultimately reached Salt Slough, exceeded this limit, rendering it unsuitable for San Luis National Wildlife Refuge management needs and would force the closure of all public use programs, including waterfowl hunting on the refuge.

To counterbalance the loss of Salt Slough water, emergency negotiations began between the USFWS and BOR and San Luis Canal Com-

pany, which made modifications to its infrastructure to accommodate federal water from the 1954 Central Valley Project Act. Ironically, the water that had never been delivered to the refuge was suddenly available.

Unfortunately, Kesterson NWR, Grassland duck clubs and the Los Banos Wildlife Area were still receiving a selenium-contaminated water supply. Zahm came up with a remedy in 1985 which would allow the transfer of selenium-contaminated water from the Grassland Water District into the self-contained San Luis Drain, which had recently been closed.

“It may sound strange, but I actually dreamed about the plan,” Zahm said.

Knowing that agricultural interests would support the plan, Zahm set up an early morning meeting with Aldo Sansoni, a well-respected farmer and board member of the San Luis Canal Company.

“Siting with our coffee, I drew up my plan on a napkin and explained the importance of such a project,” said Zahm. “With the current anti-government sentiment because of the selenium investigations and the Bureau of Reclamation decision to close the San Luis Drain to ag-drain water, emotions were running high among San Joaquin Valley farmers and water districts.”

Sansoni, known as a more contemplative individual, could relay the background of the plan and need for such a project. Eventually, the San Luis Canal Company and Central California Irrigation District negotiated long-term contracts to deliver good quality, well timed Central Valley Project Improvement Act supplies to the Grassland wetlands.

Based on a later meeting with Neal Nelson, a

private consultant within the Grassland Water District, the transfer point of contaminated, co-mingled water into the San Luis Drain was proposed to be moved to the Grassland Water District’s southern boundary. This action created the opportunity for the entire Grassland Water District and public lands to ultimately receive fresh water daily from the 1992 Central Valley Project Improvement Act and rid itself from contaminated drain water.

“The reopening of the San Luis Drain—known as the Zahm, Sansoni, Nelson Plan—to again transport and discharge ag-drain water into the San Joaquin River was a bitter pill to swallow for some environmental groups, despite the huge benefits to wetlands and migratory birds,” said Zahm. “Needless to say, I had many stressful days and nights during the Kesterson era.”

Their idea was to convey the contaminated flows around the managed Grassland wetlands by refurbishing parts of the concrete-lined San Luis Drain and reroute them into Mud Slough. Prior to their “bypass plan,” the same water delivery canals used to flood managed wetlands were used to convey drainage water to the San Joaquin River via the wetlands.

According to a Conservation Plan and Environmental Assessment by the U.S. Fish and Wildlife Service, published in 2023, the benefits of the Grassland Bypass Project to the managed wetlands are “well-documented.” The results of the project indicate success in conserving the Grassland wetlands. For example, by 2022, ag drainage into the San Luis Drain, Mud Slough and the San Joaquin River saw a reduction in the selenium load by 95%, the salt load by 86% and the boron load by 74%.

In 1996, prior to the Bypass Project, the mean

annual selenium concentration in Salt Slough was 16 parts per billion. Since that time, the 2 parts per billion monthly mean water quality objectives for Salt Slough, Mud Slough and the Grassland Water District wetland water supplies have been met.

## MONEY TO SUSTAIN PRIVATE WETLANDS

In 1981, the U. S. Fish and Wildlife Service, placed a brand-new position at San Luis NWR Complex—a private lands easement biologist—to sign up willing private wetlands owners to enter conservation easements.

Easements had been popular among landowners in the northern prairie breeding grounds of the United States, but never had been sold on wintering grounds for waterfowl. The Grassland wetlands would be the first.

“The idea was to pay landowners a price to put their land into a perpetual easement,” said Gary Kramer, who was also charged with helping owners improve their habitat. “I went from being a refuge biologist to a half realtor, half biologist,” he said.

Kramer went to clubs to explain what the federal program was all about. “Essentially, the USFWS would pay them a price—50 to 75% of the value of the ground—if they put their land in a perpetual easement,” he said. “The land couldn’t be developed into anything but a wetland or associated upland.”

He ran into stiff resistance and was bombarded with every problem that duck hunters faced, such as birds stacking up on San Luis Reservoir and fears that their duck hunting privileges would be taken away. Most of all, landowners



Gary Kramer

didn't trust the federal government and were suspicious of its motivations.

But Kramer persevered, attending Grassland Water and Resource Conservation District meetings, and getting to know some of the key directors, including J. Martin Winton, Carter Harrison, David McCabe and Carl Van Atta, and its second general manager, Don Marciochi.

Marciochi, a Fresno State grad with a teaching credential, had literally grown into the general manager's job, having served the GWD as a supervisor and assistant to Roy Lower, the original general manager. A Los Banos native, Marciochi displayed an even temperament and the ability to cut through politics for the benefit of the Grassland wetlands.

Kramer received direct instructions from Marciochi and Winton, who told him to "get out in the field and spread the word. If we want to hunt ducks in perpetuity, we must preserve the habitat. This program will pay clubs serious money when they sell an easement."

Jim Claus, the largest landowner in the Grasslands, entered the game early and sold the very first easement to the USFWS.

By 1984, in just three years, Kramer had enrolled about 25,000 acres in the Grasslands, anchored by the large Salinas Gun Club in the north and Gables Duck Club in the south. Over time, most every club in the Grasslands sold an easement, and the program went from zero to almost 100% participation.

Clubs discovered that selling an easement didn't reduce the value of their land, it enhanced it, because recreational land can have far greater worth than farm ground. The private lands easement program was literally the salvation for the Grasslands.

"When the Central Valley Project Improvement Act was authorized in 1992 and signed into law by President George H. W. Bush, the water came, clubs with a federal presence in the easement program were privy to that water," Kramer said. "With a conservation easement, the private clubs had much more clout."

Many clubs took some of their easement money and invested it back into the ground to improve their habitat and grow duck food. In 2024, approximately 90,000 acres of private lands have enrolled in the Conservation Easement Program.



Green-winged Teal  
photo courtesy Gary Zahm



**Dedication of the Mud Slough Restoration Project**  
(from left to right)

Dan Whitehead, GRCD Director; Don Marciochi, GWD General Manager; Agnes Harrison; Carter Harrison; Pepper Snyder, GWD President;  
John Beam, CDFW; Kim Forrest, USFWS; Bill Parham, GRCD President/Director.



# AFTER THE CVPIA: LEGAL HISTORY OF THE GRASSLANDS

**AFTER ENACTMENT** of the Central Valley Project Improvement Act in 1992, Grassland Water District took on the continuing task of ensuring that the law remained intact, and the Bureau of Reclamation implemented its refuge water supply legal requirements.



Ellen Wehr

General Counsel Ellen Wehr, who represents the GWD, explained the legal history with this synopsis. CVPIA was enacted at the height of a severe drought and intensifying environmental politics. The Bureau of Reclamation received a Biological Opinion from the National Marine Fisheries Service in 1992 finding that CVP water operations jeopardized the survival of threatened Sacramento River winter-run Chinook salmon. Congress enacted the CVPIA that same year, in a legislative attempt to achieve “a reasonable balance among competing demands for use of Central Valley Project water, including the requirements of fish and wildlife, agricultural, municipal and industrial and power contractors.”

From the beginning there was a need to protect the integrity of the law against significant efforts to undo it, led by Grasslands president Pepper Snyder and board members Doug

Federighi and Jeff Kerry. In 1993, the Delta smelt was listed as a threatened species under the Endangered Species Act, and the U.S. Fish and Wildlife Service issued a second Biological Opinion finding jeopardy to the species because of CVP operations. To some this era was a reckoning, and to others it significantly diminished the CVP’s benefits. It was also the dawn of a litigious era in California water, one that continues today.

With low water storage conditions as a result of drought and new regulatory requirements to protect the environment, the Bureau drastically reduced its annual water allocations to agricultural water districts in the early 1990’s. Westlands and San Benito Water Districts filed lawsuit after lawsuit, including an unsuccessful legal challenge to the CVPIA, where the court held that the law “requires the Bureau to provide water to wildlife refuges” even if the result



Don Marciochi

is “a shortage in water to deliver to satisfy the Bureau’s contractual obligations to Westlands.”

Grassland Water District, through its longtime General Manager Don Marciochi led the district’s efforts to secure firm water supplies under the CVPIA. Guided by board President Pepper Snyder and members Jeff Kerry, Bob Nardi, Doug Federighi and Tom Mackey, the district used trusted attorneys in the years that followed, focused on implementing and defending the CVPIA. They also executed major drainage agreements that assisted in additional water supply and financial support for the district.

Literally billions in funding to the district was enabled by a coalition of entities: Ducks Unlimited, California Waterfowl, U.S. Fish and Wildlife Service and the state Department of Fish and Wildlife.

Attorney Dan Cardozo, a partner at Adams Broadwell Joseph & Cardozo in Sacramento, assisted the district for decades on many matters related to water, and helped defeat several large land development proposals near the Grasslands.

“We were being threatened by urban encroachment, so we engaged this Sacramento law firm,” recalled board president Pepper Snyder. “We had never fought battles like this before.”

Cardozo was the primary attorney who negotiated the long-term refuge water supply contracts between the Bureau of Reclamation and the CVPIA refuge managers. Later, General Manager Dave Widell brought in Hal Candee, a partner at Altshuler Berzon in San Francisco, who served as senior attorney for the Natural Resources Defense Council, to interface with the Bureau of Reclamation on behalf

of Grassland Water District to advocate for the critical need for the refuge water supply. Candee was also a co-director of the NRDCs Western Water Project and carried considerable credentials in the fight for refuge water.

Widell was also the GWDs first general manager to pursue a collaboration with Dan Nelson, manager of the San Luis Delta-Mendota Water Authority. He proposed a joint position among the USBR, RWSP and the SLDMWA that focused on the development of projects to diversify refuge Level 2 supply and develop incremental Level 4 water.

In 1997, the Grasslands was given a new moniker that expanded its focal point of the 75,000-acre Resource Conservation District to wetlands and uplands to the north, south and east. The Grasslands Ecological Area was the idea of Gary Zahm, then the project leader of the San Luis National Wildlife Refuge Complex, who believed a much larger 240,000-acre area should be recognized for its critical habitat—a 25 by 30 mile mixture of private and public wetlands and riparian corridors—where 245 species of birds could be seen.

“I was stimulated by a colorful brochure published by the Grassland Water District which displayed the beauty and importance of the area,” Zahm said. “That’s when I came up with Grassland Ecological Area, which I believed was a good descriptor for the natural bounty we have in Merced County. Everyone bought in and the area started getting much more national and international recognition.” But battles over water intensified, despite the area’s vital importance to wildlife.

Only 10 years after execution of refuge water supply contracts, in 2011 California members of the House of Representatives introduced

federal legislation to amend the CVPIA. Numerous bills like this would follow, none yet successful, with provisions that would deem the CVPIA “complete,” reduce mitigation fees, replace water dedicated to fish and wildlife, and put short deadlines on the CVPIA’s refuge water infrastructure requirements. Grassland Water District, through General Manager Dave Widell, followed by Ric Ortega, increased its communication with federal lawmakers in this decade, and began making more frequent trips to Washington D.C. for face-to-face meetings.

Twenty years after the first CVPIA lawsuit, in the face of a severe drought in 2014, another lawsuit was filed, this time by Friant Water Authority and its member districts on the east side of the San Joaquin Valley. The Friant Unit of the CVP faced the first-ever water release from Friant Dam to meet the demand of more senior San Joaquin River Exchange Contractors on the west side. Grassland Water District and

Grassland Resource Conservation District were named as defendants in a claim that the “Bureau of Reclamation may not lawfully use any water for any Central Valley Project purpose, including delivery to Grassland Resource Conservation District or other wildlife refuges, until the Exchange Contractors’ substitute water supply requirements have been satisfied.” After unsuccessfully seeking a Temporary Restraining Order, where the court ruled the claim “wholly without merit,” the lawsuit was dismissed.

The drought years of 2014–2015 debilitated California, including the first water cutbacks for refuges under the CVPIA. Grassland Water District developed new and creative strategies to diversify its water supply and pursued increased legal and policy engagement at the state and federal levels. It hired Ellen Wehr as its first in-house legal counsel. It also

retained Mark Smith, a policy consultant in Sacramento.

Grassland Water District took on more legal work to develop contracts, complete environmental review and obtain permits for these projects, and held lengthy policy and financial discussions with project partners. The district’s office staff to include Veronica Woodruff, Diane Vowles and Jessica Wright put in hard work to administer these endeavors.

Challenges for maintaining baseline Level 2 refuge water deliveries persisted. In 2019, litigation by Central Valley Project commercial power contractors resulted in a major funding setback for the CVPIA Restoration Fund.

In 2021, in his outgoing days as Secretary of the Interior, David Bernhardt issued a series of memos concluding that the CVPIA could plausibly be deemed “complete,” while acknowledging that its refuge water provisions were not yet fulfilled. The memos were later overturned by the U.S. Department of the Interior secretary Deb Haaland. The Grassland Water District, however, was no longer playing only defense.

## LEVEL 4— THE PROMISE OF A FULL REFUGE WATER SUPPLY

Incremental Level 4 refuge water, as defined by CVPIA, is the amount of water needed for optimal habitat management, and it must be acquired from voluntary sources. In the first decades of CVPIA implementation, the Bureau of Reclamation purchased water transfers from Central Valley Project contractors on an annual basis, meeting approximately 25% of the Level 4 refuge water requirement.

Grassland Water District began with a groundwater pilot program in 2008, at first acquiring groundwater from nearby farmers and water districts, then facilitating well installations within the district boundaries. Voters approved Proposition 1, the California Water Bond, in 2014. With a new infusion of state funding for refuge water infrastructure, the district leveraged available local and federal funds to invest in the North Valley Recycled Water Program, a partnership with Del Puerto Water District that conveys tertiary treated wastewater from nearby cities to the Delta-Mendota Canal for both agricultural and refuge use.

