

Volunteers of the Year By Karen Belville

Judy Huck has been active with the Amigos for more than a decade. She is a Naturalist, serves on the Board of Directors, volunteers with FLOW, helps with outreach events, assists with grant writing and research, and rarely misses an Education Committee meeting. Judy really stepped up during the COVID shut down period. She was strong, steady, reliable, and reassuring, an anchor for me, kept us on course. Judy was the zoom host for Tom Pfiefer's virtual "Live from the Wetlands" classes. We did a total of five sessions (practice run, Environmental Club, two AP Environmental Science classes, and a Marine Biology class). Judy has hosted all the education committee meetings on Zoom and also sent out the invitations, agendas and minutes. Judy participated in many committees to support Amigos: the committee to update our digital presence and strategy, the retreat planning committee and the 2022 World Wetlands Day planning committee. And also for 2022, Judy has volunteered to be the organization's Secretary. Most of all I appreciate Judy's positive, diplomatic, calm manner. Always encouraging, staying on course with wisdom and integrity, always focusing on what really matters to protect our environment. Thank you Judy!

My first encounter with Annie Daw was during a school tour a few years ago. Annie was doing the FLOW water collection and lesson with the students on the bridge. Sharon Von Dollen and I were there, feeling apprehensive about our portion of the tour.

Annie's comment was so uplifting and reassuring: "This is probably my favorite time of the week. I just love doing FLOW with the students." Annie stepped up during the COVID shut down period. She has been our ray of sunshine. Annie helped develop the Self-Guided tour (walked it, answered the questions, gave feedback), serves on the education committee and is currently the committee's note-taker. She was our "cinematographer" and sometimes speaker for the "Live from the Wetlands" with Tom Pfeifer's classes, the UCI Science Summer Project and a tour for the National Oceanic and Atmospheric Administration. She was instrumental in figuring out the lens, microphones and purchasing what we needed. She helped FLOW's reopening at Bolsa Chica State Beach, made several trips to locate keys after our long absence, met with Elizabeth Bailey, State Beach Interpretive Specialist, to do inventory and restore relationships with State Beach staff. She assisted with Coastal Cleanup and the Amigos last Saturday of the month cleanup. She joined the Board of Directors and serves on the committee for updating our digital presence and strategy. And Annie just completed Naturalist training. Annie does it all, always with enthusiasm and a smile! Thank you Annie.

Nancy Boyd-Batstone has been a tremendous asset for the Amigos for many years. About ten years ago, high school student Kathryn Boyd-Batstone came to the Amigos to assist with the design of the Coastal Wetlander Activity Book. Kathryn's mother,

Restoring Nest Site 3 to Sand Dune Habitat

Currently 90% of all vegetation, including Coastal Sage Scrub, Chaparral and invasive species, must be removed from Nest Site 3 in the area of the Bolsa Chica Ecological Reserve that is closed to the public. Nest Site 3 was one of three nest sites created during the wetland restoration 15 years ago for the California Least Tern (an endangered species) and the Western Snowy Plover (a threatened species). Without continual maintenance, the site quickly becomes overgrown with non-native and native vegetation that discourages terns and plovers. At the direction of the California Department of Fish & Wildlife Manager Melissa Loebl and led by Amigos board member Tom Pfeifer, on the third Saturday of the month beginning in October, volunteers have been busy clearing the nest site of ice plant, stink weed and a variety of plants before the spring nesting season begins. Much progress has been made in the effort to restore the site to the sand dune habitat preferred by terns and plovers. Thank you to all who have participated: Don Wellmann, Candy Hernandez, Madi Grossman, Yurika Dennis, Amber and Micah Stoffel, Ariel Arviero, Danica Zamora, Jenn Macias, Bob Wilkins, Taylor Karp, Lynn Yamaoka, Dan Dawes, Dave Lasky, Lori Donohue, Karen Belville, Vic Leipzig, Jim Robins, Bill Stern, Annie Dawes and Nancy Boyd-Batstone.









FLOW Fridays are back!

Citizen/Community Scientists are wanted for water quality monitoring. Miscroscopy and analysis are conducted weekly at Bolsa Chica State Beach. Training provided.

