Sketches
SAN DIEGO AUDUBON

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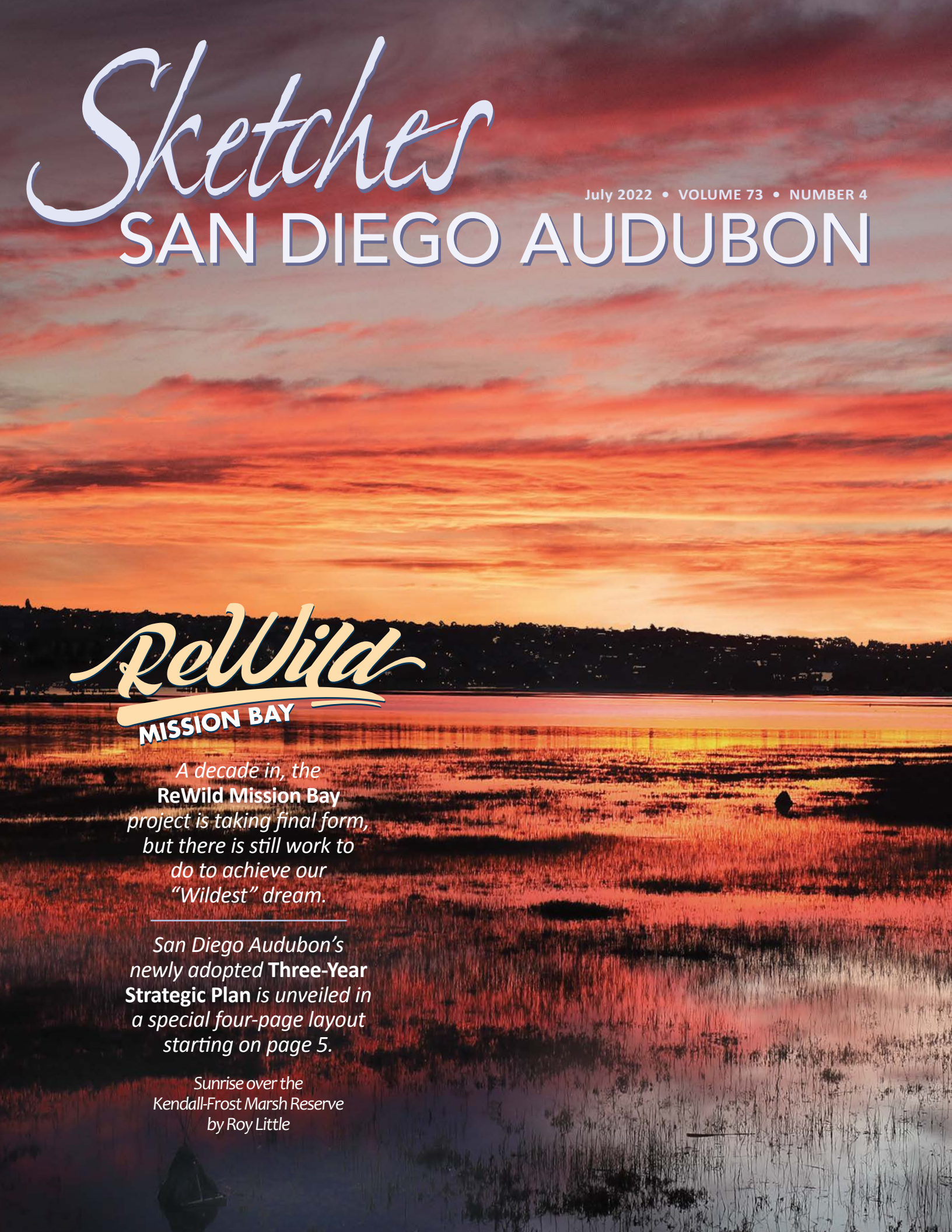