The district was also awarded Proposition 1 funding to support the North Grasslands Water Conservation and Water Quality Control Project, a partnership with San Luis Water District that recirculates about 18,000 acre-feet of refuge water for use in the North Grasslands.

Grassland Water District took on more legal work to develop contracts, complete environmental review, and obtain permits for these

projects, and held often lengthy policy and financial discussions with project partners. And while the cost of annual “spot market” water transfers continued to climb, the investment in long-term regional supplies resulted in increased Level 4 water allocations for CVPIA refuges. In wet hydrologic years, most refuges could count on receiving 100% of their CVPIA supply, a feat that was not accomplished for 30 years.

The fight to protect wetland water quality from harmful constituents in upslope agricultural drainage spanned more than 40 years, from the Kesterson Reservoir disaster in the 1980s to court cases in the 2020s, applying the Clean Water Act to the Grassland Bypass Project. Within this four-decade period, the district redoubled its commitment efforts—particularly after the severe drought years of 2014–2015—joining other groups to embark on a long-term effort to fully implement the refuge water provisions of the CVPIA.

The district achieved an important exemption from state water quality regulation in 2021. It also played a key role in developing a Groundwater Sustainability Plan for the Delta-Mendota Subbasin, under the state’s Sustainable Groundwater Management Plan.

For water supply projects, in the 2020’s the district continued to further new partnerships with water agencies in the pursuit of refuge water supply benefits from water storage projects. It joined the Los Vaqueros Joint Powers Authority to promote ecosystem benefits as part of that reservoir expansion project, worked with the Bureau of Reclamation to secure refuge water storage in an expanded San Luis Reservoir, and partnered with the San Joaquin River Exchange Contractors and San Luis Water District in a proposal to reoperate a

local reservoir, the Los Banos Creek Reservoir. The future will likely also see small-scale water regulating storage projects within the district, further efficiencies in water and wetland habitat management, an effort to increase local breeding bird populations, and expanded wetland footprint as more land protection and restoration efforts take place.



Veronica Woodruff



Roy Lower



Scott Lower

## WOMAN FOR THE AGES

Within the Grasslands Water District, since its inception, there have been ditch tenders and supervisors, engineers and heavy equipment operators, biologists and scientists, and boards of directors. For many years it was a man’s world, except for one: Veronica Woodruff, who would become known as “the voice of the district.”

When she retired in 2023, Woodruff had logged 34 years with the water district, earning the mantle as the agency’s longest serving employee. Along the way she was “the voice,” talking directly to landowners, gaining their respect and ultimately their trust. When they phoned and asked about water—how much was available, when it was coming and how much it would cost—Woodruff answered their questions.

Woodruff’s career began in 1989 as a secretary. Her role as a vital cog to the organization expanded to co-assistant general manager with Scott Lower under General Manager Don Marciochi, and finally to secretary-treasurer and controller.

Woodruff was the heart and soul of the district and lived through many changes. At the district’s original office at 610 Pacheco Boulevard, which served the district and attorney/general manager Roy Lower concurrently. She said

board meetings were brief, so all in attendance could part take in the rolling beverage cart.

“Times were pretty simple,” recalled Woodruff, who chronicled the changes of water district leadership since its inception in 1954. Old records showed Lower as the general manager and his son, Mark Lower, as water master and superintendent.

Mark Lower ran water in both the North and South Grasslands and found the workload increased to the point the district needed more help, not just seasonal.

“Don Marciochi and I went to school together in Los Banos,” Mark Lower said. “I hired him to manage water and shoulder the workload in the North Grasslands. Don worked as a ditch tender and later as a supervisor and manager.”

“The Board of Directors took notice of Don’s diligence and good judgement and decided to make him the general manger in 1983, and kept Roy as its attorney,” said Woodruff, who researched old minutes and correspondence. “In the late 80s there were five on our field team: water tenders Darrell Nunes and Scott Lower, who became water master and supervisor, and a maintenance staff of Sam Cook, Frank Castodio and Roger Huff.”

Woodruff’s first position was with Central California Irrigation District. She was hired by Walt Latham to oversee the water and maintenance departments. Then she moved to Grasslands.

She recalled when Marciochi and the Board of Directors decided to close the bar during public meetings, when landowners complained that alcohol was being served. “The meetings continued at the Pacheco Boulevard office,

and after a proper adjournment, the participants went to Carlo’s, a well-known restaurant and bar, for libations and further discussion,” Woodruff said.

Meetings soon became long and contentious and began to extend well into the evening. The City of Los Banos footprint was expanding, and proposed development was threatening the Grasslands with golf courses, housing, a community college and industrial expansion.

Grassland Water District board met Tuesdays. Discussing the thorny issues were board members Pepper Snyder, Jeff Kerry, David McCabe, Jack Sturla and Mike Bambauer.

The Grassland Resource Conservation District met on the fourth Tuesday and included Duane Cosart, Gary Harris and Carter Harrison, and two members who served both boards concurrently, Jeff Kerry and David McCabe.

Pepper Snyder, who has served as water district president for 37 years, since 1987, explained the situation. “When the resource conservation board came into being in 1972, the same board of directors served both entities. Once the duties and obligations of these boards became more complicated and time-consuming, each entity had its own board, with no overlap,

starting in 1985.”

“Both boards of directors were “real strong advocates for protecting the Grassland Wetlands,” Woodruff said. “They took their fight to Washington, D.C., published a newsletter, invited the news media to write stories and insisted that Dennis Underwood, water commissioner for the U.S. Bureau of Reclamation, make a personal visit to show him the dry Grassland Wetlands that so desperately needed a firm supply of well-timed, good-quality water. “

Woodruff described Marciochi was an excellent general manager, especially for the changing times. “He was super kind, patient, very knowledgeable and understood the history of the Grassland Water District,” she said. “I never heard anyone say a bad word about him, but he could be very passionate when it came to protecting the wetlands.”

In 1991, Peter Ottesen was hired as a public information officer. A veteran newspaper writer, outdoor school leader and member of the Salinas Gun Club, he brought passion and experience in publicizing the district’s importance to fish and wildlife, and waterfowl along the entire Pacific Flyway.

The district newsletter, Grassland Today, tar-



GWD Staff & Directors, circa 1990

geted landowners, news media and politicians from Sacramento to Washington, D.C. The publication was recognized by the Outdoor Writers Association of California as “Best Newsletter,” for 14 consecutive years. Stories highlighting the Grasslands appeared nationwide, including the Christian Science Monitor, San Francisco Chronicle, Wall Street Journal and Los Angeles Times, and on numerous radio and television documentaries.

In 1992, Woodruff was credited with finding a much larger office space to rent for the district, complete with a large maintenance shop and equipment yard. “Moving to South Mercey

Springs Road gave us room to grow,” she said. “Jeff Kerry put the deal together. Our new site was the best thing ever.”

The new office also provided space for allied organizations like Ducks Unlimited and California Waterfowl Association. At the same time, board president Snyder reached out to Dave Widell to become the district’s assistant general manager. The office staff expanded to include Melissa Cotta and Norma Rodriguez.

Widell possessed a political science degree from U.C. Davis and was a former aide to Assemblyman Rusty Areias and had long ties with



Pepper Snyder      Jeff Kerry      David McCabe      Jack Sturla



David Cosart      Gary Harris      Carter Harrison

Los Banos. Widell would later become deputy director of State Parks and assistant secretary of the Resources Agency, before returning home to the GWD as its general manager in 2007.

“Dave really cut back on expenses and kept close controls on all aspects of the district,” Woodruff said. “By the time he died unexpectedly in 2011, Dave had put away enough money to put a down payment on a new office on West Willmott Avenue, which we now own outright. We moved into our current headquarters in 2013.”

Woodruff described Widell as a consummate politician, a dealmaker who could forge connections with groups that didn’t see eye-to-eye and often were bitter enemies.

“Dave got lawyers going, protected our district boundaries from encroachment and developed allies at all levels of government and local concerns,” she said. “His leadership was the springboard for the district going forward.”



Dave Widell

Among Widell’s broad vision was a need for an environmental education center to serve local school children and show them and the community the importance of the Grassland Wetlands. It would be known as the Grassland Environmental Center, with a catchy acronym, GEECe.

Woodruff recalled Peter Ottesen loaning money for the center’s first building, a mobile home, that was placed at Ingomar Packing Company, to complement walking trails with interpretive signs. She said Candace Sigmund has long directed the center, which moved to its permanent location at the Los Banos Wildlife Area. GEECe serves approximately 6,000 local children annually, and now has a satellite area for field trips at Bird Ranch at San Luis

Creek near Santa Nella.

Widell also hired the current general manager, Ric Ortega, a wetland ecologist, who was conducting research in the Grassland Wetlands as the district’s first science programs manager.

At her retirement celebration, held in conjunction with the annual landowner’s meeting in 2024, Woodruff spoke, in typical understated fashion. “Working with the landowners and gaining their trust, those interactions made me feel good,” she said. “They’d call with questions and talk with me, because I’d tell it straight. It is the landowners that kept me going all these years. They were so passionate about our wetlands.”

## PROTECTING THE GRASSLAND WETLANDS FROM ENCROACHMENT

Besides water issues, Grassland Water District has long been focused on the protection of its wetland habitats from incompatible development proposals. In 1995, it commissioned two comprehensive land use studies from prominent thinkers, concluding that a buffer from development was the best way to protect the integrity of the wetland complex. In 2001, the district also commissioned an economics study to document the significant regional economic benefits of the Grasslands.

An example of a GWD-sponsored study concerned the effects of urbanization on the critical passage for migratory birds along a narrow corridor that links the North and South Grasslands, east of Los Banos. The research was undertaken by Joe Fleskes, Ph.D., of the U.S. Geological Survey, focused on Flight Path

Telemetry and routes taken each day by 42 radio tagged northern pintail that flew from their roosts to feeding sites. The study showed that the flight corridor was used extensively by birds, and that encroachment or even breaking up of the corridor would imperil migratory bird species. The finding ultimately influenced Merced County and the City of Los Banos to incorporate wetland protection provisions in their long-range planning documents.

Another project was to monitor selenium and other trace elements, both on water when it entered the wetlands complex and when it was discharged. The study was led by Nigel Quinn, Ph.D., of Berkeley National Laboratory, which concluded that water was cleaner when it left the district than when it entered.

Grassland Water District successfully pursued an international designation for the Grassland Ecological Area, which in 2005 was listed as a Wetland of International Importance under the Ramsar Convention, a treaty that provides for the conservation wetlands worldwide. But without official state or local land use protections beyond conservation easements, particularly for the agricultural lands surrounding the district, each new development proposal necessitated a response.

For decades, attorneys at the Adams Broadwell firm negotiated with the City of Los Banos and County of Merced to limit their urban growth boundaries and reject new development proposals around the edges of Los Banos, Volta, and Gustine. Supported by California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, California Waterfowl Association and Ducks Unlimited, the district successfully developed a buffer zone with a land-use consultation requirement that was adopted by



Joe Fleskes

Merced County in its General Plan.

The City of Los Banos General Plan also recognizes the importance of maintaining a buffer zone between urban growth and wetlands. The plan, adopted October 19, 2022, reads, in part: “Los Banos City Council includes a provision to protect wetlands for migratory birds and to keep good relations with the Central California Irrigation District and the Grassland Water District. The plan keeps ag/rural lands for migratory birds and prevents them from being rezoned for industrial use.”

Over the years, Grassland Water District has stopped numerous new developments in proximity to its boundaries, including a proposed golf resort, a community college, a shooting range, and a rodeo and concert venue. It also negotiated avian protection plans for renewable energy projects, particularly solar arrays, food processing and dairy expansions.

The proposal by Chinese developers to construct 1,600 homes and a golf course adjacent to the migratory corridor and the state-operated Gadwall Unit was particularly onerous. “The pressure was really turned up,” recalled Pepper Snyder, president of the GWD board of directors. “When I met with them they offered some pretty nice incentives.”

On the third meeting in San Jose, Snyder offered up a plan of his own. “Maybe there is a way to do this,” he said. “What we need to do is camouflage the golf carts and golf balls and insist the golfers wear camo clothing.” Snyder never heard from the foreign developers after that.

## PERSPECTIVES

As a focal point for providing critical, well-timed, quality water to wetlands, the Grassland Water District provides life giving supplies to the largest complex in the entire West. Through it all, private citizens have strived to protect a public resource.

The district's mission is to deliver water, inspire innovate new ways to conserve and redistribute water and fight to retain water mandated by the Central Valley Project Improvement Act. The Grassland Ecological Area is a mainstay for migratory birds that fly the north/south route each fall known as the Pacific Flyway.

Leading conservationists and environmentalists are proponents and defenders of the Grasslands. Here are some of their perspectives:



Steve McCormick

Steve McCormick, former president of The Nature Conservancy and co-founder of Earth Genome, commented, "The contributions hunters have made to the conservation of vast assemblages of wetlands and adjacent landscapes, such as the Grasslands, are incalculable and vastly underappreciated by the general public.

"Hunters were, in fact, the original conservationists, who realized that what needed protecting was not just scenic wonders, but intact, fully functioning ecosystems essential for a species to flourish."



John Carlson

John Carlson, recently retired president of California Waterfowl Association, expressed the importance of the Grasslands to the Pacific Flyway and globally, as well. "The value of these wetlands cannot be overstated," he said. "Millions of waterfowl and shorebirds depend on the wintering habitat that is 70% privately owned.

"Cal Waterfowl has been an extremely strong partner with the Grassland Water District, working together on public policy, legislation and local ordinances to protect the wetland complex found there," Carlson said. "In a state where water is so precious and costs continue to rise, the district is a champion for keeping it economically feasible to maintain this critical resource."