For more information, visit: https://amigosdebolsachica.org/flow_volunteers.php or email flow@amigosdebolsachica.org



Naturalist Training Class of 2021

By Thomas Anderson

On Saturday, November 13 at the home of board member Cat Navetta, the Amigos de Bolsa Chica celebrated the completion of the 2021 Naturalist Training class with a lunch for our four new Naturalists, for our Volunteers of the Year – and for all of the Amigos amazing volunteers. The 2021 Naturalist training was a little different this year. Instead of eight in-person classes as we have done in the past, we took advantage of our pre-recorded trainings, new online quizzes and zoom discussions, and added more field trips and time spent in and around the Bolsa Chica. This year's Naturalists, Annie Daw, Kevin Hertell, Arnold Muasa and Yezzen Khazinder, got to spend several hours at the wetlands with several experienced Naturalists to better learn how to discuss birds, ecology, plants, history and restoration with the students and adults who will participate in future Amigos public tours and private scheduled field trips. Thank you to Kim DiPasquale, Vic Leipzig, Nancy Boyd-Batstone, Jennifer Robins, Amber Davis, Sharon Von Dollen, Tom Pfeifer, Karen McReynolds and Nancy Curtis for their invaluable assistance in making the training happen.



From left: Kevin Hertell,
2021 Naturalist; Annie
Daw, Volunteer of the Year
and 2021 Naturalist; Judy
Huck, Volunteer of the
Year; Nancy Boyd Batstone,
Volunteer of the Year; and
Yezzen Khazinder, 2021
Naturalist. Not pictued,
new naturalist Arnold
Muasa. Photo by Thomas
Anderson.

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Nancy, made sure Kathryn attended all the meetings necessary to develop the book and was impressed by the result of the project. Nancy soon took the Naturalist Training class and began regular participation in the First Saturday of the month Public Tours. Nancy really stepped up during the COVID shutdown and became a trusted "Boots on the Ground" Amigo. She attended Education Committee meetings and offered valuable ideas and support. She helped develop the Self-Guided tour (walked it, answered questions, gave feedback, established NGSS standards for students); she was the speaker for the "Live from the Wetlands "Ecology/Plants portion of Tom Pfiefer's classes and the UCI Summer Science program. She was so helpful in locating an appropriate lens, providing props and organizing the presentations.

Nancy has also met with UCI Science Project staff

many times on zoom as well as in person to coordinate and brainstorm future projects. This past summer she planned, facilitated and participated in the HB Public Library Festival, and supported their summer reading program by researching appropriate books for Amigos Storytime, We are the Water Protectors. She also helped organize and facilitate the "We Love our State Parks" Girl Scout tour last September. Nancy served on the committee to develop a new format for the Naturalist Program and assisted with the training and field trips. She also serves on the Board of Directors and has graciously accepted the Education Committee Chair position. Nancy is my "go to" person for fact finding, research, resources and wisdom. Always open to listening and considering new ideas. Love our walk and talks! Steady, reliable, conscientious, dedicated, and supportive. I couldn't have made it through those COVID times without you! Thank you Nancy.

More on the Local Impacts of Sea Level Rise

By Shirley Dettoff

As I wrote in the fall issue of the Tern Tide, the City of Huntington Beach has done two studies on how sea level rise will affect our City. The report is currently being revised to include additional analysis required by the California Coastal Commission staff. I will continue to keep you posted with any new information which may impact Huntington Beach and the Bolsa Chica Ecological Reserve.

Although many climate changes and its effects have been seen throughout the world, many continue to deny the facts which provide many examples of devastation. Throughout Europe unusual storms have produced major flooding, and here in the United States we have seen many effects of climate change. Tornadoes and hurricanes have increased in strength. Much of the Western U.S., including California, is witnessing a drought compounded by the effects of climate change. Unprecedented fires have destroyed thousands of Sequoias, and right here in Orange County, ocean waters are eroding cliffs and damaging a portion of the rail system between Los Angeles and San Diego. Scientists predict more unusual weather is on the horizon. Will we be prepared? Now the State Legislature is addressing this problem, and the Coastal Commission continues doing studies and urging coastal communities to prepare. We know Huntington Beach is addressing the issue.