ReWild MISSION BAY

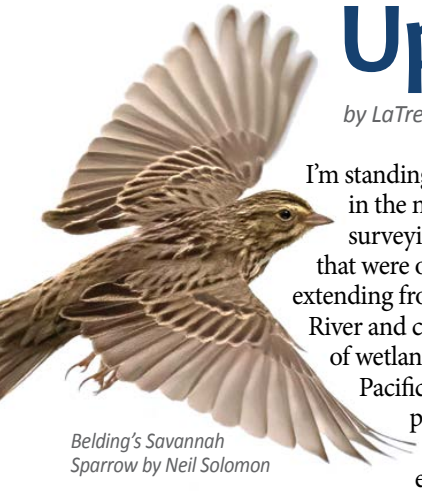
A decade in, the **ReWild Mission Bay** *project is taking final form, but there is still work to do to achieve our "Wildest" dream.*

San Diego Audubon's newly adopted **Three-Year Strategic Plan** *is unveiled in a special four-page layout starting on page 5.*

Sunrise over the Kendall-Frost Marsh Reserve by Roy Little

Update: ReWild Mission Bay

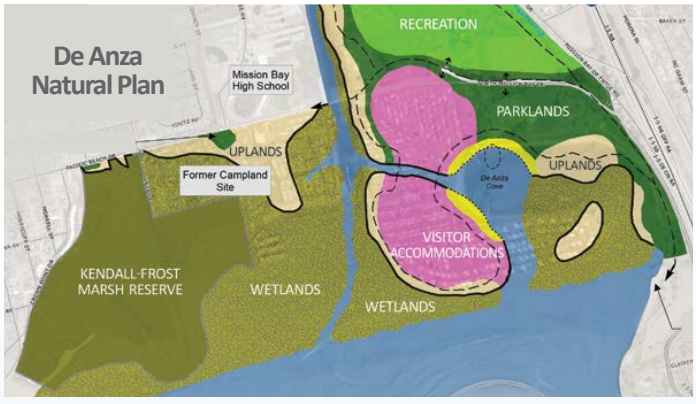
by LaTresa Pearson, Sketches Editor



Belding's Savannah Sparrow by Neil Solomon

I'm standing in the Kendall-Frost Marsh Reserve in the northeast corner of Mission Bay surveying the last 40 acres of salt marsh that were once part of a vast estuary complex extending from the mouth of the San Diego River and comprising more than 4,000 acres of wetlands. Behind me, cars swoosh by on Pacific Beach Drive. A steady stream of people stroll, jog, bike, and skate along the sidewalk just outside the fence enclosing the reserve. Apartment buildings line the street and wind down Crown Point Drive to the west. I look to the east, and see RVs and tents jammed tightly together. Jet skis and boats zoom across the bay, and in the distance, the downtown San Diego skyline fades into the horizon. But before me, amid all the concrete and noise, is a small, wild oasis that stretches to the ocean. The coastal sage scrub is filled with the soft pink and cream blossoms of California Buckwheat. I follow the changing plant habitat as it descends toward the water—rambling seablite, saltgrass, arrowgrass, saltbush, saltmarsh daisy, California sea lavender, and saltwort. Yellow-green cordgrass interspersed with succulent pickleweed take over, covering the lower marsh, providing critical habitat for the federally listed endangered Ridgway's Rail and the state-listed Belding's Savannah Sparrow, which is only found in the last few remaining salt marshes that dot the Southern and Baja California coastline. Plant life yields to mudflats where a variety of shorebirds eagerly probe for hidden delights, but begins again, beyond my view, in the form of underwater eelgrass beds, which serve as nurseries to fish like the California Halibut.

Managed by UCSD and owned by the UC Natural Reserve System, the Kendall-Frost Marsh Reserve includes 21 of the 40 acres of salt marsh remaining here. The rest are part of the Northern Wildlife Preserve, which is owned by the City of San Diego. While this salt marsh provides critical habitat, it's not thriving as much as it could be. "The cordgrass is not very healthy because this is a small wetland, and it's not connected to the nearest river," San Diego Audubon Conservation Manager Megan Flaherty tells me as we look out over the marsh. "Those artificial nest platforms are for the endangered Light-footed Ridgway's Rail because they're not able to make their nests out of the cordgrass the way they normally would," she says, pointing to several structures scattered across the marsh that look like small teepees. "The cordgrass needs to be much taller."



ReWild Mission Bay "Wildest" Plan
San Diego Audubon's "Wildest" plan (above) remains the gold standard for the best way to restore native habitat for long-term sustainability.

