



# Land of the West Wind

Volume 16, Issue 1

March 2016

## The Marsh Has Ears

By: Sarah Estrella (CDFW) & Cory Overton (USGS)

One small component of a larger long-term waterfowl study by the U.S. Geological Survey (USGS) and Department of Water Resources (DWR) in Suisun Marsh involves placing acoustic recording units, or ARUs, in locations around the marsh. These ARUs operate like remote microphones and can record 24-hours per day. USGS scientist Cory Overton says, "the recordings are like being able to sit at a spot in the marsh while being invisible to everything around."

Researchers are hoping to use these ARUs to identify both which species use different marsh types and when they use them. The ARUs are particularly useful for identifying species that are active at night

or are secretive, rare, or otherwise difficult to encounter. Toward that end, one of the first uses is to analyze calls for secretive marsh birds, specifically the state threatened California black rail and the state and federally endangered Ridgway's (formerly Clapper) rail.

The 1981 U.S. Fish and Wildlife Service's Biological Opinion for the implementation of the Suisun Marsh Plan of Protection requires regular surveys of Ridgway's rail, salt marsh harvest mouse, and their habitat. Habitat can be measured through aerial photography and salt marsh harvest mice can be captured in live traps baited with bird seed and ground walnuts.

(**EARS**, cont. on pg . 6)



California Black Rail

## SCMAD Zika Update

By: Richard Snyder (SCMAD)

Zika is an infectious disease caused by the Zika virus which is an Arbovirus transmitted to people by mosquitoes in the genus *Aedes*.

Zika occurs in many tropical and sub-tropical areas of the world, particularly Africa, Southeast Asia, and islands in the Pacific Ocean. Recent outbreaks have occurred in the Caribbean, Central and South America, and Mexico.

In the Americas, the principal vector is *Aedes aegypti* (also known as yellow fever mosquitoes), but *Aedes albopictus* (also known as the Asian tiger mosquitoes) is a potential vector as well. These species live in close association with humans, and occur in numerous types of water-holding containers such as buckets, plastic containers, bird-baths, dishes under potted plants, pet-watering dishes, discarded tires and other items often found around human dwellings. ***They do not live in ditches, marshes, or other large bodies of water.***

The Zika virus has frequently been found to be transmitted from mother to fetus, and there

(**ZIKA**, cont. on pg . 6)

## Land of the West Wind

Quarterly newsletter of the Suisun  
Resource Conservation District  
Address: 2544 Grizzly Island Road  
Suisun, CA 94585  
Telephone: (707) 425-9302  
Fax: (707) 425-4402  
Water Manager office: (707) 426-2431  
E-mail: [srkd@suisunrkd.org](mailto:srkd@suisunrkd.org)  
Website: [www.suisunrkd.org](http://www.suisunrkd.org)

### SRCD Staff

Steven Chappell, *Executive Director*  
Bruce Wickland, *Operations Manager*  
Kelli Perez, *Office Supervisor*  
Tim Edmunds, *Biologist/Water Manager*  
Dean Podolsky, *Biologist/Water Manager*  
Jeff Taylor, *Biologist/Water Manager*  
Steve Witherspoon, *Caretaker LJI*

### Board of Directors

Tony Vaccarella, *President*  
(650) 365-1642  
Terry Connolly, *Finance*  
(707) 422-6700  
Arnold Lenk, *Agency Relations*  
(925) 284-3100  
Jim Waters, *Legal*  
(510) 409-3864  
Mike Lewis, *Personnel*  
(707) 224-3824

### Associate Directors

Dennis Becker  
Kurt Black  
Bill Brush, *PR*  
H. Kent Hansen

### Directors Emeritus

James Bancroft  
Paul Crapuchettes\*  
Ray Lewis\*  
Dr. William Coon\*  
Greg Palamountain\*  
Timothy Egan\*  
Leland Lehman\*  
(\*deceased)

**SRCD's public meetings are  
held at 2 PM on the second  
Wednesday of each month at the  
Solano County Supervisors Chambers  
675 Texas Street, Fairfield, CA 94533**

SRCD represents private landowners of the Suisun Marsh at the Federal, State, and local levels. Its historic goal has been to achieve a water supply of adequate quality so that preferred wetland habitat values will be retained through appropriate management practices. Through cooperation with landowners and various agencies, SRCD seeks to develop new programs aimed at protecting and improving the Suisun Marsh for future generations.