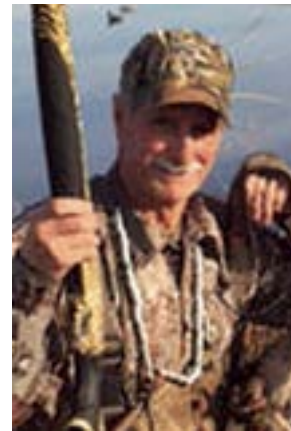
Glenn Olson, the Donald O'Brien Chair for bird conservation and public policy at the Audubon Society believes, "For the birds of the Pacific Flyway, it isn't much of a stretch to say that it is all about water. Approximately 60% of the ducks, geese and swans of the Pacific Flyway winter in California's Central Valley, an area where we have lost 90% of the historic wetlands.

"What's left is absolutely critical to sustaining this rich heritage of not only waterfowl but also millions of shorebirds," he said. "Providing that water to the Grassland Resource Conservation District is the critical role of the Grassland Water District. In doing so the GWD is sustaining and enhancing the entire 240,000-acre Grassland Ecological Area, made up of private duck clubs and state and federal wildlife refuges. For a duck or a goose flying south in the Fall, the water and the wetlands of the GRCD is a shining light, a shimmering beacon of hope, that sustains life... all life."

Dennis Campini, who doubles as president of both the Stillbow Club and the Grassland Resource Conservation District, believes the Grassland Water District is nothing short of "amazing to work with." "Our water district fights tooth and nail to preserve water supplies for our managed wetlands," he said. "They are a great part of our club's success and habitat management, providing adequate water at



Glenn Olson



Dennis Campini



Matt Kaminski

exact times, renovating canal banks and water control structures when needed, offering advice on growing moist soil plants for duck food and allowing us to flush our grounds at the end of the season.

"Every privately-owned wetland receives the same benefits from the Grassland Water District," Campini said. "Who could ask for more?"

Matt Kaminski, regional biologist for Ducks Unlimited said, "Duck clubs and sportsmen in the Grasslands have a unique role in the history, conservation and management of our upland and wetland habitats.

"This legacy is repeated every year when seasonally flooded wetlands receive water provided through the Grassland Water District, and work with conservation organizations like Ducks Unlimited and California Waterfowl Association revitalize the Grassland wetland management infrastructure and restore and enhance management of the wetlands."

## PARTNERSHIPS SUPPORT THE DISTRICT

(see Appendix)

Sean Allen, manager of the Los Banos Wildlife Area cited the GWD's advocacy for south of the Delta wetlands, both private and public, as well as its defense of the Central Valley Project Improvement Act, its implementation and ongoing efforts to secure a clean, high quality water supply. "That's what I admire most," Allen said. "The district is so well-respected and never backs down when the integrity of the Grasslands is threatened. The water district can do what state and federal agencies cannot do, and its impact is far-reaching."

Allen also stressed education, particularly with local school children, through the Grassland Environmental Education Center, known as GEECe, which is a partnership between Grasslands and the state Department of Fish and Wildlife. The center is directed by Candace Sigmund and annually serves approximately 5,000 students. It is located at Los Banos Wildlife Area.

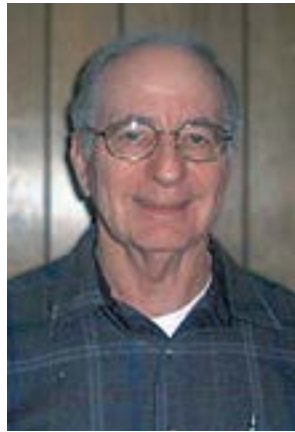
GWD General Manager Ric Ortega said, "Our educational program is unique. We have an interpretive marsh for kids of all ages to put on waders and trek through the wetland, collecting critters and examining them under microscopes in our classroom. I'm not aware of any other public, free environmental education program focused on wetland conservation in California."

Grasslands also maintains incredible relationships with Audubon, Point Blue Conservation Science, The Nature Conservancy, Defenders of Wildlife and many other environmental non-profit organizations. These relationships support funding requests to the GWD and other refuges, but also help defend attacks to the refuge water supply. These partnerships have also led to many scientific investigations and the development of tools to assess the health of the marsh and the wildlife that depend upon it.

As part of the 26-member San Luis Delta Mendota Water Authority, three districts including the Grasslands Water District, Central California Irrigation District and San Luis Water District, have riparian water rights to Los Banos Creek Detention Reservoir, to provide additional water for wildlife.

"We've constructed facilities, so when there are riparian releases, we can put this water into the

Doug Federighi



Delta Mendota Canal and all of the participating districts to deliver water to riparian lands,” explained Lon Martin, general manager of San Luis Water District. “Grasslands Water District is the primary recipient of these releases, generally between 300 and 1,000 acre-feet, delivered from January through March.”

The Grassland Water District is now leading the charge on pollinator habitat restoration in the San Joaquin Valley. Through grant funding from the state Wildlife Conservation Board, California Association of Resource Conservation Districts and the National Fish and Wildlife Foundation, the district has been able to deploy pollinator habitat along canal edges and around wetlands, where water already exists for other purposes.

Pollinator restoration along canals also creates long linear features, like arms of an octopus, that are more likely to be encountered by pollinators than traditional postage stamp-sized restoration approaches. Pollinators encounter the strip and travel along it back to the central habitat hubs. This approach is providing far more nectar resources and breeding habitat for declining pollinators like the monarch butterfly. The hope is that through the district’s proof of concept projects that other water districts in the west can implement similar strategies to help the declining populations of pollinators.

Perhaps the district’s longest running encroachment battle is with the California High-Speed Rail Project, dating back to 2005. Grassland Water District has persistently advocated for a less damaging route and project design. The district, under the direction of former General Manager Dave Widell was able to negotiate a commitment to conserve 10,000 acres in and around the Grassland Ecological Area through habitat and agricultural easements.

The GWD also negotiated the construction of an above ground tunnel to enclose the high-speed trains through the critical Mud Slough wildlife corridor that links the south Grasslands to the north.

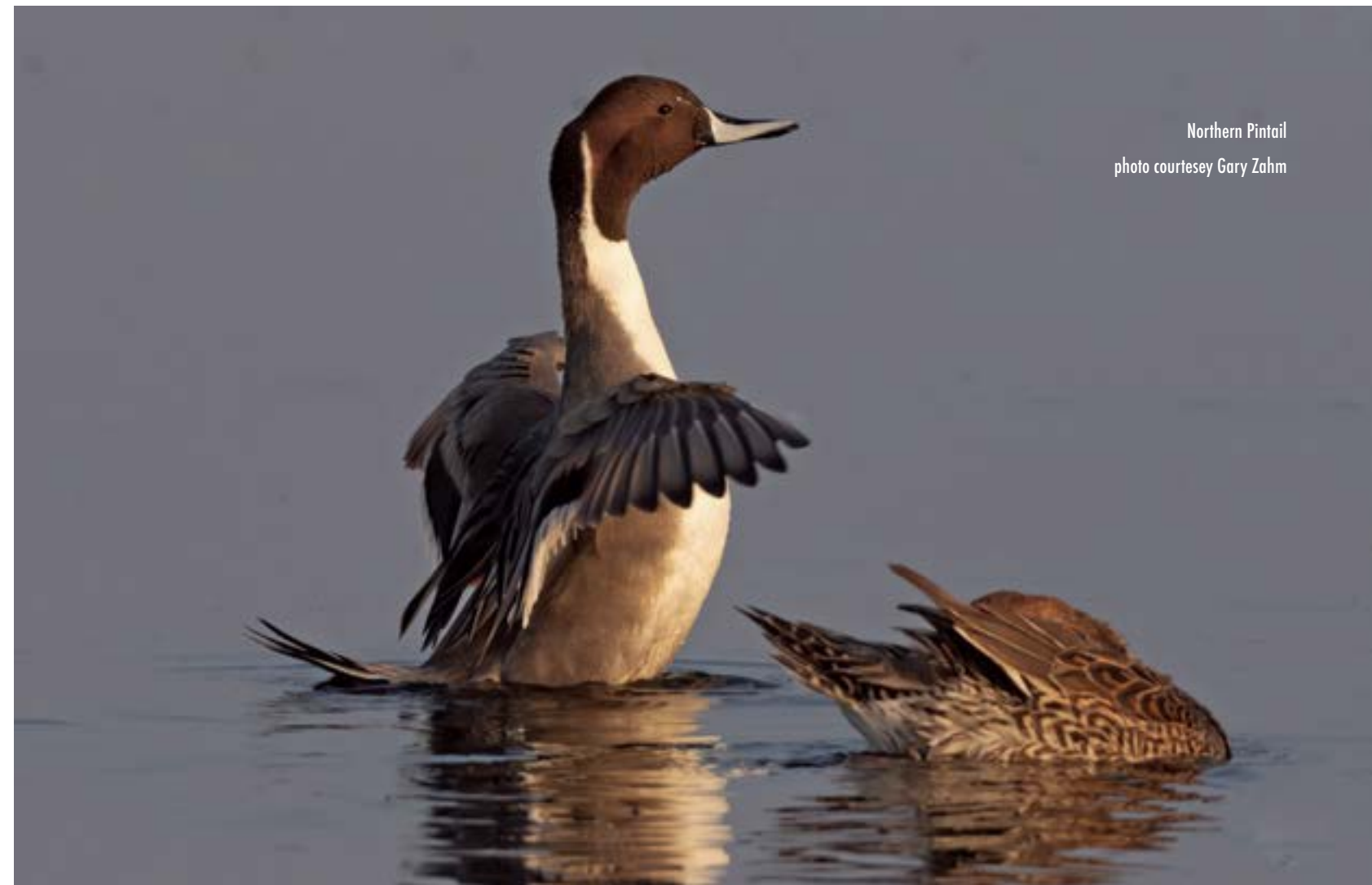
The future of the high-speed rail is uncertain. Ideally, the project will avoid the Grassland Ecological Area but, as always, the GWD hopes the best but plans for the worst.

“With luck and continued focus, the future may see expanded protections for wetlands and wildlife-friendly agriculture surrounding the district, plus greater recognition by local municipalities of the unique benefits the Grasslands provide to this fast-growing area,” Wehr said. “The legal battles will continue. It seems the district has a minimum of four lawsuits at any given time.”

Frederic “Fritz” Reid, Ph.D., former conservation director for the Boreal Forest for Ducks Unlimited, who replaced Doug Federighi on the Grassland Water District board of directors, believes the district is the “most important entity for waterfowl” in the entire state.

“Without water we don’t have wetlands and duck habitat and, although I knew of the history of the district and that it was a great leader in fighting for water, I was shocked that almost daily, the GWD was attacked on the water it receives.

“I really credit Ellen Wehr and the board of directors for having the vision to know when to fight, when to let something go and when to jump on something that could be very, very bad. Not only do these fights never end, but they grow in intensity every year.”



Northern Pintail  
photo courtesy Gary Zahm

# STRUCTURE OF THE GRASSLANDS DISTRICT

(see Appendix)

A five-member Board of Directors possess an excellent business acumen, innovation, passion for wetlands and the ability to build coalitions to protect, restore and maintain the Grasslands. Many refer to the GWD as “*Protecting the West’s Largest Wetland.*”

Over the past 70 years, the district has had only four general managers, all with local ties and an unswerving passion for the Grasslands.

Strong leadership has been the hallmark of the district, modeled by Roy Lower, the district’s first general manager and attorney in 1954, who spent a lifetime protecting and obtaining water for the wetlands of western Merced County.

A son, Scott, served the district as its water master and assistant general manager, and politically, was elected mayor of Los Banos, where he kept the Grasslands at the forefront of the City Council. Another son, Mark worked feverishly on effective water delivery.

Don Marciochi became the district’s second manager in 1983. He held a teaching credential and a Bachelor’s Degree in History from Fresno

State, and displayed a very pleasant, mild-mannered demeanor that could turn intense, when discussions called for a strong presence. Before taking the reins, Marciochi served as a supervisor for the district.

Dave Widell, who was selected the GWD’s third general manager in 2007, could be described as super intense, relentless, controlling, and extremely intelligent. A savvy politician, he was formerly a staffer for Assemblyman Rusty Areias and achieved a degree in Political Science at UC Davis.

He previously served the GWD as its assistant general manager, Ducks Unlimited as its director of conservation policy, deputy director of State Parks and assistant secretary of the California Resources Agency.

Widell excelled at forming partnership, including with agencies and organizations that didn’t necessarily share much common ground, and was well connected. Tragically he died unexpectedly at age 44.

Ric Ortega, born and raised in Dos Palos, has been the manager since 2011. He came to the Grasslands as a multi-taxonomic biologist working for the state Department of Fish and Wildlife in 2003, after receiving Bachelor of Science degrees in ecology and systematic biology and animal science from Cal Poly. He received a Master of Science Degree in avian science from UC Davis, after researching how wetlands respond to changes in water management that were being promoted by regulators. He worked under and learned from the previous managers—Marciochi and Widell—and has grown into the politics of the GWD.

Ortega displays motivation and passion and is known for making science-based decisions to protect the Grasslands. He was the first manager to participate on the San Luis Delta Mendota Water Authority and forged many refuge water supply collaborations with agricultural districts. He sits on the Los Vaqueros Reservoir Joint Powers Authority to ensure that refuges receive a significant additional water supply for decades to come.

Dave Widell



Ric Ortega



# MOVING FORWARD AGAINST ALL ODDS

**W**HEN IT COMES TO protecting the largest wetland complex west of the Mississippi River—the 240,000-acre, 30-square mile Grassland Ecological Area and its 550 species of birds, animals and plants (40 of which are federally listed as sensitive, threatened or endangered)—it is anyone’s guess how long the struggles will last or, if they will ever end.