De Anza Natural Plan
The City's updated "Natural" plan is an encouraging improvement over their original effort. We are working to influence it further.

Connecting to Rose Creek

Although cordgrass and other tidal marsh plants live in saltwater, they need the nutrients and sediment that fresh water brings when it enters the marsh from rivers and creeks. "Kendall-Frost Marsh historically was the recipient of fresh water and sediment flow from Rose Creek, which in the 20th Century was channelized and caused to be shunted out to deeper water in Mission Bay," explains Matthew T. Costa, a postdoctoral scholar in the Center for Climate Change and Adaptation at UCSD's Scripps Institution of Oceanography. "That causes the fresh water and sediments in that water to immediately go into the bay rather than what would have naturally happened, which is that it would pass through the marsh." The flow of fresh water and sediments from the watershed into the marsh is critical to the health and productivity of the entire coastal ecosystem, he explains. Healthy coastal wetlands and other coastal ecosystems like eelgrass are valuable tools in the fight against climate change because they capture carbon and store it in their dense, muddy sediment, reducing the amount of greenhouse gas in the atmosphere. They also build up sediment, which creates a buffer between rising waters and urban development, preventing flooding in coastal communities caused by storm surges and sea-level rise. "Probably the number one most important area that we can work on to help our wetlands sequester (store) carbon more effectively and be more resilient to sea-level rise is to reconnect the wetlands to the watershed. In this case, rerouting Rose Creek in such a way that it spreads out across the marsh rather than going through a channel that's been lined with riprap (loose stones) or other barriers," says Costa, who has been researching and measuring carbon sequestration at the Kendall-Frost Marsh as part of Reconnecting to the Kendall-Frost Marsh, a collaborative project between San Diego Audubon, Scripps Institution of Oceanography, UC Natural Reserve System, Native Like Water, and Renascence, with

Light-footed Ridgway's Rail by Karen Straus

funding from the Honda Marine Sciences Foundation *(see Restoring a People to Mission Bay, page 9)*.

In addition to helping the city become more resilient to climate change, revitalizing the existing coastal wetlands in Mission Bay by reconnecting them to Rose Creek, as well as restoring additional wetlands throughout the northeast corner, would provide many other valuable ecosystem services. Healthy coastal wetlands guard against erosion by cushioning the impact of waves and trapping sediments that would otherwise wash away. They improve the water quality of the bay and surrounding waters by absorbing nutrients and filtering or trapping pollutants from urban runoff before they can enter the ocean. They protect biodiversity, providing essential habitat to the highly adapted and endangered species that live in them, as well as providing refuge for birds migrating along the Pacific Flyway. They supply vital food, refuge, and nursery habitat for more than 75 percent of fishery species. And they offer us refuge—a place where we can connect with the natural environment and learn about the living things that share this space with us *(see page 10)*.

From where I'm standing in Kendall-Frost Marsh, I look to the east where Rose Creek's waters should flow into the marsh, but instead, the creek is blocked by Campland, which sits on a site that was artificially created during the construction of Mission Bay Park. During the post-World War II years between 1945 and 1962, city leaders decided tourism would be the best way to ensure continued growth and prosperity, so they created a plan to transform this coastal wetland area into the largest aquatic playground in the United States. According to the City's website, crews dredged 25 million cubic yards of sand and silt to create the landforms of Mission Bay Park, which is now almost entirely human-constructed. In an article published in *The Journal of San Diego History* in 2002, Ed Gabrielson, City Engineer during much of the creation of Mission Bay Park in the late 1950s and early 1960s, describes the process of creating De Anza Point and converting it into land suitable to build the now defunct De Anza Mobile Home Park. "The original material that had been pumped onto De Anza Point was a mucky silt, which would not hold up equipment of any type," he writes. "Although this material set for approximately three years, it never gave up its water content, and nothing could be built on it." They ended up pumping a three-foot layer of "good sand" on top of the silt to make the ground suitable for building the mobile home park's infrastructure.