## The Vision of a Pacific Flyway Center Takes Flight in Suisun

*By: Michael Sutton, Pacific Flyway Fund*

The Pacific Flyway is an "aerial superhighway" that stretches for 10,000 miles from the Arctic to Patagonia. Each year, more than a billion birds travel the Flyway on their annual migrations. Along the way, they need stopover sites with suitable habitat and food supplies such as the Suisun Marsh. However, many of these sites today are impacted by development and other factors that threaten to affect the viability of the entire Flyway.

Few people appreciate the importance of the Flyway to the vitality of North American populations of waterfowl and other migratory birds. Recognizing the need to educate the public—particularly children—on the importance of the Flyway, in 2015 Ken Hofmann, a Concord developer and philanthropist, established the nonprofit Pacific Flyway Fund. Its purpose is to raise the necessary funds to build the Pacific Flyway Center, a world-class attraction with the mission of inspiring conservation of the Flyway.

The Center will be a major interpretive and educational facility that will introduce the public to the wonders of the Flyway and encourage wildlife conservation and land stewardship. Inspired in part by the Wildfowl and Wetlands Trust in the United Kingdom, the Center will restore wetlands and make them accessible to the visiting public. The Center will have significant indoor and outdoor features, including a large education and event center with interactive exhibits, an auditorium or amphitheater, parking spaces, restored wetlands, boardwalks, and wildlife viewing structures.

The Center will educate the public on the wonder and value of the wetlands, watersheds, and wildlife of the Flyway and encourage good land stewardship. The Center seeks to expose visitors to the ecological relationships among water (quality and hydrology), marsh vegetation, invertebrates, and migratory birds. The project will allow people from the Bay Area community and visitors from all over the world to encounter wetlands and wildlife in their natural habitats. It will provide an opportunity for people to learn about habitat restoration and the conservation of wetlands and wildlife. Visitors will experience first-hand the magic that happens every day in the marsh.

The proposed project site lies on the Garibaldi tract at the western edge of the Suisun Marsh where the Fund is in the process of acquiring suitable land on which to build the Center. The site is conveniently located adjacent to an existing exit from Interstate 680, which handles traffic of 280,000 cars each day. Nearly nine million people live within a 60-mile radius of the site, including the cities of San Francisco, Oakland, San Jose, and Sacramento.

*(FLYWAY, cont. on pg . 6)*



## California Waterfowl Association 2015-16 Education Centers update

By: George Oberstadt, CWA Heritage Program Supervisor

California Waterfowl Association (CWA) Hunting Heritage programs hosts hunter recruitment and retention events at our 2 properties in Suisun Marsh (Grizzly Ranch and Denverton). These Conservation Education Centers host camps, clinics, fun shoots and hunts for all ages and ability levels including youth, family, veterans, women and general public opportunities.

With the youth hunt weekend in February it brings to a close a very successful and rewarding hunting season with close to 1,000 attendees averaging over 2 birds per gun for the season. These hunting opportunities are offered through CWA's statewide Hunt Program and offered on the California Waterfowl website starting in August. A big part of our hunting outreach is designed to ensure new hunters (youth, women, and veterans) have the opportunity and mentorship to stick with hunting into the future. By providing "guides", instruction, equipment and networking support we are hoping to overcome many of the barriers that prevent folks from continuing our hunting traditions. Our tremendously popular "Duck Camp" and "College Camp" were great successes and also follows along providing hunter skills training, mentorship, and opportunity for new hunters including future wildlife management professionals.

CWA's Hunting Heritage programs don't stop when the hunting seasons wrap up. In fact, our properties in Suisun Marsh get even busier once the guns and waders are put away. Many programs are offered with "recruitment" of new hunters in mind. Level 1 youth hunter camps include hunter certification along with a summer camp filled with duck banding, shooting and lots of other fun activities. Level 2 camps keep these youth hunters outdoors after they get a hunter safety certificate and incorporate more advanced fun including sporting clays and muzzleloader shooting.

Ladies events, Family Fun shoots, Family Camp, Waterfowl hunting clinics and Duck Camp are also offered to provide lots of different fun activi-

ties and formats to accommodate different folks interests and schedules. Lastly, CWA has educational programming for the non-hunting audience by hosting school and group field trips and events, teaching the important role that hunting plays in wildlife conservation. See list below of upcoming events and visit CWA's web and Facebook pages for details and registration information. Questions about programs or interest in volunteering to help with these events call or email George Oberstadt 916-275-0961

[goberstadt@calwaterfowl.org](mailto:goberstadt@calwaterfowl.org).