“I feel very good about where the Grassland Water District is positioned just now,” said Pepper Snyder, president of the district since 1987. “Our biggest fear is what Washington, D.C. will do at the federal level to alter the Central Valley Project Improvement Act that provides us with a firm supply of good quality, well timed water that is critical to wetlands and the migratory bird species that depend upon it.”

Snyder emphasized the importance of Central Valley refuges and the Grasslands to migratory waterfowl. “Imagine, eight to ten million migratory birds winter here annually, he said.”

As he reflected on four decades fighting for water for Grasslands, Snyder said Dan Chapin, director of governmental affairs for California Waterfowl Association, “deserves so much credit” for passage of the Central Valley Project Improvement Act in 1992.

In 2024, Snyder believes the GWD is “on top of things” and fostering so much more awareness about the Grasslands—outdoor tourism,

local economy, environmental protection and recreation—and the hundreds of millions of dollars in revenue that is generated annually for the local area.

Snyder said, “The whole world knows about the Grasslands, being celebrated as a Wetland of International Importance by the Ramsar Convention; recognition as a critically acclaimed wetland by the Western Hemispheric Shorebird Reserve Network; a major focus in the Central Valley of the National Audubon Society and Ducks Unlimited; and a recipient of millions of dollars in state and federal grants annually dedicated to western Merced County wetlands.”

Director Bob Nardi has served on the GWD board of directors since 1994 and recalls 30 years of struggling for water and protecting the wetlands. “Back in the day the board was fighting everything,” he said, citing Los Banos urban sprawl and housing that threatened wetlands. “It was a constant fight with developers and the Los Banos City Council,” he said. “At



Bald Eagle  
photo courtesy Gary Zahm



Bob Nardi

one point we had to discourage a new airport and an expansion of Merced Community College that encroached on the district. Times were that difficult.”

A major victory came when Merced County and the City of Los Banos agreed that any kind of structure or commercial venture would not be approved within a buffer zone of the Grasslands.

Nardi said the main fights these days are protecting the district’s mandated water supplies under the CVPIA and securing additional funding for water acquisition from the Bureau of Reclamation.

He cited the efforts of the district’s General Counsel Ellen Wehr and General Manager Ric Ortega, with the assistance of lobbyists in Washington, D.C. and Sacramento, for being a “formidable team” in attacking threats to the water supply. However, he doubts the fights will ever end. Next up is the threat of High-Speed Rail and the growth that will accompany it.

A coalition of Ducks Unlimited, California Waterfowl, Point Blue Conservation Service, Audubon, California Department of Fish and Wildlife and Grasslands Water District have joined the fight to force the High-Speed Rail Authority to mitigate impacts to the Grassland wetlands.

“In the greater scheme of things, the Grassland Water District is a small entity, but it carries a big punch,” Nardi said. “We face constant fights, and I don’t see these fights ending soon, if ever. We are a small target and those who would threaten our water supply and wetlands complex believe we are an easy take out, but we aren’t, and that is a positive thing.

“California’s water system is broken and there isn’t a solution if the state government continues the same path, it is on,” he said. “The Grasslands is going to continue the fighting and believe me, we have the ammunition to fight. Our environmental public legacy is strong and so is our passion to protect the Grassland Wetlands.”

Jeff Kerry joined the water board in 1986 and said the battle over water and encroachment is going to be a constant fight. “It’s been going on the past 100 years, and I suspect the fights will continue for the next 100 years,” Kerry said. “They never stop picking on us, encroaching on our wetlands or trying to take our water.”

Fitz Reid, Ph.D., who joined the board in 2014 said, “Groups think they have the right to determine the future of the Grasslands, such as proposals to develop solar, which requires a lot of water. And they want to locate right on the edge of the district.”

Reid cited other challenges since the Central Valley project Improvement Act was enacted. “There have been those who tried to dilute the amount of water that is guaranteed by the legislation and others who try to persuade the Bureau of Reclamation to eliminate our precious water,” he said. “At every turn there is an attack on our water.”

General Manager Ric Ortega agrees. “We continue to employ new strategies to preserve our water supply and its quality and repel threats to the habitat from encroachment. The players have changed but it is going to get harder. The climate is changing so there will be even less and less water available.”

Ortega believes the Grassland Water District is making some progress, but if it sits on its

laurels, things would be much worse off. “There is no silver bullet, no guarantees,” he said. “It is important that our passionate board of directors, employees, water contractors and landowners keep their guard up, because our wetlands could go away rapidly, if we weren’t there to respond and defend.”

Testifying before the state Water Quality Board recently, Ortega emphasized, “They need to hear a constant narrative about the importance of wetlands and the functions wetlands play in the greater scheme of things, for water filtration, carbon sequestration, flood control, ground water recharge, and drinking water, let alone for wildlife.”

He noted that since passage of the CVPIA in 1992, the Grasslands had only received its full refuge water supply three times, in 2011, 2017 and 2023. Although the refuge “Level 2” water supply that comes from the Central Valley Project yield is reliable, “Level 4,” that must be acquired from willing sellers, has been a constant struggle.

Ortega said Reclamation had only been able to acquire about 50% of “Level 4,” mainly due to funding limitations. He realized the “only way to move the needle” was to begin partnering with agribusiness.

He pointed with pride to the North Valley Regional Recycled Water Program, in partnership with the cities of Modesto, Turlock and

Ceres, Stanislaus County and the Del Puerto Water District.

“The recycle water program currently yields about 30,000 acre-feet, 10,000 acre-feet of water to south of the Delta refuges and 7,000 acre-feet to the Grassland Resource Conservation District,” Ortega he said. “As the cities grow the benefits of the project will double over time.”

Another impressive Grassland partnership is with neighboring San Luis Water District, a junior federal contractor that is receiving very low and unreliable water allocations. Each year, San Luis must aggressively compete on the open market to acquire enough water to keep its family farms alive.

On a tour of unfunded water supply projects, General Manager Dan Nelson, of the San Luis-Delta Mendota Water Authority, recommended that Ortega reach out to then General Manager Martin McIntyre of San Luis Water District. Having known Nelson for years, Ortega had done his graduate research on his duck club, the Ducky Strike. Thus, he took his advice.

Soon thereafter, in the mid-2000s, GWD Director Bob Nardi devised a recirculation system for the North Grasslands along Gun Club Road. The concept would be to intercept high quality maintenance flow during the late-fall and early-winter. Key points of acceptance



Delta-Mendota Canal  
photo courtesy Capitol Public Radio

would be Los Banos Creek, Hollow Tree Drain and Mud Slough, and pump those supplies upstream into the Santa Fe Canal to serve around 8,000 additional acres of wetlands.

GWD General Manager Dave Widell brought on legendary local engineer Bob Stoddard to work with Ortega to develop a grant proposal for the engineering and environmental work for the Bureau of Reclamation. The BOR awarded the district with the funding and the work was completed, but the GWD lacked the \$16 million construction cost estimate.

That's where San Luis Water District came in. Ortega realized the GWD needed big money to create more water and that a junior district, such as San Luis, had money, but needed water desperately. He approached McIntyre at a local watering hole with an idea. The concept was simple: San Luis Water District would loan the GWD \$16 million to develop a 16,000 acre-foot annual water supply and the GWD would pay back the loan by splitting the water yield, until the debt was paid.

McIntyre's response was immediate. "You get the Bureau of Reclamation on board, and we will make it happen," he said.

After many years of back and forth with the BOR and a four-year construction, the North Grasslands Water Conservation and Water Quality Control Project came into production. The project was a huge success for both districts and built as lasting relationship, as well.

Now, the two districts have embarked on the second phase of the recirculation project that will nearly double the annual yield to around 30,000 acre-feet additional supply. The effort is called the 216 Recirculation Project, located at the confluence of the Mosquito Ditch, 216

Drain and Los Banos Creek, and is funded by San Luis Water District, Ducks Unlimited and the Reclamation. Lon Martin, general manager of the San Luis Water District, calls the joint North Grasslands Water Quality Recirculation projects with the Grassland Water District, "our marquee effort."

"When it comes to making best use of water and to maintain water quality, we must continually remain innovative and forward thinking," Martin said. "Our partnership with the Grassland Water District is a demonstration of that kind of out-of-the-box thinking."

## HABITAT BENEFITS FOR FISH AND BIRDS

Ducks Unlimited and the Grassland Water District are pursuing a floodplain restoration project to benefit waterfowl and Chinook salmon.

The goal is to create floodplain habitat condition more frequently by using water from adjacent seasonal managed wetlands. Birds and fish both rely heavily on invertebrates in the water column to survive.

Seasonal wetlands are primarily managed to provide invertebrates for migrating waterfowl. Each year the seasonal wetlands need to be drawn down in the spring to initiate germination of wildlife beneficial grasses like swamp timothy. At the same time, out migrating spring Chinook salmon fingerlings need additional refuge and food in the floodplains adjacent to the river.

Sound rather novel. Well, bringing the fish community and bird community together is the focus of Ric Ortega, general manager of

the GWD and Cliff Feldheim, biologist with Ducks Unlimited.

As Feldheim puts it, "This is our chance to bring this unusual project and different ideas to work for the benefit of so many diverse species." The unique project is taking place at China Island Wildlife Area, a 1,300-acre parcel adjacent to the San Joaquin River. The area is difficult to maintain as managed wetlands because it occasionally floods. The project will improve levees and water control structures to safeguard seasonal wetlands from flooding during the growing season.

"We're going to capture water after the annual March–May flood events," Feldheim said. "We will be at the whims of the water cycle—the amount of rainfall and the water that is dumped back into the river after hunting season by Grassland duck clubs—and attempt to capture that water and hold it for

habitat purposes."

He believes Chinook salmon fingerlings will use the captured water to feed on aquatic invertebrates and grow, before swimming back into the river and continuing an out-migration to sea.

Waterfowl and other water birds will use the nutrient-rich water for nesting and brood habitat, while riparian and songbirds will nest and rear their young in the river side forest.

"We want to bring wetland managers and the anadromous fish restoration biologists to the table," Ortega said. "Our goal is to demonstrate how managed wetlands can provide benefits to fish and ecosystem health as a whole."



Chinook Salmon  
winter–run fry  
image courtesy Jake Sisco, USFWS



Jeff Kerry, Bob Nardi, Pepper Snyder

## WHAT'S NEXT?

The more things change, the more they stay the same. Back in 1855, American author and humorist Mark Twain, commented about California, saying, “Whiskey is for drinking. Water is for fighting over.”

Twain’s iconic words characterize the tumultuous history of the Grassland Water District, and its battles to protect the Grassland Ecological Area of western Merced County—the largest complex of wetlands in the West, set in the Central Valley of the most populous state in the union.

When asked why defending the Grasslands and her own conservation mark for wetlands is such a deep-rooted passion, General Counsel Ellen Wehr said, “Beyond conserving habitat for wildlife itself, it is important to me that we retain and restore places where people can experience something bigger than themselves, wide open and quiet, filled with different creatures, a reminder that we are only one part of a beautiful and complex world.”

What does the future hold? Will adequate water and protections for these critical wetlands ever be in place? Must they always be threatened?

Since 1954, the Grassland Water District—*“Protecting the West’s Largest Wetland”*—has made progress and intends to continue the good fight, for however long it requires.



Northern Pintail  
photo courtesy Gary Zahm



White-faced Ibis  
photo courtesy Gary Zahm

# APPENDIX

## J. MARTIN WINTON CONSERVATION AWARD WINNERS

*J. Martin Winton Conservation Award for Outstanding Achievement in Natural Resource Conservation. This award is presented by the Grassland Resource Conservation District.*

1991	Richard Spotts, <i>Defenders of Wildlife</i>
1992	Dan Chapin, <i>California Waterfowl Association</i>
1993	Gary Zahm, <i>U.S. Fish and Wildlife Service</i>
1994	Joel Miller, <i>U.S. Fish and Wildlife Service</i>
1995	Roger Patterson, <i>U.S. Bureau of Reclamation Tri Valley Growers Plant 5 (organization)</i>
1996	Ed Smith, <i>California Department of Fish and Wildlife Natural Resources Conservation Service (organization)</i>
1997	Gary Harris, <i>Grassland landowner</i>
1998	Dave Widell, <i>Grassland Water District</i>
1999	George Miller, <i>U.S. Congress</i>
2002	Bill Gaines, <i>California Waterfowl Association</i>
2004	Charles van Gastel, <i>Grassland landowner</i>
2005	Malia Hildebrandt, <i>Natural Resources Conservation Service</i>
2006	Don Marciochi, <i>Grassland Water District</i>
2007	Walt Latham, <i>Central California Irrigation District</i>
2008	Frederic “Fritz” Reid, <i>Ducks Unlimited</i>
2009	California Wildlife Conservation Board <i>(organization)</i>

2010	William Cook, <i>California Department of Fish and Wildlife</i>
2011	Dave Widell, <i>Grassland Water District (posthumous)</i>
2012	Allen Inman, <i>State Water Resources Control Board</i>
2013	Robert Schafer, <i>Central Valley Habitat Joint Venture</i>
2014	Jeffrey Kerry, <i>Grassland landowner</i>
2015	Chris Hildebrandt, <i>Ducks Unlimited</i>
2016	Richard Wright, <i>California Waterfowl Association</i>
2017	Douglas Federighi, <i>Grassland landowner</i>
2018	Ellen Wehr, <i>Grassland Water District</i>
2019	Tim Poole, <i>Grassland Water District</i>
2020	Mark Biddlecomb, <i>Ducks Unlimited</i>
2021	Veronica Woodruff, <i>Grassland Water District</i>
2022	Lon Martin, <i>San Luis Water District</i>

# HISTORY OF THE GRASSLAND WATER DISTRICT BOARD OF DIRECTORS

The initial, five-member Board of Directors was elected to office in 1954, the year the Grassland Water District was formed. Since its inception 70 years ago, only 23 directors have served on the board. One director, Jeff Kerry, was elected twice for non-consecutive terms.