Capturing Carbon

If only Gabrielson and the city planners had known then what we know today. This "mucky silt" is exactly what makes coastal wetlands so good at storing carbon. Tidal marshes can store, or sequester, carbon at rates two to four times greater than mature tropical forests, according to the International Blue Carbon Initiative, a global program focused on mitigating climate change through the conservation and restoration of coastal and marine ecosystems. Conversely, when they are dredged like they were in the construction of Mission Bay Park, they release that carbon into the atmosphere, contributing to climate change rather than helping to reduce it. Tidal marshes have a lot of plants, and those plants take carbon out of the air through photosynthesis and store it in their shoots and flowers above the ground, and in their roots and rhizomes below the ground, explains Costa. When the plants die, some of that organic matter gets buried in the sediment. "When that organic matter gets buried in the sediments, the sediments are really good at preserving it, and it can build up as the sediments build up over hundreds of years," he says. "So, the focus of my work to look for carbon is to take sediment cores."

Using a special steel tube that he sticks into the ground, Costa has been collecting vertical sediment core samples from each of the Reserve's carbon-rich ecosystems, the salt marsh, the mudflats, and the eelgrass. After they collect the samples, they take them back to the lab and analyze them through a meticulous, months-long process. The goal is to measure the amount of carbon sequestered at Kendall-Frost Marsh, known as its carbon stock, as well as the rate at which that carbon is sequestered. At this point, he says they have found significant variation between the sediment core samples they've taken despite the locations being only 100 or 200 meters apart. As a result, he says they still need to do a lot more sampling to come to a more precise number. "In our initial analyses, we have carbon stock estimate ranges from 152 to 370 metric tons of organic carbon stored in the sediment per hectare in Kendall-Frost Marsh," he says. "To scale that up to the whole site, which is about 40 acres, that represents anywhere from 2,400 to 6,000 tons of carbon." Assigning dollar values to carbon stock is tricky and can vary significantly, depending on who's valuing it, so Costa says the monetary value of the carbon in Kendall-Frost Marsh could be anywhere from tens of thousands to millions of dollars. But he cautions against placing too much emphasis on any one ecosystem service, like carbon sequestration. "Wetlands provide many, many services," he says. "Carbon sequestration probably isn't even the most valuable in terms of realized economic value, partly because so far we've probably undervalued the costs of emitting carbon, especially in a highly used urban area like this."

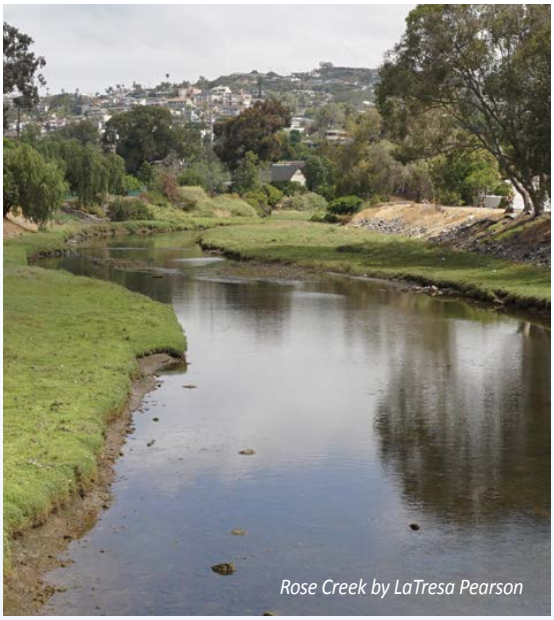
The Time is Now

Despite the many ecosystem services coastal wetlands provide, they are disappearing at an alarming rate. Southern California has already lost about three-quarters of its salt marshes. Without intervention, sea-level rise could swallow the rest by 2110, with the greatest escalation occurring between 2050 and 2100, according to a study led by the U.S. Geological Survey that was published in *Science Advances* in February 2018. "There's an optimistic way to view that statistic," says Costa. "There are places where if the sea level rises, but the marshes are able to accrete vertically up with it (move through the accumulation of sediment), then maybe they won't be lost. To make room for that, we have to imagine how we can actively manage these sites to help them keep up with sea-level rise." *(Continued on page 4)*

Kendall-Frost Marsh Reserve by Roy Little

(Continued from page 3)