### **2016 Calendar – upcoming CWA events**

Becoming an Outdoors Woman /

Ladies Fun - May 21

Adult Hunter day - May 22

Fun Shoots - June 11<sup>th</sup> and August 28<sup>th</sup>

Youth Hunter Camps (Level 1) - June 12-16 and July 10-14

Youth Hunter Camps (Level 2) - June 19-23 and July 17-21



*Humboldt State students at 2016 College Camp*

## 2015/2016 Grizzly Island Wildlife Area Waterfowl Season Summary

By: Orlando Rocha, CDFW Environmental Scientist

The 2015/2016 season has officially come to a close. While it was a long tiring season and a part of me is glad to see it go, the other already misses it and is counting down the days until next waterfowl opener. Like most, my focus will shift to what we neglected during the season; with this nice weather fishing comes to mind. In general the season on the Grizzly Island Wildlife Area (GIWA) was a success, no major accidents or mishaps and our hunters had a good season.

We had 283 more hunters than last year, but shot 437 fewer waterfowl this year. These numbers below do not include coots. If you look up the numbers on our DFW website, they will not match. For the curious folks, our hunters shot 544 coots this season. Other hunted species include 69 Snipe.

Continuing last year's trend, pheasant hunting was pretty poor on the GIWA. Hunters harvested 69 wild pheasants and 149 planted pheasants for a total of 218 pheasants for the year.

CDFW staff, in cooperation with CWA, put together a proposal and received grant funding to plant 180 acres of upland habitat that will provide nest cover and food not only for pheasant but also for our locally nesting waterfowl. We have high hopes that this will give us a boost in pheasant numbers for the upcoming season.

Our Federal youth waterfowl hunt weekend took place the weekend after the regular season closed was a huge success with the youth shooting a 3.5 bird average on both days. Now all we need is for more juniors to show up and take advantage of the opportunity next year.



Geese in flight



Northern Pintail

2015/2016 To Date 2/7/16					
Date	Total water-fowl Hunters	Total Ducks	Total Geese	Total Water-fowl	Average
1/31/16	6097	9853	71	9924	1.62
Last Season 2014/2015					
1/25/15	5814	10236	125	10361	1.78
Top Five Birds of 2015/2016					
Bird:	Northern Shoveler	American Wigeon	Green-winged Teal	Ruddy Duck	Northern Pintail
Number Harvested	2606	2476	1565	669	648
As a note remaining 5 birds to fill out our top 10 birds are as follows: Mallard (596), Bufflehead (433), Goldeneye (366), and Cinnamon Teal (60). Of interesting note we also shot 3 Blue-winged Teal and 3 Eurasian Wigeon this season.					
Junior Hunt Summary					
Dates	Total Junior Hunters	Total Ducks	Total Geese	Total Water-fowl	Average
Feb 6, 2016	10	35	1	36	3.60
Feb 7, 2016	4	14	0	14	3.50



## **Diversion Measurement and Reporting Requirements Increase for Suisun Marsh Landowners**

*By Steven Chappell, SRCD Executive Director*

On June 24<sup>th</sup> 2015, Governor Edmund G. Brown signed Senate Bill 88 into law. This legislation added new measurement and additional reporting requirements (effective as early as January 1, 2016) for a substantial number of diverters who divert more than 10 acre-feet of water per year, including the Suisun Marsh. The State Water Resources Control Board (SWRCB) adopted Emergency Regulations to implement these new provisions of the law. Starting in November 2015 the SWRCB held informational meetings throughout the State and public hearings to support new Regulation development. The Suisun Resource Conservation District (SRCD), Gaines and Associates (representing SRCD) and California Waterfowl Association (CWA) attended these meeting and provided public comments as well as prepared detailed comment letters in an attempt to reduce or avoid the addition of costly diversion measurement and reporting requirements for Suisun Marsh landowners as part of the Emergency Regulations. On January 19<sup>th</sup>, 2016 the SWRCB adopted regulations to implement this new law, but many of SRCD's requested amendments and exemptions were not included in the final regulations.