In the early days the Board of Directors appointed a non-member secretary: Kenneth Fink in 1954 and Roy Lower in 1955. Since that time, the appointed secretary has been the water district’s general manager.

Pepper Snyder has served as president of the board since 1987, a remarkable 37 consecutive years. In addition to Snyder, there have been only four presidents. The others include Earl Harris, 1954; J. Martin Winton, 1962; Carter Harrison, 1978 and Allen Coutchie, 1982.

Directors with two decades or more service to the board include Pepper Snyder, 39 years; Carl Van Atta, 31 years; J. Martin Winton, 24 years; Jeff Kerry, 25 years; Edward Fagundes, 23 years; and Doug Federighi, 20 years.

# BOARD OF DIRECTORS GRASS LANDS WATER ASSOCIATION, 1944-1954

George Bacon  
D. E. Bambauer  
Walter Christensen  
George Devaney  
John Erreca  
George Fink  
Joe Gomes  
Earl Harris  
Axel Holm  
Al Jessen  
Claude Rowe  
Joe Silva  
William Turpin  
J. Martin Winton  
Henry Wolfsen

# BOARD OF DIRECTORS GRASSLAND WATER DISTRICT, 1954-PRESENT

<b>1954</b> Earl Harris George Fink George Bacon J. Martin Winton Walter Christensen	<b>1991</b> Charles Van Gastel
<b>1956</b> Carl Van Atta	<b>1995</b> Bob Nardi
<b>1962</b> Edward Fagundes	<b>1998</b> Doug Federighi
<b>1969</b> Carter Harrison	<b>1999</b> Tom Mackey
<b>1970</b> Darrel Kalar	<b>2005</b> Byron Hisey
<b>1978</b> Allen Coutchie	<b>2018</b> Frederic “Fritz” Reid
<b>1985</b> Pepper Snyder Jeff Kerry	<b>2019</b> Jeff Kerry
<b>1987</b> David McCabe Mike Bambauer Jack Sturla	<b>2020</b> Mark Erreca
	<b>2023</b> Keith Frost

# GRASSLAND WATER DISTRICT GENERAL MANAGERS

**1954**—Roy Lower  
  
**1983**—Don Marciochi  
  
**2007**—Dave Widell  
  
**2012**—Ric Ortega

# GRASSLAND SOIL CONSERVATION DISTRICT AND GRASSLAND RESOURCE CONSERVATION DISTRICT

The Grassland Resource Conservation District was formed in 1972 to replace its forerunner, the Grassland Soil Conservation District, which begun in 1954.

In its early years, the five-member GRCD governing board was filled by board members of the Grassland Water District, who did double-duty. This practice changed in 1985.

The Grassland Resource Conservation District has had only five presidents in its 52 years:

**1972**—J. Martin Winton  
  
**1978**—Carter Harrison  
  
**1995**—Duane Cosart  
  
**2009**—Bill Parham  
  
**2012**—Dennis Campini

# BOARD OF DIRECTORS GSCD, 1954–1971 AND BOARD OF DIRECTORS, GRCD, 1972–2024

*\*Directors who served on the Grassland Soil Conservation District and later, the Grassland Resource Conservation District*

**1954**

Earl Harris  
George Fink  
George Bacon  
J. Martin Winton\*  
Walter Christensen

**1956**

Carl Van Atta\*

**1962**

Edward Fagundes\*

**1969**

Carter Harrison\*

**1970**

Darrel Kalar\*

**1984**

Pepper Snyder  
Jeff Kerry

**1986**

David McCabe  
Gary Harris

**1988**

Duane Cosart

**1989**

Scott Costello

**1992**

Bob Nardi

**1994**

Walt Latham

**1995**

Don Bacci

**1996**

Mike Corker

**2000**

Keith Toon

**2003**

Don Dawson

**2004**

Dennis Campini

**2006**

Bill Parham

**2007**

Dan Whitehead

**2009**

Dale Boust

**2020**

Mark Erreca

# LANDOWNERS—PRIVATE, STATE AND FEDERAL, WHICH RECEIVE WATER FROM THE GWD

101 Duck Club  
11 Bravo Duck Club LLC  
111 Club, The  
216 Duck Club  
Agatha Farms, Inc.  
Almaden Land & Cattle  
Armstrong Duck Club  
Avila Ranch  
B & D Gustine Club  
Backwater Retreat, The  
Bada Bing Duck Club  
Banta Duck Club  
Barbara Duck Club, Inc.  
Barcellos, Arnold  
Bardin Duck Club  
Bayshore Land & Cattle Co., Inc.  
Bee Ess Land & Cattle Co.  
Big Sandy Land & Cattle Co.  
Big Water Land & Cattle  
Blue Goose Unit USFWS  
Box Lake Duck Club  
Britto Land Co., Inc.  
Britto Land Investment  
Buena Vista Land & Cattle  
CA Dept. of Fish & Wildlife—  
    Gadwall Unit #3  
CA Dept. of Fish & Wildlife—  
    Mud Slough Unit  
CA Dept. of Fish & Wildlife—  
    Volta Expansion A  
CA Dept. of Fish & Wildlife—  
    Volta Expansion B  
CA Wildlife Conservation Board—  
    Gadwall Unit #2  
CA Wildlife Conservation Board—  
    Gadwall Unit #3  
Canada Land & Cattle Co.  
Canal Properties  
Cherokee Land & Cattle

Chesapeake Duck Club (Gavlak)  
Chesapeake Duck Club (PSV)  
Coaches Gun Club  
Coast Cattle Co., Inc.  
Cook’s 80 Club  
Corral Ranch  
Costa Land & Cattle  
Cotton Club, The  
Cottonwood Club  
Coyote Creek  
Dan & Cami Palermo Property  
DAPS, LLC  
Deer Park Properties  
Double “D” Club  
Douglass Property  
Drakes-N-Paynes  
Duck City  
Ducks Home Gun Club  
Ducky Strike, The  
East Gustine Duck Club, Inc.  
Eastman Duck Club  
Edgewater  
Eighty Gun Club  
Esgibago Land & Cattle Co.  
Eureka Farms  
Exeter Development Co., Inc.  
Featherstone Duck Club  
Fields Duck Club  
Flyway Ranch  
Fortune Farms  
Four Ponds, Inc.  
Fourteen Land & Cattle, Inc.  
Frasher Farms  
Frog Pond  
Gable Farm Land Co., Inc.  
Gatos Investment Co.  
Geis, Linda  
Gilroy Land & Cattle Co.  
Giovannotto, Sal

Gomes, Wilbur	Outdoor Sports Club
Greenwing Gun Club	Palace 125, LLC
Gustine Land & Cattle Co.	Pato Loco Duck Club
Halfback Land & Cattle	Piedmont Land & Development Co.
Happy Duck Club	Pioneer Duck Club
Haywire Land & Cattle	Pocoloco Club
Hillview Packing	Pocoloco Club II
Hollister Land & Cattle, Inc.	Poston/Miller Club
Hollow Tree Land & Cattle	Redfern Ranches
Ideal Land & Cattle Assn.	Redwood Land & Cattle Co.
Industrial City Cattle Ranch & Duck Club	Reedley Duck Club, The
Ingomar Duck Club	Reeves Lake Land Co., Inc.
Jackson Farms	Riverfield Cattle Co.
Kerry Duck Club	Rooney Ranch
Klamath Land & Cattle	Russo Duck Club
La Cienega Gun Club LLC	Salinas Land & Cattle
Late Water Duck Club	Sal’s Duck Club
Lazy “V” Duck Club	Sand Lake Hunting Club
Liatnip, Inc.	Santa Cruz Land & Cattle Co., Inc.
Livewater Duck Club	Santa Fe Land & Cattle Co.
Lone Tree Land & Cattle, Inc.	Santa Fe-Sierra, Inc.
Lonesome Duck	Shark Pond, The
Lonesome Mallard Duck Club	Six Spot Land & Cattle
Los Banos Duck Club	Sloan Cattle Company, LLC
Los Banos Properties	South City Farms
Lost & Found Cattle Co.	South Dos Palos Land Co.
Lucky “K”, The	Souza, William R.
Lucky Leven Land & Cattle	Souza-Nygard Duck Club
Lucky Twelve Duck Club	Sprig Haven Farms
M & M Farms	SSA Duck Club
Madrone Land & Cattle	Standard Duck Club
Manteca Land Company	Stevens Creek Quarry
Mar Land & Cattle	Stillbow 80
Mesquite Sportsmen’s Club	Stillbow Ranch, Inc.
Midway Land & Cattle Co.	Straight Arrow Land & Cattle Co.
Moffat Road Gun Club	Sunset Club
Mulock, Roger (Hershel Harvey)	Sweet Water Duck Club
Murrieta Land & Development Co.	Tiro Alto Properties
Oakland Land & Cattle Co.	Tracy Duck Club
Office Duck Club, The	Tramontana Club
Oh So Hi	Tri City Land & Cattle Co.
Old Los Banos Land & Cattle	Triangle Duck Club
Old Schwab Ranch	Tule Acres Land Co.

Twin Lakes Duck Club  
Twin Lakes Ranch (Altick)  
Two Forty Gun Club  
Underwood Land & Development Co.  
Valley Land & Cattle  
Vista Farms Duck Club, LLC  
Ward Farms, Inc.  
Webfoot Development Co.

Westervelt Ecological Services  
Westlake Duck Club  
Westside Properties  
Wheel-Berry Duck (Pintail)  
Wheel-Berry Duck Club  
Wild Duck Farm  
Willow Farms  
Wooten Duck Club  
Zimmerman Club

# INTERVIEWS: RESOURCES AND REFERENCES

*(Personal interviews that contributed to the history of the GWD)*

**Sean Allen**, Manager—  
*Los Banos Wildlife Area Complex*  
**Ryan Broddrick**, former Director—  
*California Department of Fish and Game*  
**Dennis Campini**, President—  
*Grassland Resource Conservation District*  
**John Carlson**, past President—  
*California Waterfowl Asociation*  
**James Claus**—  
former Grasslands landowner  
**Dan Connelly**—  
retired Waterfowl Coordinator—  
*Department of Fish and Wildlife*  
**Cliff Feldheim**, Wildlife Biologist—  
Floodplains and Water Infrastructure, *Ducks Unlimited*  
**Joe Fleskes, Ph.D.**, retired Biologist—  
*U.S. Geological Survey*  
**Kim Forrest**, retired Project Leader—  
San Luis National Wildlife Refuge Complex  
**Bill Gaines**, Principal—  
*Gaines & Associates, Governmental Relations*  
**Matt Kaminiski**, Biologist—  
Grasslands Ecological Area, *Ducks Unlimited*

**Jeff Kerry**, Director—  
*Grassland Water District*  
**Gary Kramer**, retired Project Leader—  
*Sacramento National Wildlife Refuge Complex*  
**Mark Lower**, retired Water Master and Superintendent—  
*Grassland Water District*  
**David McCabe**, retired Director—  
*Grassland Water and Resource Conservation Districts*  
**Steve McCormick**, former President—  
*The Nature Conservancy* and co-founder, *Earth Genome*  
**Jeff McCreary**, director—  
Western Regional Office, *Ducks Unlimited*  
**Lon Martin**, General Manager—  
*San Luis Water District*  
**Dan Nelson.** retired General Manager—  
*San Luis-Delta Mendota Water Authority*  
**Glenn Olson**, Donal O’Brien Chair—  
Bird Conservation and Public Policy, *Audubon*  
**Ric Ortega**, General Manager—  
*Grassland Water District*

**Fredric “Fritz” Reid**, Ph.D., Director—  
Grassland Water District/  
*Ducks Unlimited*

**Medford “Pepper” Snyder**, President—  
*Grassland Water District*

**Ellen Wehr**, General Counsel—  
*Grassland Water District*

**Chris White**, General Manager—  
*San Joaquin River Exchange*  
*Contractors Water Authority*

**Roger Wilbur**,  
retired Assistant Manager—  
*Los Banos Wildlife Area*

**Veronica Woodruff**, retired Controller—  
*Grassland Water District*

**Dennis Woolington**, retired Biologist—  
*U.S. Fish and Wildlife Service*

**Gary Zahm**, retired Project Leader—  
*San Luis National Wildlife*  
*Refuge Complex*

HISTORY: RESOURCES  
AND REFERENCES

\* Zahm collection fully digitized and located  
at the library at CSU Stanislaus.

\*\* Loose Change Publications may be  
purchased from the Milliken Museum.

\*\*\* Available at:  
<https://gwdwater.org/land—use—sties/>.

*“An Historical Account of Waterfowling in  
the San Joaquin Valley, California, 1870–  
1970.”* By Howard R. Leach, 1984.

*“California’s Grassland Wetlands, A Legacy  
of Partnerships,”* by David Rosen. Ducks  
Unlimited Magazine, 1996.

*“California Waterfowl Association’s 75Year  
History,”* by Peter Ottesen. Business Print-  
ing Service, 2020.

*Grassland Water District, “Grassland Today”*  
Newsletters, January 1991–December  
2007. Edited by Peter Ottesen.

*“Grassland Water District Land Planning  
Guidance Study, 1995,”* By Thomas Reid  
Associates. \*\*\*

*“Grassland Water Summary,”* edited and  
published by Jayne Philpott Casey, 1962.

*“Hunting the Lawless,”* by Hugh  
Worcester. Published by American  
Wildlife Associates, 1955.

*“Introduction to Water in California,”* by  
David Carle. UC Press, 2004.

*“Land Use and Economic Study: Grassland  
Ecological Area,”* commissioned by the  
Grassland Water District, 2001. \*\*\*

*“Land Use Impacts and Habitat Preservation  
in the Grasslands of Western Merced Coun-  
ty, California,”* by Leigh Frederickson and  
Murray Laubhan, 1995. \*\*\*

*“Lone Tree,”* by Tim Poole.  
Mill City Press, 2024.