Finding places along California's coastline that will allow salt marshes to migrate naturally as sea level rises isn't easy. In many cases, roads, buildings, and other urban development hug the coastline, preventing the marshes from moving beyond the reach of rising waters. "You can see right here at Kendall-Frost, it's not like the marsh can just move inward because there's a road," Heather Henter, Executive Director of the UC Natural Reserve System for UCSD, tells me, pointing at the street behind us. "There's Pacific Beach Drive. There are apartments. There's the city. There's nowhere for the marsh to go." With current sea-level rise predictions, much of the existing wetland habitat here at Kendall-Frost and the Northern Wildlife Preserve will be gone by 2100. That's why it's so critical to restore as many acres of wetlands as possible along both sides of Rose Creek. Restored wetlands on De Anza Point would have the greatest chance of surviving sea-level rise, according to projections in the *ReWild Mission Bay Feasibility Study*. "Through our advocacy efforts, at the beginning of June we convinced our partners on the City of San Diego's Climate Action Plan Review Committee to officially recommend to the City Council that wetland restoration get underway as soon as possible," says Andrew Meyer, Director of Conservation for San Diego Audubon.



Rose Creek by LaTresa Pearson

To restore and actively manage Mission Bay's coastal wetlands in time for them to be resilient to sea-level rise, as well as to reap the many benefits they provide, we need to move fast. According to the State Coastal Conservancy's 2018 regional strategy for the Southern California Wetlands Recovery Project, wetlands restoration projects take between 20 to 40 years to plan and complete. "Because of the rapidly increasing rate in sea-level rise in the second half of this century, wetland restoration should occur before 2030 in order to establish mature marshes that are more resilient to sea-level rise; *such efforts need to start immediately,*" the document stresses [emphasis added].

Compounding the urgency, both the state and federal government have money available right now to back these efforts. In September 2021, Governor Gavin Newsom signed a budget bill that includes $500 million for coastal resilience to be appropriated to the Coastal Conservancy in Fiscal Years 2022-23 and 2023-24 to provide grant funding for projects like ReWild Mission Bay—a project in which the Conservancy has already invested more than $500,000 for the creation of the *2018 ReWild Mission Bay Feasibility Study*. In addition, the Biden administration launched the $1 billion *America the Beautiful Challenge* in April, which is designed to "leverage Federal conservation and restoration investments with private and philanthropic contributions to accelerate land, water, and wildlife conservation efforts across the country." One of the core focuses of the program is "conserving and restoring rivers, coasts, wetlands, and watersheds." The federal government will commit an initial investment of $440 million over the next five years to the grant program, which will be administered by the National Fish and Wildlife Foundation. "[Restoration projects] can be much faster if you hit it when there's a lot of money available, and that seems to be what's starting to happen right now," says Carolyn Lieberman, U.S. Fish and Wildlife Service's Coastal Program Coordinator for our region, which also contributed funding for ReWild's feasibility study.

It's Time to Get Wild

Fortunately, San Diego Audubon has been leading a collaborative effort to lay the foundation for coastal wetland restoration in the northeast corner of Mission Bay for more than a decade. Created through a multi-year, intensive, science-based collaborative process, the nearly 400-page *ReWild Mission Bay Feasibility Study* identifies three feasible wetland restoration alternatives for the northeast corner of Mission Bay, dubbed *Wild, Wilder,* and *Wildest*. Of the three plans from the study, the ReWild Mission Bay Coalition, led by San Diego Audubon and including more than 60 community organizations, advocates for the *Wildest* alternative because it optimizes water quality, sea-level rise adaptation, and the ability for wetland habitats to persist over time. The *Wildest* plan would provide 227 acres of new coastal wetland habitat. The design would also ensure that 75 acres of wetland habitat would continue to exist by 2100, with a projected sea-level rise of 5.5 feet. In addition, 4,800 feet of new interpretive trails would wind through the habitat, providing public access and educational opportunities. An estuarine science center and a visitor center would educate visitors about this coastal ecosystem, and there would be space for the Kumeyaay people to connect to lands in which they once lived and prospered before they were forced inland to their current tribal lands.