This new law affects all water users required to file a Statement of Diversion and Use in the Suisun Marsh, including those claiming riparian or pre-1914 appropriative water rights. Reporting of water diversion amounts is now required annually and the past reporting requirement of every three years has been eliminated. Therefore all landowners will have to report the 2015 diversion amounts and any past years not previously reported by July 1, 2016

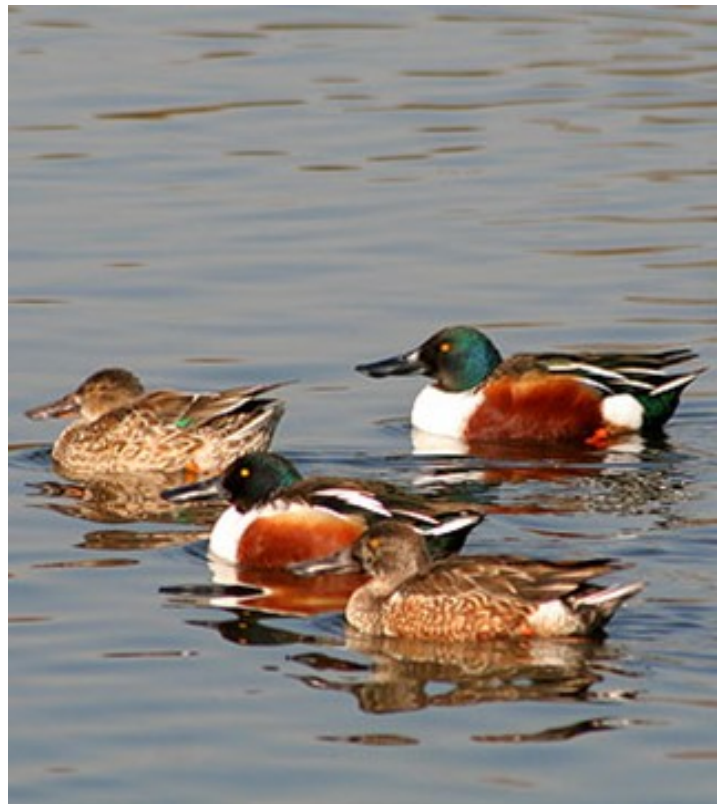
The second part of the new law establishes a phased-in approach to deadlines for compliance with Measurement, Reporting, Accuracy of Measurement, and Frequency of Measurement. SRCD doesn't believe it will be possible for most Suisun Marsh landowners to effectively comply with these new regulatory measurement requirements in the unique corrosive and tidally variable Suisun Marsh environment. The new regulations do have exemptions to allow for diverters to

propose a measurement method (in lieu of measuring device) or the development of an approved Alternative Plan for Compliance.

SRCD, CWA, Department of Fish and Wildlife and the RWQCB staff will be meeting over the next few weeks to discuss diversion measurement options in an attempt to develop an approved Alternative Plan for Compliance for all Suisun Marsh diversions. SRCD is hopeful that the currently approved diversion measurement method of staff gauge and floodable acreage will continue to meet regulatory requirements for the measurement of brackish water used to manage Suisun Marsh wetland habitats. SRCD will provide an update to the landowners at the April 20<sup>th</sup>, 2016 Suisun Marsh Landowner Workshop.

If you would like to get additional information on the SB 88 regulatory requirements you can visit the RWQCB at (916) 341-5300, email questions to [dwr-measurement@waterboards.ca.gov](mailto:dwr-measurement@waterboards.ca.gov), or go to their web site at:

[http://www.waterboards.ca.gov/waterrights/water\\_issues/program/measurement\\_regulation/](http://www.waterboards.ca.gov/waterrights/water_issues/program/measurement_regulation/)



*Northern Shovelers*

(**ZIKA** cont. from pg . 1)

is one documented case of the virus being transmitted sexually. Symptoms of Zika typically include fever, rash, joint pain, and/or red eyes.\*

To date neither of these mosquitoes has been found in counties neighboring Solano, the closest are Alameda and San Mateo Counties. The District is acquiring specialized traps to monitor for these species and will be distributing them at various locations soon. The Arbovirus of major concern in Solano County is still West Nile virus. Last year Solano County and the rest of the Bay area experienced very high population counts of *Culex tarsalis* the primary vector of West Nile virus in Solano County. The Suisun Marsh was a contributing factor to this. West Nile virus was detected in a number of mosquito samples from both sides of the Marsh as well as the District's chicken flock on the West side of the Marsh.

For more information on *Aedes aegypti* and *Aedes albopictus* go to the CDPH website:

<https://www.cdph.ca.gov/HealthInfo/discond/Pages/Aedes-albopictus-and-Aedes-aegypti-Mosquitoes.aspx>

\*Source of information 2/2016: California Department of Public Health-Division of Communicable Disease Control



*Aedes aegypti*



*Aedes albopictus*

(**FLYWAY** cont. from pg . 2)

The Pacific Flyway Center is being planned and developed in cooperation with private and public entities, including Solano County, the Suisun RCD, the Bay Area Conservation & Development Commission, the California Department of Fish & Wildlife, National Audubon Society, Ducks Unlimited, the California Waterfowl Association, and others. Individual philanthropic donors led by Ken Hofmann, as well as government and private foundation grant funds, will support planning and construction of the Center.