*“One Man Show... Henry Miller in the San  
Joaquin,”* by Charles Sawyer. Loose Change  
Publications, Los Banos, 2003. \*\*

*“Our Sport... Market hunting,”* by Charles  
Sawyer. Loos Change Publications,  
Los Banos, 2005. \*\*

*“Draft Comprehensive Conservation Plan  
and Environmental Assessment, San Luis  
National Wildlife Refuge Complex,”* 2023.

*“The Best of Jimmy Robinson,”* by John  
Meyer. Lakes Publishing Company,  
Minnesota, 1980.

*“The Cattle King,”* by Edward F. Treadwell.  
The MacMillan Company, 1931.

*“The Great Canal,”* By Alan M. Paterson.  
Nishihara/Wilkinson Design, Inc., 2018.

*“The Fall and Rise of the Wetlands of Califor-  
nia’s Great Central Valley,”*  
by Philip Garone.  
University of California Press, 2001.

*“The Road Over,”* by Charles Sawyer. Loos  
Change Publications, Los Banos, 2002. \*\*

*“The Salinas Gun Club, 80th Anniversary,”*  
by Peter Ottesen. Business Printing  
Service, 2009.

*“The Tarpon Club of Texas and the Genius  
of E.H.R. Green,”* by R. K. Sawyer and Jim  
Moloney. Nueces Press, 2022.

*“Translating Conservation: Principles of  
Landscape Design for the Grassland Water  
District,”* by R. F. Noss, 1995. \*\*\*

*“Travels and Traditions of Waterfowl,”* by H.  
Albert Hochbaum. University of  
Minnesota Press, 1955.

*“Waterfowler’s Hall of Fame, California,  
2006–2022,”* published by California  
Waterfowl Association, 2024.

*“Wild Lands for Wildlife...  
National Wildlife Refuges,”* by Noel Grove.  
National Geographic Society,  
Washington, D.C., 1984.

Gary Zahm, retired Project Leader, San  
Luis National Wildlife Service Complex,  
collection of notes, records, correspon-  
dence and e-mails pertaining to Kesterson  
National Wildlife Refuge and selenium  
poisoning, 1985. \*

GRASSLAND RESOURCES

**Los Banos Wildlife Area Complex**  
18110 Henry Miller Avenue  
Los Banos, CA 93635  
Telephone: (209) 826-0463  
Hours: 7:30 a.m.–4 p.m.,  
Monday–Friday

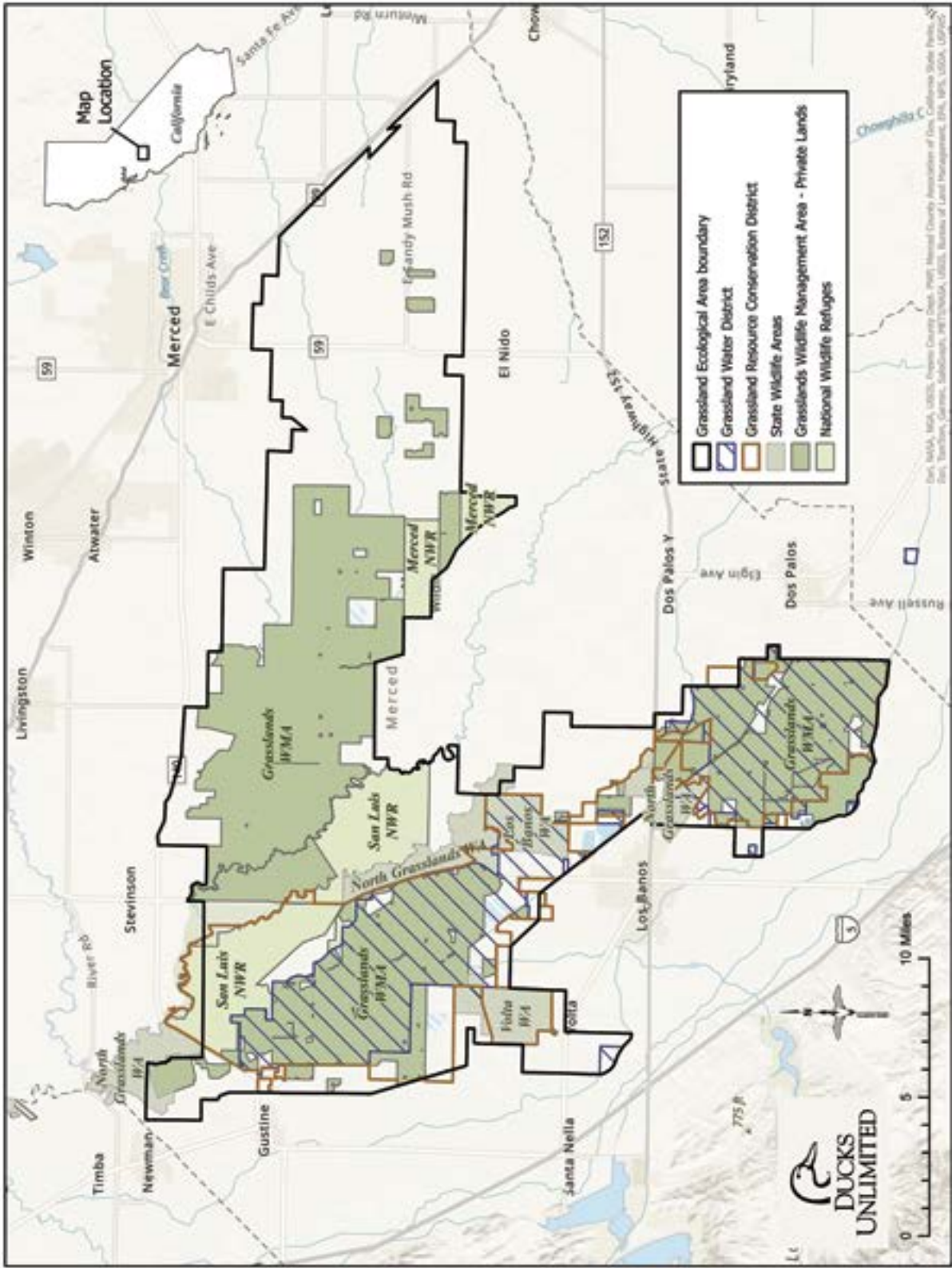
**San Luis National Wildlife  
Refuge Complex**  
7376 Wolfsen Road  
Los Banos, CA 93635  
Telephone: (209) 826-3508  
Visitor Center Hours: 8 a.m.–4:30 p.m.,  
Monday–Saturday

**Milliken Museum**  
Los Banos County Park  
905 E. Pacheco Boulevard  
Los Banos, CA 93635  
Telephone: (209) 826–5505  
Hours: 1 p.m.–4 p.m., Tuesday–Sunday

**Grassland Water District**  
200 W. Willmott Avenue  
Los Banos, CA 93635  
Telephone: (209) 826-5188  
Hours: 7 a.m.–4 p.m., Monday–Friday

**California Waterfowler’s Hall of Fame**  
<https://www.cawaterfowlershof.com/>

# GRASSLAND WETLANDS HISTORICAL TIMELINE



Grasslands Location Map  
courtesy Ducks Unlimited

**Time and Millennium**—Northern Yokuts—comprising 63 tribes and numbering more than 35,000 individuals, inhabited the San Joaquin Valley for more than 10,000 years, including the west side of what is now known as Merced County.

**1776**—Spanish explorers, led by Juan Bautista de Anza, accompanied by settlers, established villages.

**1805**—Gabriel I. Moraga discovered the Pacheco Pass, an historic trading route of the Northern Yokuts, and named it “*San Luis Gonzaga*.”

**1826**—Jedediah Smith, “*the Bible totter*,” entered the valley the first time.

**1827**—“*Cattle King*” Henry Miller, born Heinric Alfred Kreiser, in Germany, would immigrate to California 20 years later.

**1829**—Ewing Young and Kit Carson trapped in the San Joaquin Valley and encountered Peter Skene Ogden, with a party of Hudson Bay trappers. These were the early adventurers whose travels established the “*California Trails*” for the overland mass migration of people which began when gold was discovered in 1849.

**1839**—Kit Carson reported Indians had mostly “*disappeared*,” succumbing to disease, forced slavery and killed by soldiers, or placed on reservations.

**1850**—Congress approved the Swamp and Overflowed Lands Act.

**1863**—Henry Miller purchased his first land in the San Joaquin Valley, 8,835 acres in the Grasslands, for \$1.<sup>25</sup> an acre and \$5 per head for 7,500 cows. Formed a partnership with Charles Lux, also a German immigrant. Their company, named Miller & Lux, bought land bordering either side of the valley’s major rivers—through the Swamp and Overflowed Lands Act—for .<sup>50</sup> cents an acre and gained riparian water rights. The purchase included 125 contiguous miles along the San Joaquin River and more than 100,000 acres.

**1869**—Transcontinental railroad completed. Within a year, the Central Pacific Railroad, later to become the Southern Pacific, started construction of a line from Oakland to the San Joaquin Valley, reaching Fresno in 1872. A competitive line known as the San Francisco & San Joaquin Railroad, began construction of its “*Valley Road*” in 1885 that reached Fresno in 1898. It was sold to the Santa Fe Railroad that same year.

**1873**—Miller & Lux purchased a 58-mile canal from Mendota to Newman to provide water for cattle pasturage and growing wheat to fatten cattle. The canal was extended to Orestimba Creek and later added what was called the “*Outside Canal*” that move water from Crows Landing to Los Banos.

**1889**—Miller & Lux turned 109,000 acres of lowlands riparian to the San Joaquin River into man-made wetlands—irrigated to native pasture and flooded into duck ponds—where ducks could be hunted for a profit by market hunters and cattle grazed when ducks weren’t present.

**1915**—Marketing of waterfowl came to an end when state laws were made to conform to the Federal Migratory Bird Treaty Act of 1913. However, market hunting in the Grasslands went on, unabated.

**1916**—Henry Miller died, forcing heirs to Miller & Lux Company to sell 98,200 acres of riparian lowlands and wetlands in Game District No. 3 in western Merced County for death taxes.

**1926**—Ten years after Henry Miller’s death, lands of poor quality, high in alkalinity and without water rights, were sold to private duck clubs for the ensuing years. The land sold for \$17 to \$25 an acre.

**1929**—Los Banos State Game Refuge on Henry Miller Avenue, with approximately 3,000 acres, became the first state—designated wildlife area in California. No hunting was allowed.

**1934**—President Franklin D. Roosevelt signed the “*New Deal for Waterfowl*” the enabled the Migratory Bird Hunting and Conservation Stamp Act. Colorful artist and hunter Jay “*Ding*” Darling created the first federal duck stamp, a drawing of mallards.

**1935**—Federal agents and California game wardens put an end to market hunting in the Grasslands once and for all, when a major “*bust*” took down 13 market hunters who hadn’t given up their illegal trade in waterfowl. Among the arrested was the notorious Howard “*Bluejay*” Blewett, who was given 18 months in the federal penitentiary.

**1937**—In response to the “*Dust Bowl*” and precipitous losses of waterfowl, Ducks Unlimited was founded.

**1939**—The Federal government purchased the Miller & Lux Company water rights to 98,200 acres in the Grasslands of western Merced County. The water purchased allowed creation of the Central Valley Project’s Friant Unit.

**1944**—Central Valley Project completes construction of dams on the San Joaquin and Kings rivers, which ended water deliveries to the Grassland wetlands and threatened the existence of migratory waterfowl and water-dependent birds.

**1944**—Grass Lands Water Association, formed by concerned wetlands owners and led by J. Martin Winton, began negotiations with the federal government to secure a reliable water suppl for wintering waterfowl.

**1945**—Ducks Hunters of California was founded under its first president, Carl F. Wente. Later the non-profit organization would change its name to California Waterfowl Association.

**1951**—Merced National Wildlife Refuges is established by the U.S. Fish and Wildlife Service, with funding from the Lea Act, to attract waterfowl from adjacent farmland.

**1952**—Volta Wildlife Area, a state area, provided the first public waterfowl hunting in the Grasslands. Hunting at Los Banos Wildlife Area was allowed one year later, in 1953.

**1953**—Negotiations collapsed between the federal government and the Grass Lands Water Association when water supplies were cut off. Later, a lawsuit brought by J. Martin Winton was successful, and brought 55,000 acre-feet of water to the Grasslands. President Dwight D. Eisenhower signed the enabling legislation and presented the pen to Winton.

**1954**—Never ending battles over water led to the formation of the Grasslands Water District, a state water agency, which took over all assets from the former Grass Lands Water Association. The newly formed water district would receive and deliver water solely for wildlife management purposes within the Grasslands Resource Conservation District.