The State Legislature recently passed SB 1, a bill which formally adds rising seas to the list of issues to be addressed by the California Coastal Commission. The Commission has been addressing sea level rise for some time, but now it has been added to the list of principal responsibilities listed in the Coastal Act. This means that any project coming before the Commission will be studied in relationship to how well the project will be protected against sea level rise. It has been signed by Governor Newsom. The Ocean Protection Council which provides sea-level rise projections for State agencies to plan by, has set a benchmark target to prepare for six feet of rise by 2050 and seven feet by 2100. Every dollar spent in pre-disaster preparation can avoid public and private economic losses. SB 1 not only directs the Coastal Commission to add sea level rise to issues that they must address, it creates a new entity to coordinate seaadaption efforts, and provides a \$100 million a year in

grants for local and regional governments to prepare for sea level rise.

What does this mean to a community? It could mean projects being denied by the Commission, moving current homes inland, roads being rebuilt, sewage plants and water facilities being relocated and railways moved. The Coastal Commission has just released a 230-page report which meets the requirements that SB 1 put forth. This document urges cities to prepare for the Pacific Ocean to rise 10 feet by 2100. This has been criticized by some scientists who say these predictions go far beyond the calculations and who feel that the prospect of six feet of rise by 2100 will probably not happen. Several major entities have also opposed the Commissions calculation, such as the League of California Cities, the Orange County Transportation Authority and others including the City of Huntington Beach.

There are five other bills addressing this issue. SB 83 addresses homes threatened by rising sea. It establishes a program for the state to loan money to coastal cities to buy such properties from homeowners and rent them out as long as they are safe. The money would go back into the loan program. AB 66 would request a study from Scripps Institute of Oceanography to study cliff collapse and an early warning system. AB 63 by Cottie Petie-Norris, our Assembly Member, would allow marine restoration in marine protected areas, such as restoring kelp beds which can help to reduce ocean storm surges. AB 72, also by Cottie Petrie Norris, would streamline approval processes and other hurdles in relationship to decisions on sea level rise.

Regardless of how fast or how high the sea level rises, there is irrefutable evidence that our climate is changing. We must be prepared, and that is what the City of Huntington Beach is doing. Hopefully our properties will be protected, but we must look at scientific information and build our plan on facts and then determine what steps we must take to protect our coastal resources like the Bolsa Chica Ecological Reserve as well as our homes, critical facilities, businesses, and roads.

The October 2, 2021 Oil Spill and Beyond

By Thomas Anderson

On October 2, 2021, an oil pipeline off the Orange County Coast was ruptured, presumably by the dragging anchor of a container ship, though a more precise cause is still under investigation. Approximately 25,000 gallons of oil leaked from the pipeline, narrowly missing the Bolsa Chica Ecological Reserve but fouling the coastline from the Talbert Marsh in Huntington Beach southward to Laguna Beach, to La Jolla and beyond. Containment and cleanup efforts were immediately deployed and fisheries were closed. Dozens of birds, mammals and fish were rescued, cleaned and released though 114 died. Amplify Energy, the Texas-based company that operates the pipeline is facing 14 lawsuits filed by businesses, residents, property owners and others affected by the spill. The lawsuits may be consolidated into a classaction case. The pipeline has remained shut down since the initial incident on October 2.

On November 20, crews scheduled for planned work on the pipeline observed and reported a sheen of 30' by 70' as they approached the area of the line. Divers conducting the planned assessments on the line then discovered small droplets on the syntho-glass wrap around the damaged pipeline. The old wrap was removed from the line and the new wrap was installed. No sheen or oil has been observed in the vicinity of the damaged pipeline since the report on November 20.

A work barge with divers remains on the scene of the pipeline rupture to monitor for sheens and conducts dives to check the wrap. Additionally, crews installed a pollution capture dome that sits over the area of the line that could capture any product that may escape from the line in the future. The dome can then be evacuated by a pump if there is product present. Personnel onboard the barge monitor the area within the dome by video camera. Unified Command, comprised of representatives of the United States Coast Guard, California Department of Fish and Wildlife's Office of Spill Prevention and Response, County of Orange, County of San Diego, and Amplify Energy, is monitoring the status of the pipeline since the oil will remain in the line until it is flushed as part of the repair process. Amplify has submitted their proposed repair plan to the Pipeline Hazardous Materials Safety Administration for approval.