Additional support will be drawn from other Federal and state sources such as mitigation funds and targeted wetlands conservation funds, including oil spill settlement funding.

(**EARS** cont. from pg . 1)

In the past, rails have primarily been detected by researchers listening for their calls at dawn and dusk, sometimes playing taped calls to elicit responses. This method can be time-consuming and difficult due to boat-only access in most locations. ARUs can operate continually for up to 10 days and during the specified rail survey periods for over a month. This may provide a much more accurate picture of the distribution of animals within the marsh.

Early results from outside the Suisun area, where Ridgway's rails are more common indicate, that about half of the calls heard on a traditional observer-based survey were not recorded by ARUs. But in turn, humans missed about a third of the calls that ARUs picked up. "It's clear," said Overton, "that the ARUs and human observers working together are the most efficient." But it appears that ARUs could be an especially valuable tool in low-density areas, such as Suisun, where they can be placed for long periods of time. At this time, ARUs will not differentiate between individual rails of the same species but can be used to identify presence or absence. If you'd like more information, please contact Cory Overton at [coverton@usgs.gov](mailto:coverton@usgs.gov).



# SUISUN RESOURCE CONSERVATION DISTRICT



## ANNUAL LANDOWNER WORKSHOP

**DATE:** Wednesday, April 20th, 2016

**TIME:** 8:00 AM TO 2:00 PM

**PLACE:** Rush Ranch Education Center, Solano Land Trust  
3521 Grizzly Island Road, Suisun Marsh

**COST:** \$10.00 PER PERSON (Coffee & Donuts and Buffet Lunch)

**RSVP:** By Friday, April 15th, 2016

### **Possible Topics and Presentations**

2015 SMPA and Preservation Agreement Implementation (PAI) Fund Cost Share Program  
BCDC Duck Club Management Plan Update  
2015 DWR/Suisun Marsh Waterfowl Work & Telemetry Results  
SB88 SWRCB Diversion Measurement & Reporting Requirements  
Low Dissolved Oxygen Study BMP Assessment Update  
Pacific Flyway Center

-----CUT AND MAIL THIS PORTION WITH YOUR PAYMENT-----

I would like to RSVP for the SRCD Annual Landowner Workshop April 20th, 2016.

**\*\*Please remit by 4/15/2016 to: Suisun RCD, 2544 Grizzly Island Rd., Suisun, CA. 94585\*\***

Enclosed is a check for \_\_\_\_\_ lunch(es)

Name: \_\_\_\_\_ Club #: \_\_\_\_\_ Phone: \_\_\_\_\_

Name: \_\_\_\_\_ Club #: \_\_\_\_\_ Phone: \_\_\_\_\_

Name: \_\_\_\_\_ Club #: \_\_\_\_\_ Phone: \_\_\_\_\_

Name: \_\_\_\_\_ Club #: \_\_\_\_\_ Phone: \_\_\_\_\_

## *Land of the West Wind*

Suisun Resource Conservation District  
2544 Grizzly Island Road  
Suisun, CA 94585



PRESORTED NONPROFIT  
U.S. POSTAGE PAID  
SUISUN, CA 94585  
PERMIT NO. 124

**Address Correction Requested**

### **Diversion Monitoring in Full Swing**

The Suisun Resource Conservation District and Department of Fish and Wildlife (DFW) have been monitoring diversion intakes in the Marsh since November 1st. We completed the Winter Salmon restrictions in January. Landowner compliance during this monitoring period was perfect, and we hope that continues into the Spring Salmon and Smelt monitoring periods.

We are currently monitoring for Spring Salmon restrictions that began mid-February and run through the end of March. During that time, diversions along salmon smolts' migration path must be completely closed.

Delta Smelt restriction monitoring will begin in April and will run through the end of May. Diversions located within Smelt habitat have to reduce intakes to 20% or 35% depending on the results of sampling efforts by DFW. We have had good landowner cooperation the past few years during all three monitoring periods and expect that to continue throughout this year. Landowner notifications will be mailed out when we know the results of the DFW survey for the Marsh.



Juvenile Delta Smelt



Chinook Salmon smolt