**1967**—San Luis National Wildlife Refuge is established by the U.S. Fish and Wildlife Service.

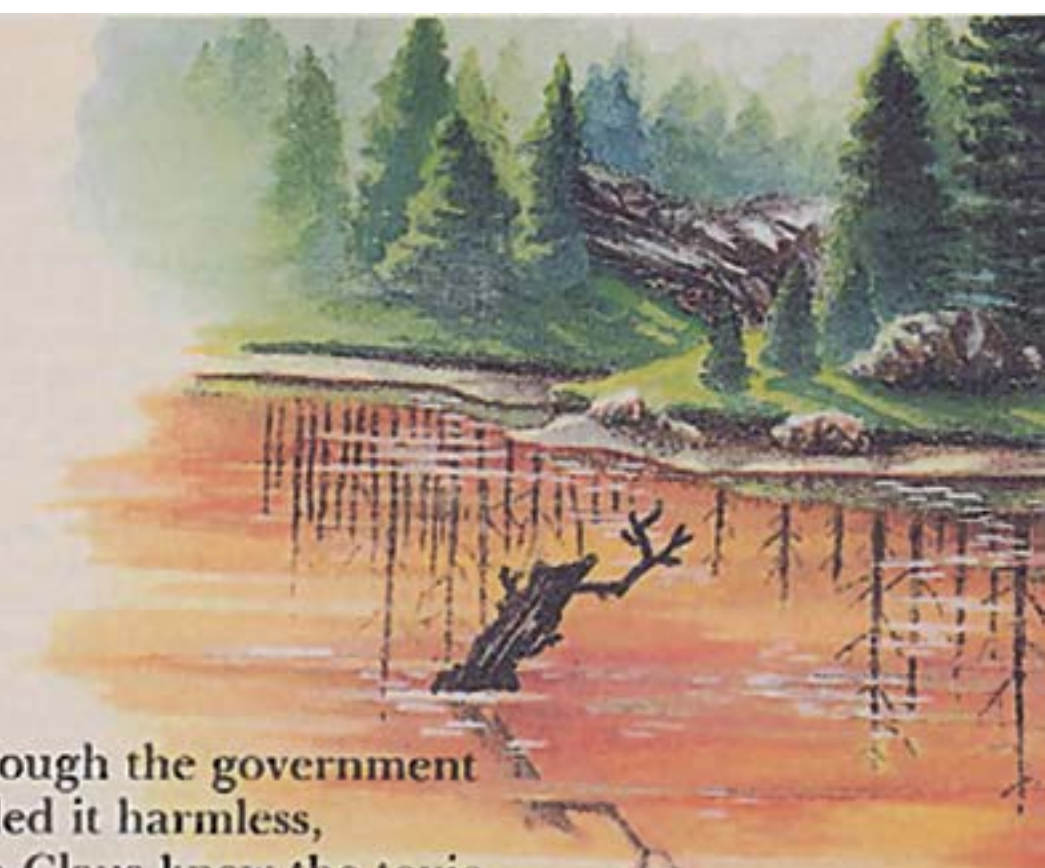
**1971**—State Legislature, backed by J. Martin Winton and the California Waterfowl Association, authorized the California Duck Stamp. Paul Johnson created the first image, a northern pintail.

**1979**—U.S. Fish and Wildlife Service implemented the Federal Easement Program to purchase development rights from willing private duck clubs to protect wetlands in perpetuity.

**1983**—Scientists studying 1,200 acres of evaporation ponds at Kesterson National Wildlife Refuge confirmed that contaminated agricultural tile drain water, loaded with selenium and toxic trace elements, caused a 64% rate of deformity and death of embryos and hatchlings of wild fowl and aquatic birds, as well as some livestock death.

**1985**—Abatement order to close ponds at Kesterson National Wildlife Refuge by the California State Resources Control Board, followed a successful lawsuit by James Claus, owner of 5,000 acres of Grassland wetlands, and others, to prohibit the use of tainted agricultural drain water at the refuge and provide a supply of clean water by the U.S. Bureau of Reclamation to be supplied by the Grassland Water District.

**1992**—President George H. W. Bush made “*no net loss of wetlands*” the national goal and signed the Central Valley Project Improvement Act that guaranteed refuges and private wetlands within the Grassland Resource Conservation District a firm supply of good—quality, well-timed water amounting to 180,000 acre-feet annually.



Though the government called it harmless, Jim Claus knew the toxic waste water was causing an ecological disaster. His lonely battle against the bureaucrats dramatizes a national dilemma

## The Case of the Poisoned Wildlife Refuge

BY RANDY FITZGERALD

ONE MORNING in late 1981, 15 cattle belonging to Jim and Karen Claus drank from an irrigated pasture on their ranch in California's San Joaquin Valley. And one by one, the cows lay down and died. A foul odor began to permeate the ranch. To Jim, it seemed to originate in the Kesterson National Wildlife Refuge next door. As months passed, fish disappeared from streams, frogs from irrigation ditches, rabbits from fields. Birds fell dead. The environment was degenerating before their eyes.

For Jim and Karen Claus and

ILLUSTRATION: JAMES E. DYERMAN

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their three children, their 1400-acre ranch and duck-hunting club represented their savings and a lifelong dream. Both held Ph.D.s—Jim in land-use economics, Karen in psychology—and they had been trained to ask questions. But when they tried to raise an alarm, people ignored them. No one wanted to believe that the marshy 5900-acre refuge for migratory birds could be dying.

Investigating further, Jim began to suspect something was wrong with the irrigation water, the valley's lifeblood. He decided to notify officials at the U.S. Fish and Wildlife Service, which ran the Kesterson refuge. Jim had been introduced to FWS in 1979 when he entered into an easement agreement with them. In return for a pledge to keep their property as it was—native pasture and a duck habitat—land-owners were promised the government would protect the area, called "Grasslands," as permanent wetlands.

In late 1981, Jim flew to Portland, Ore., to warn FWS regional officials: "Your refuge is killing the very life it is supposed to protect." He says that they tried to assure him nothing was wrong with the water and perhaps predators were depleting the wildlife. But once back home, he received the first of a series of packages, apparently mailed anonymously by sympathetic employees of the FWS and the Bureau of Reclamation.

Inside, Claus found reams of federal documents relating to Kes-

terson and the surrounding 50,000 acres of the mostly private Grasslands. He was shocked. Kesterson was being transformed into a toxic waste dump. "I can't believe our government is doing this to us," he raged. "This water is dangerous!"

"Then we must close Kesterson," Karen replied, "no matter what it costs."

Jim first had to find the source of the pollution and who was responsible. His search would uncover a problem with national implications.

**Corporate Muscle.** Jim found that water flowed into Kesterson along an 83-mile-long drain from the Westlands Water District, a group of several hundred farming operations southwest of Fresno. An impermeable clay layer underlies much of Westlands' 603,000 acres, creating serious drainage problems. High salinity levels tended to combine here in the irrigation water with naturally occurring trace elements such as selenium—toxic at high levels—in Westlands' soil. This water had to be removed after use or it would poison crops. So farmers hooked up subsurface tile drains to pipe used irrigation water away, via the Bureau of Reclamation's master drain, to Kesterson.

Kesterson, with its 12 evaporation ponds, was originally planned as part of a drainage system through which the agricultural waste water would flow, eventually to reach the San Francisco Bay delta. But in 1975 a shortage of funds and environmental concerns over high salinity

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and pesticides in the water prevented the system's completion, and the drain stopped at Kesterson.

Tile-drain water had begun flowing into Kesterson in 1978, and by 1981, the year that Jim noticed animal deaths and deformities, the waste water was all from tile drains. Sources say that for several years Reclamation continued to deny there was a problem.

Claus also began to understand the political muscle he was up against. These were not ordinary farmers. Westlands' membership was dominated by large corporations, which, with other landowners, exercised considerable influence over the Bureau of Reclamation. Westlands was America's biggest irrigation district and the largest recipient of federally subsidized water in the reclamation program.

To favor family farms, the law had limited those that could receive subsidized water to 160 acres. (It has since been raised to 960 acres.) This acreage limitation was circumvented by elaborate leasing arrangements. Further, as a Natural Resources Defense Council report notes, over half of Westlands acreage was permitted to be devoted to growing surplus government crops, especially cotton. Thus Westlands

received subsidies for both its water and its crops.

**Unanswered Complaints.** Because Westlands is semi-arid, its soil can only be made highly profitable with enormous floods of cheap irrigation water. A 40-year contract, which went into effect in 1968 between Westlands and Reclamation, made



Jim Claus kneels on the ravaged soil of Kesterson

this possible: it called for water deliveries from federal dams at \$7.50 an acre foot. (A study by the Natural Resources Defense Council shows the true delivery cost is \$97 an acre foot, with American taxpayers making up the difference.) And Reclamation charged Westlands only 50 cents an acre foot to divert the waste water away.

For months, Claus tried to warn his Grasslands neighbors about the danger in re-using Westlands' waste water, but to no avail. The

PHOTO: WARRICK MORGAN

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cattlemen feared that if word got out their water was toxic, their herds would become worthless and property values would plummet.

As Claus persisted in his campaign, his family was harassed. Vandals ransacked their home, and an anonymous caller threatened to harm his family. But before long, other landowners adjoining Kesterson began experiencing problems. On Frank and Janette Freitas's 5500-acre ranch, sheep and cattle started dying, and gardens refused to grow as Kesterson water began seeping into their properties.

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They filed a formal complaint with the California Regional Water Quality Control Board, Central Valley Region, requesting immediate enforcement of the water-quality law. Months of research went into Jim's presentation. But the board denied his request.

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as a water dump until July 1986, when it would be closed.

Jim Claus had sued the United States in U.S. District Court for damages relating to Kesterson seepage. The Justice Department asked the court to dismiss the suit, calling it "a patently unmerited effort to open the federal treasury to their gain." The suit did not proceed. Claus then sued the government in U.S. Claims Court. Supporting his case were the findings of Herbert Skibitzke, former senior research hydrologist for the U.S. Geological Survey: The land surrounding Kesterson "will not be redeemable in a reasonable time or at a manageable cost. The water pouring onto the land is inconceivably bad, and the damage is essentially permanent."

**Ecological Disaster.** When Claus requested government documents bearing on his case, he was told he must pay over \$170,000 for search and photocopy costs. "The government's intent is to bankrupt the Claus family or force them to withdraw the lawsuit," contends Bruce Nahin, a Los Angeles attorney representing them. The squabbling over blame continues, while the Clauses, Freitas and another family involved have been reduced to financial ruin, pain and despair.

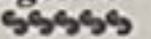
Observers believe Justice and Interior are fighting so hard because they want to avoid a precedent that might encourage similar suits. Last year, a survey by the FWS found that 85 wildlife refuges were suffering from documented, suspected or

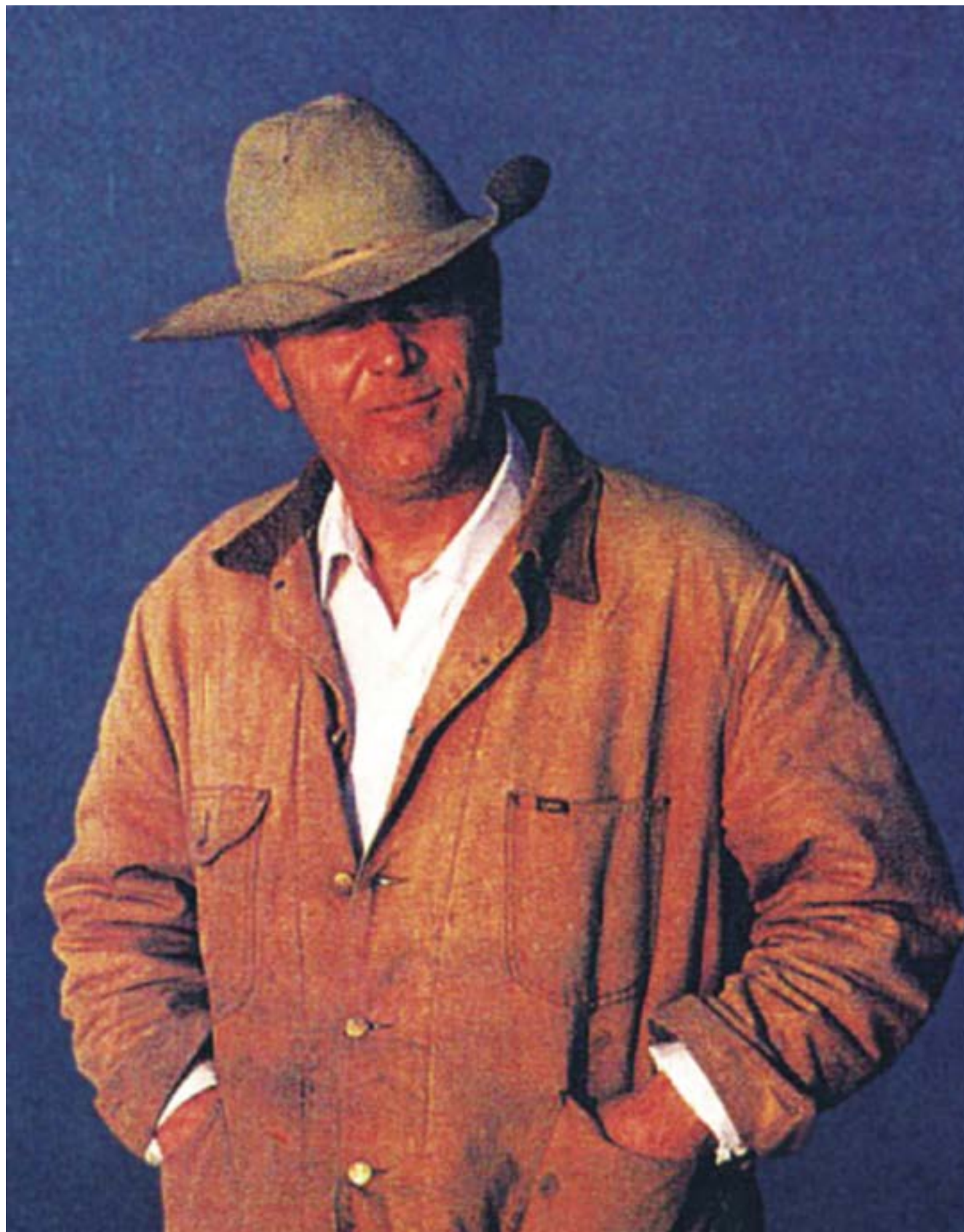
potential problems—most caused by agricultural irrigation wastes that Interior has allowed to be dumped in them for years. The Stillwater National Wildlife Refuge in Nevada, for instance, has selenium levels comparable to Kesterson's. Early this year millions of fish and scores of birds were found dead there.

In 1985 Jim Claus and his family moved to Portland, Ore., where they are now struggling to establish new careers. He takes small consolation from events that have transpired since he first spoke out. Although Kesterson was closed to drainage dumping after June 30, 1986, Westlands still receives taxpayer-subsidized federal irrigation water for its toxin-producing soils.