The City Goes Natural

In January, the City of San Diego unveiled an expanded wetland plan for the northeast corner of Mission Bay. Originally designed as an alternative to be studied with the City's 2018 proposal, Planning Director Heidi Vonblum says the City now considers the expanded wetland alternative, called *De Anza Natural*, to be their preferred plan. "The ReWild effort has provided really valuable information that has greatly informed the *De Anza Natural* plan," says Vonblum. "Taking that into account and the information we have through the development of the *Climate Resilient SD* plan, and all the input we've heard from all of the different user groups interested in this particular portion of Mission Bay, we wanted to put forward a plan that really strikes a balance between the land uses, while also being focused on providing that expanded wetland area," she says.

Climate Resilient SD, the City's first climate adaptation and resiliency plan, focuses on how the City can respond proactively to the threats of climate change, including extreme heat, wildfires, sea-level rise, flooding, and drought. "We know that sea-level rise will be affecting particularly this portion of De Anza Cove, and the climate resiliency plan really focuses on nature-based solutions to climate change," says Vonblum. "De Anza presents a unique opportunity to be able to plan for a very climate-resilient area within Mission Bay that also provides other benefits like carbon sequestration, which furthers our *Climate Action Plan* goals, and provides opportunities for education and other types of access associated with the increased habitat provided by the wetlands," she adds. *De Anza Natural* would provide 181 acres of wetlands (excluding the existing 40 acres at Kendall-Frost Marsh Reserve/Northern Wildlife Preserve and another 43.5 acres of uplands and buffers *(See figure, page 2)*. The current site plan, however, doesn't show the breakdown of wetland habitat or provide any projections for how sea-level rise would impact the area over time.

Visualizing the Possibilities

After poring over documents and plan details, I head back out to the northeast corner of Mission Bay to help visualize the proposed plans. This time, I start at the Rose Creek Cottage on Garnet Avenue to check out the lower end of the Rose Creek Watershed. The creek is fairly narrow at this end, growing wider as it meanders to the bay. I follow

(continued on page 9)

For birds. For people. For the planet.

New Mission Statement, Adopted April 2022:

Together we defend our region's birds, unique biodiversity, and threatened habitats through advocacy, education, and restoration.

Revised Vision Statement, Adopted April 2022:

We envision a region in which people and nature are interconnected and thriving, where diverse communities find common ground to prioritize and respond to the climate crisis and other urgent threats to birds and the natural world, and give shape to an enduring culture of conservation and sustainability.

THREE-YEAR STRATEGIC PLAN

In June of 2021, San Diego Audubon's board and staff came together, *in person,* for the first time in over a year. The purpose: to set our sights on the future and establish a three-year strategic plan. This was no easy task with the pandemic being as old as my tenure with San Diego Audubon at that point, and all of us being excited just seeing each other and catching up. We needed help to focus and get this critical work done. In stepped Pat Libby of Pat Libby Consulting, an expert in strategic planning, board governance, and advocacy, to facilitate the retreat and the hard work ahead. Like a cormorant taking flight from the water, with a few strategic questions, the momentum slowly built with the group, and our collective dreams and aspirations began to take flight.

The exciting journey of our slowly emerging plan included key informant interviews with partners such as the American Indian Health Center, Barona Cultural Center & Museum and Recreation Center, California Coastal Conservancy, City of San Diego Planning Department, and U.S. Fish and Wildlife Service. Our informants expressed their amazement for the breadth of our work, highlighted the importance and strength of our advocacy efforts, and were excited to collaborate further to help build a diverse community engaged in conservation. Fueled by this great feedback, the strategic plan took shape, new committees formed, and bylaws were revised to support this endeavor. We are excited about the potential for real growth in our numbers, greater impact on the environmental needs of our region, and building diverse coalitions and partnerships that better reflect the communities we serve.

Our new tagline—***For birds. For people. For the planet.***— reflects the big-picture view we see emerging throughout the environmental movement and the growing imperative, across all human boundary lines, for social and environmental justice *(see page 8)*. The SDAS logo is likewise subtly updated with a new font and warmer color scheme *(shown above)*.