Response efforts continue from Long Beach to La Jolla

to include Shoreline Cleanup Assessment Teams and work crews, monitoring, inspecting, and spot cleaning the beaches. Cleanup efforts are now focused on collecting tar balls along the shoreline. Task forces and hot shot teams remain staged in Orange County and San Diego County to respond to tar ball reports or as crews identify additional cleanup recommendations. The Office of Environmental Health Hazard Assessment has determined that there is no further risk to public health related to seafood consumption. As a result, the California Department of Fish and Wildlife lifted the fisheries closure related to the pipeline incident on November 30, 2021.

On December 15, a federal grand jury charged three companies with criminal negligence in connection with the oil spill. The indictment alleges that Amplify Energy Corp. and two subsidiary firms, Beta Operating Co. and San Pedro Bay Pipeline Co., illegally discharged oil into federal waters from the pipeline they operated off Huntington Beach. Among the charges against the three companies is the allegation that the 17.3-mileunderwater pipeline, running from a production and processing platform called Elly to the Port of Long Beach, was being operated by "an understaffed and fatigued crew," who "had not been provided sufficient training regarding the pipeline's automated leak detection system."

The momentum for an end to offshore oil production has increased

At the October 19 Huntington Beach City Council Meeting, long-time Amigos member and former Huntington Beach Mayor and Council Member, Vic Leipzig, addressed the Council and spoke that the Amigos de Bolsa Chica supports the proposed resolution by the City of Huntington Beach calling for a ban on new offshore oil, gas drilling and similar exploration activities off our coasts, and that the Amigos encourage all council members to vote in favor of this common-sense measure, given the recent oil spill's impact on Huntington Beach. Later that evening the Council voted 5-1 in favor of the resolution.

The Amigos have adopted the following position statement that is similar to the City's proposed resolution: The recent oil spill devastated the shoreline

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of Huntington Beach, harming our environmental resources and our economy. Although oil did not directly enter the Bolsa Chica Ecological Reserve, it came perilously close. The Amigos is immensely grateful that the state of California long ago prohibited the expansion of offshore oil production within state waters and we believe that a similar prohibition should be applied by the federal government to federal waters beyond the three-mile limit. The federal government should not encourage, but rather should prohibit, the expansion of oil production off the coast of California. Furthermore, the Amigos request both state and federal governments to develop a plan for the phase out of existing offshore facilities.

What needs to happen to decommission oil rigs

While the October spill brought the decommissioning of oil wells into the spotlight, actual progress towards this goal is slow. There is little economic incentive for oil companies to act quickly. The momentum to curtail oil production and transition toward an economy driven by renewable, carbon-free energy is growing, but as long as human beings accept the impacts of climate change that are already happening in order to keep driving cars, oil companies will continue pumping and transporting oil. The most serious change must begin with the consumer.

California has no authority over the 23 oil platforms in federal waters, which generally are marked by a three-mile buffer from the coast. Since offshore oil facilities in state waters have existing leases, shutting them down under the state's eminent domain powers could cost taxpayers hundreds of millions, if not billions of dollars.

California's "Rigs to Reefs" program, an effort to transform oil platforms into underwater artificial reefs was signed into law in 2010. No oil company has yet applied. To qualify for California's Rigs to Reefs program, oil companies must prove that partially removing the oil platforms would provide a benefit to the marine environment, including sea life. The top of the structures, some of which stretch more than 1,000 feet down to the seafloor, must be removed down to 85 feet below the surface to allow for ships to pass overhead. This would not necessarily benefit sea creatures that thrive near the water's surface, because everything above 85 feet below sea level would be removed. Oil companies would remain responsible for capping all of their wells.

The federal government has a similar program, created in 1984, that runs in coordination with states that rim the Gulf of Mexico. Under that program, oil companies are allowed to dump the remains of oil platforms in designated "reef zones" in the gulf, providing a habitat for sea life and a benefit to recreational anglers and the commercial seafood industry.

In both State and Federal programs, oil companies receive taxpayer-funded incentives to remove parts or all of the rigs and can save oil companies millions of dollars, offering the incentive to cease offshore oil production that appears be declining. All oil producers, when they sign a lease, promise to remove their derricks and restore the ocean floor to its natural state. After extracting millions of dollars of oil from state or federal lands, Rigs to Reefs programs are a gift of taxpayer dollars to cap the wells.