Donald Anthrop, environmental professor at San Jose University, calls the episode "an ecological disaster brought about by subsidized irrigation of marginal land that should never have been irrigated in the first place." And the Natural Resources Defense Council asks, "Does the profit of a relatively small number of farmers justify water subsidies that may create an insoluble threat to the environment?"

The Interior Department should settle damage claims with landowners around Kesterson. More important, the FWS and Bureau of Reclamation should put an end to the ecological disaster at all wildlife refuges in the West. We must not let our nation's wildlife refuges become toxic dumps.





# Down the drain



**He's been reviled as a crank and a crackpot, but Jim Claus took on the government and agribusiness over one of the worst toxic dumps in the West — and won.**



all Jim Claus the swamp fox.

The man who took on everyone from the Secretary of the Interior to California's most powerful farmers to force them to admit that the way we irrigate farms is poisoning the West has suffered the fate of most whistle blowers. He was driven from his home, had his livelihood destroyed,

was vilified as a crank and troublemaker and rarely received credit for his single biggest victory: a 1985 state order to shut down the farm waste water evaporation ponds at the Kesterson National Wildlife Refuge, an order that forced the federal government to reexamine its irrigation practices throughout the American West.

But after spending the 1980s fighting in the courts, pleading his case before local, regional and state water boards and lobbying the media and agri-

inate not only western valley farmland but the drinking supplies sent over the Tehachapi Mountains to Southern California," Claus wrote in his latest federal lawsuit.

The problem at Kesterson was selenium, a normally harmless trace element that is toxic in concentrated doses and causes a variety of ailments, including birth defects and death. Selenium from the western San Joaquin Valley soil was contaminating the irrigation water, which in the late 1970s was discharged into the Kesterson Reservoir, where it quickly polluted the food chain. By 1983, the bird sanctuary 80 miles southeast of San Francisco was dying. Dead birds floated everywhere in the stinking evaporation ponds.

But if selenium was the immediate culprit at Kesterson, Claus believes the real killers were members of the so-called Hydraulic Brotherhood, a powerful network of politicians, reclamation officials, engineers, scientists and rich farmers who be-

cultural scientists, Claus is making it clear to all but the most obstinate that wetlands for protected bird species are not good places to dump farm drainage water laden with deadly poisons.

Five years after he won his historic Kesterson cleanup order, Claus is back in federal court to force a solution to the drainage crisis in the western San Joaquin Valley. He wants to make sure that the type of toxic farm drainage water that ravaged Kesterson doesn't destroy other rivers and wetlands that have become disposal areas for irrigation projects all over the West. "Much of the agricultural effluent in the San Joaquin River is being sucked up at the federal pumps in Tracy and sent back down the Delta-Mendota Canal and the state Aqueduct to contaminate not only western valley farmland but the drinking supplies sent over the Tehachapi Mountains to Southern California," Claus wrote in his latest federal lawsuit.

By Lloyd Carter

Photographs by Elizabeth Mangelsdorf

San Francisco Examiner

Sunday, June 10, 1990 • I M A G E • 21



**The Kesterson Reservoir, 80 miles south-east of San Francisco (see map, opposite), is a refuge for migrating geese, ducks and other water fowl. Inset, right, the now unused San Luis Drain, was "temporarily" dumping farm drainage at Kesterson while the government studied its controversial plan to eventually flush the water into the sea via the San Francisco Bay. But in 1983, dead birds and deformed embryos started turning up at Kesterson in large numbers. The culprit was selenium, a trace element in the soil, toxic in concentrated doses, that had dissolved in the irrigation water. Opposite top (l. to r.) embryo with curled lower beak and missing eyes; embryo with missing eyes, wings and legs; embryo with missing eyes, curled lower beak, only one toe on each foot, upper legs shortened and twisted; embryo with missing eyes, legs and lower beak, elongated upper beak, eroded nostrils, only one small wing; and normal embryo. From the lab of Dr. Henry M. Oshendorf of the U.S. Fish and Wildlife Service.**



believed without question that California's rivers should be rerouted to develop the western valley desert. It seemed like a good idea 30 years ago, and a lot of those factory farmers in the western valley will argue fiercely that it's still a good idea.

The problem in the western valley is that all the irrigation over the last half century has waterlogged the land, and unless it is periodically drained to lower the groundwater table, salts and toxins just below the root zone kill the crops. And there are a lot of toxins in western valley soils just as nasty as selenium, things like arsenic and boron, heavy metals, uranium, cadmium, mercury, chromium and sodium sulfate. Because of the drainage problem, plans were made in the 1960s to build a massive canal — the San Luis Drain — to carry the waste water to the Sacramento-San Joaquin Delta, where it could be "safely" flushed through the San Francisco Bay to the Pacific Ocean, the ultimate salt sink.

But, unsurprisingly, Delta and Bay Area residents were suspicious of the scheme and demanded scientific studies to prove that it was safe. So in the 1970s, with studies underway, the Hydraulic Brotherhood decided to use Kesterson as a "temporary" dumping ground for drainage from the Westlands, the nation's biggest federal irrigation district — legendary for its political muscle. That's when Jim Claus came onto the scene and muddled the waters.

A successful Bay Area real estate investor with a Stanford Ph.D. in urban geography, Claus started going duck hunting in the Merced County wetlands around Kesterson in the early 1970s and fell in love with the area. By the late 1970s he'd bought several combination cattle ranch/duck clubs there, including 950 acres right next to Kesterson.

Claus did not notice anything unusual until 1981, when his forage grasses wouldn't grow and his cattle started losing weight, getting sick and dying. The Freitases next door were having similar problems; their cattle were dropping dead every time they drank the foul smelling water that was starting to bubble up on their property. Local hunters reported nabbing ducks that were sickly and underweight, some with damaged feather patterns. Another neighbor, Frank Schwab, found a goose with a

stunted leg. Claus began speaking out and things got weird. "We had death threats, we couldn't eat in restaurants, we weren't welcome in town anymore. When we were at the hearings we had to keep moving our vehicle," Claus said. "We were attacked in every possible way you can imagine, including having our house burglarized. We had people trespass on our property, destroy items, give us (threatening) messages, call us on the phone, threaten to maim and kill our children and kidnap our youngest child."



The pressure from the federal government was more subtle. The Bureau of Reclamation, which operated the Kesterson evaporation ponds, said there was no leakage from Kesterson to adjacent ranches. The water was fine, they insisted, cleaner than local groundwater.

Scientists later found that selenium in the drain water had quickly infected Kesterson plant life, then become more concentrated as it moved up the food chain to the migratory ducks, which started showing bizarre embryo abnormalities like missing eyes, wings and feet and corkscrewed beaks. But the bird deformities did not become public knowledge until the fall of 1983, five months after they were discovered.

By 1984, Kesterson was at full virulence. Birds were dying by the thousands. As many as 2,600 were picked up in a single day, 15,000 in a month. Bureau officials called it avian cholera, but 12 of the 14 birds that were actually tested had died of selenium toxicosis.

In late April of that year, Claus and his wife, Karen, appeared before the Central Valley Regional Water Quality Control Board to demand that Kesterson be cleaned up or closed. The regional

SAMUEL W. WOOD



board, dominated by farming interests, refused to acknowledge that there was even a problem. So the Clauses appealed to the State Water Resources Control Board with a massive stack of paperwork they had accumulated to document their claims, including proof that scientific warnings had been issued all through the 1960s and 1970s about the dangers of the kind of drainage water being dumped at Kesterson.

As early as 1949, David Love of the U.S. Geological Survey had proposed a thorough study of selenium in the West, warning that it could save the country tens of millions of dollars and much future grief by keeping bad land out of production. Love says politics killed his proposal. Agriculture Department officials admitted in 1961 that they feared a selenium survey could hurt property values all over the West.

Reclamation officials and agriculture interests, who wanted to continue dumping drainage at Kesterson, rushed busloads of farmers to the December water board hearing — but to no avail. On Feb. 5, 1985, Jim and Karen Claus won the order to clean up the reservoir.

Six weeks later, just a few days after Claus could be heard thundering righ-

teously about government stupidity on "60 Minutes," former Interior Secretary Donald Hodel ordered the reservoir closed. It was a stunning move. Twenty-five years after it had been authorized by Congress and narrowly approved by a majority of California voters, the still unfinished state-federal plumbing job to irrigate the western valley had dead-ended in the sulfurous Kesterson swamp. Since the closure, the Bureau of Reclamation has spent nearly \$50 million to study and undo the mess, and will spend \$3.5 million a year, every year for the foreseeable future, just to keep an eye on it.

The shutdown sent shock waves through California's \$17 billion-a-year agriculture industry that would eventually reverberate around the globe. Kestersons were springing up everywhere, including the Soviet Union, where a scheme to grow cotton in the desert killed the Aral Sea, once the world's fourth largest fresh water lake.

Jim Claus shook the temple of the Hydraulic Brotherhood to its foundations. It may never recover. Whether the Clauses will recover is another matter.

When the death threats grew serious and their Kesterson area home was bur-



glarized, they took their children and fled, first to Beverly Hills, then to Ventura and finally to a country home near Portland, Ore. Claus briefly considered moving to Australia but decided to stay and fight. "At that point, if I had stayed any length of time in Australia, I simply would not have come back to the United States. But I felt that I had a responsibility to stand up for what was right. I realized that I could not simply walk away from the situation," he said.

The family's bitter battle to recover damages to their ranch lasted two years and ended in July 1987 with the government agreeing to buy 90 acres. It was an expensive war, fought in a Washington, D.C., courtroom with no coverage by the TV cameras and reporters who had flocked to the earlier Kesterson hearings in Sacramento and Los Banos.

Claus served as his own attorney and was almost jailed for contempt when he accused the judge of being in cahoots with the government lawyers. At one point, the government tried to charge the Clauses \$170,000 for copying documents the Interior Department was providing free to the news media. After a sympathetic *Reader's Digest* reporter had his magazine's lawyers question the Justice Department's attorneys about their tactics, the department settled, though without admitting that the government had done anything wrong. In the end, Claus had to concede that the fight had cost him more than his ranch was worth.

**E**xcept for an occasional foray into water board hearings on the Kesterson cleanup, Claus dropped from sight for a while, keeping a low profile in Oregon. But in mid 1989 the swamp fox emerged with a new lawsuit.

This time Claus is fighting the Interior Department over its failure to protect migratory birds in the Tulare Basin, a factory farm area in the southwest corner of the San Joaquin Valley where there are more than 7,000 acres of drainage water evaporation ponds, many far deadlier than Kesterson. National wildlife refuges established there to shelter migratory ducks and geese are woefully inadequate and lack secure water supplies. One wetlands "refuge" known as Pixey has no water at all. Presumably the ducks bathe in the alkali dust.

The southern valley is the domain of some of the state's most powerful landholders, including J. G. Boswell, who owns 140,000 acres, and the Chandler family, owners of the *Los Angeles Times*. Perhaps coincidentally, *Times* coverage of the Tulare Basin dispute has been vir-

tually non-existent. Republican Congressman Charles "Chip" Pashayan, who represents the Basin, has ignored the problem. Boswell is one of his largest contributors.

U.S. District Judge Lawrence Karlton, who has had many thorny California water issues before him over the years, is faced in the Claus suit with one of the most difficult decisions of his career. Acting again as his own attorney, Claus has amassed a mountain of persuasive evidence. U.S. Fish and Wildlife officials have said publicly that there are Migratory Bird Treaty Act violations occurring in the Tulare Basin, where bird deformity rates are higher than they ever were at Kesterson. But Justice attorneys insist that the law against killing migratory birds is being enforced.

Claus says he finds himself once again defending public resources because government agencies entrusted to do so have failed so miserably. "If one has to find the individuals with the least conscience and the most fight, one must look at the lawyers. Every time a public servant lies, there is a government lawyer not far behind him telling him that he doesn't have to tell the truth. The lawyers manage to remove any personal sense of responsibility."

The dozens of professional papers and doctoral theses written about Kesterson over the last five years always credit the state water board or Donald Hodel with closing Kesterson. As if either would have taken action without the screaming and relentless Jim and Karen Claus. It's a slight that still rankles the Clauses, but there are signs that they are at last receiving recognition for their efforts. This year they spoke at the annual selenium conference at UC-Berkeley where Jim was prevented from speaking seven years ago by Interior officials who labeled him a crackpot.

Claus still owns the Kesterson Gun Club — which he renamed the Blue Goose. He says he will sell it to the government if the government wants to buy it. Claus still likes to prowls his swamp, making improvements in the marsh, watching ducks fly overhead. The duck population is at an all-time low and he doesn't hunt anymore. He talks instead of turning all 50,000 acres of privately owned duck clubs in the area into public wetlands for future generations to enjoy.

There's been enough killing, he says. ■

*Lloyd Carter is a reporter for United Press International in Fresno who won the San Francisco Press Club's Best Environmental Coverage award in 1985 for his reporting on Kesterson.*



White-fronted Geese  
photo courtesy Gary Zahm

## ADDITIONAL TITLES BY PETER OTTESEN

“BIRDS AND MAMMALS OF SAN JOAQUIN COUNTY”—1975

“PUBLIC SCHOOLS OF SAN JOAQUIN COUNTY—1852–1990”

“LEGACY OF VENICE SLAND”—Three editions: 1999, 2004, 2008

“HISTORY OF THE SALINAS LAND & CATTLE COMPANY”—2009

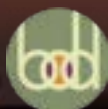
“CENTENNIAL OF THE STOCKTON GOLF AND COUNTRY CLUB”—2014

“CREATING A BALANCED, SUSTAINABLE WETLAND HABITAT...  
THE BLACK HOLE”—2020

“75-YEAR HISTORY OF THE CALIFORNIA WATERFOWL ASSOCIATION”—2020”

“CENTENNIAL OF THE BUTTE LODGE OUTING CLUB”—2024

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