Free First Saturday of the Month tours of the Bolsa Chica Ecological Reserve led by Amigos Naturalists 9:00 - 10:30 a.m.

Free Last Saturday of the Month Bird Walk led by Amigos Naturalists 8:30 a.m. Trash Cleanup at 9:00 a.m.

Free monthly tours are on a first come, first served basis. Donations are much needed and appreciated. Reservations and carpooling are encouraged as parking at the Bolsa Chica Ecological Reserve is limited. All tours begin at the south parking lot, Pacific Coast Highway between Warner Ave. and Seapoint St.

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Amigos de Bolsa Chica

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State Lands Commission Answers Questions about Oil Production within the Bolsa Chica Ecological Reserve

1. The Bolsa Chica lease is held by California Resources Corporation (CRC), and there appear to be 102 active wells at the wetlands. Are those two pieces of info accurate?

There are two categories of wells within Bolsa Chica, those that are private wells (pre-existing private leases, not leased by State Lands Commission [SLC]), and wells located within one SLC lease. The on-site oil operator at Bolsa Chica for both the private wells and state leased lands is CRC. The State of California, acting by and through the Commission, took title to the Bolsa Chica Lowlands subject to existing legal agreements that allow for oil extraction operations to continue indefinitely, as long as production is economical. The Fractracker website includes wells that are on private leases within Bolsa Chica. Therefore, we cannot confirm the 102 number, but suggest that you contact CalGEM for that information.

2. When does the lease end?

The Commission manages one oil and gas lease in the Bolsa Chica wetlands that it acquired as a successor in interest as part of the State's acquisition of the Bolsa Chica wetlands in 1997. It is lease number 4736 and it is held by CRC. The lease, like nearly all offshore oil and gas leases in the state, is held by production. This means that the lease term persists as long as the lessee either produces, or is capable of producing, oil from the lease.

renew the lease because environmental concerns, including risks to the environment and the state's move away from fossil fuels?

No. As described above, the State of California took title to the Bolsa Chica Lowlands subject to existing legal agreements that allow for oil extraction operations to continue. The agreements do provide for the oil operator, which is now CRC, to plug and abandon any well that is

3. Can the Commission simply decide not to

no longer producing in quantities sufficient to pay its costs of operation, as well as to clean up and restore the land surface.

4. How much does CRC pay annually for the lease?

The royalty the Commission receives from lease number 4736 is roughly \$30,000 a year.

5. Do you know how much oil/gas they produced last year from Bolsa Chica? If not, how about for 2019? We don't know the total amount of oil that is produced from the entire Bolsa Chica wetlands because some of the wells are developed under private agreements not under the Commission's jurisdiction.

6. Are you aware of any plans to end oil and gas operations at Bolsa Chica?

We are not aware of any plans CRC has to end oil and gas operations at Bolsa Chica. The Commission's EIR for the Bolsa Chica Restoration Project contemplated that the operations would eventually cease, allowing for the potential restoration of the Project's 252-acre Future Full Tidal area.





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AMIGOS DE BOLSA CHICA MEMBERSHIP APPLICATION

I support the specific and primary purpose of Amigos de Bolsa Chica, which is to advocate the preservation, restoration and maintenance of the Bolsa Chica, to encourage the public acquisition of all the wetlands and sufficient surrounding open space to create a viable ecosystem, and to provide education about the importance of wetlands.

ANNUAL DUES	Name:	
\$ 10 Student \$ 25 Individual	Address:	
\$ 40 Family	City:	
\$100 Sustaining \$1000 Life Member	Email:	
	Phone:	
Additional Contribution:		
\$ Fund operational expenses \$	Fund education projects \$	Total enclosed
Please check if you are interested in volunteering for:		
FLOW Citizen Science Naturalist training	ng/wetland tours Wetlands cleanups _	_ Fundraising Grantwriting
All contributions to Amigos de Bolsa Chica are tax-deductible as allowed by law under IRS Code Section 501(c)3. No goods or services were provided in consideration of this gift.		

Return application to: Amigos de Bolsa Chica, P.O. Box 1563, Huntington Beach, CA 92647