We invite you to familiarize yourself with the **five strategic goals** *(pages 6-7)* and envision the role you may see yourself playing in their achievement. San Diego Audubon Society will enhance its leadership voice and strategic position by nurturing the involvement of its members, volunteers, allies, and others throughout the region to take action in new ways. Our sanctuaries will more fully exemplify this work and immerse visitors in our mission. *The journey begins!*

Travis Kemnitz, Executive Director

(Continued on next page)

THREE-YEAR STRATEGIC PLAN

We will enhance our impact through five integrated goals:

Expand messaging and public awareness of And about our work

1. Develop and execute a plan for communicating SDAS mission and work to a broader and more diverse audience.
2. Institute procedures and practices that ensure publications and materials containing scientific information are conveyed in an accessible and effective manner to diverse audiences.

The mission of San Diego Audubon will be communicated in an expanded, media-savvy way to broaden and diversify our base, and to make our environmental projects and positions relevant, vivid, and compelling. We are in the early stages of developing a **Communications Master Plan** that will integrate the components of a comprehensive media presence that better expresses, in word and image, our core message. The knowledge gained and connections established by staff and active volunteers in our ReWild Mission Bay campaign will help form a versatile template for future projects. Internally, this master plan will better focus the combined efforts of our Conservation and Education work, amplified through the chapter's events and programs as they are promoted to the public—both the general public and those strategically engaged.

Increase, diversify, and nurture a community of inspired environmentalists

1. Foster relationships with diverse people and organizations that result in new collaborations and increased participation in SDAS activities/resources/leadership.
2. Provide environmental access, education, and career pathways to diverse and under-served people and communities.

We shall actively and creatively foster relationships with groups representing those in the San Diego region who are underrepresented in our sphere of engagement, and establish ways to reach across cultural and language barriers to generate a broad-based movement to address the mounting conservation challenges of our region and beyond. We will provide increased pathway opportunities for those wanting to do more and go deeper in conservation and climate action work, such as our Advocates Program, the California Climate Action Corps, and in partnership with the U.S. Fish and Wildlife Service, launching an exciting conservation career pathway program with an emphasis on engaging and empowering indigenous young adults.

Hone and strengthen our public policy and advocacy work

1. Implement a new committee and operating structure that allows SDAS to identify and advance advocacy priorities, respond to timely issues, and build the capacity of volunteers to be effective advocates.

Originating in the Conservation Committee, the **Advocate Program** has achieved major success which we are at the point of expanding. We will be making advocacy training a regular offering. The program will actively recruit persons for a wide range of advocate roles, including the formation of a **Rapid Response Team** that will be able to address needs requiring timely engagement.

(Left) Executive Director Travis Kemnitz savoring open dialogue with Great Egret Society members at a recent Silverwood event. The Great Egrets are an invaluable part of our chapter who contribute on many levels.

(Below left) Kemnitz at the ribbon cutting for a new Native Seed Library (box on pedestal to Kemnitz's left) sponsored by SDG&E. They have supported numerous SDAS programs. The seed library program, developed within our Advocate Program, has grown rapidly since its prototype was first launched.

(Below) The always alert, ever opportunistic California Scrub-jay is a role model for San Diego Audubon as we help preserve our amazing biodiversity in both the undeveloped and developed areas of our region. It learns (and remembers) where the nuts are!

Target habitat expansion, restoration, species monitoring, and management plans in select areas throughout the region

1. Ensure that SDAS properties are optimally maintained as models of state-of-the-art conservation and preservation practices.
2. Identify and advance targeted habitats and focus areas for species monitoring, habitat expansion, restoration, and preservation.

We'll develop common policies and a **sanctuary operating manual**, covering fire risk mitigation, needs assessment, science-based land management, and dissemination strategy. We will actively support staff, volunteers, and partnering researchers with safety training, species monitoring, and developing CFA (conservation focus-area) goals. We will look to the future by establishing a task force to avail ourselves of opportunities for expansion and improvement as they arise. This is an exciting yet challenging time for our sanctuaries, and with your help, we are committed to maximizing both their educational roles and their ecological health.

Build the capacity of other Audubon chapters, allied organizations, and individuals to engage in work throughout the region

1. Provide partnership opportunities and strategic support to organizations and individuals working on conservation issues in our region but beyond our immediate areas of focus.

One major lesson of the ReWild campaign: Partners and allies can make a decisive difference. We are establishing ongoing dialogue with other county and regional Audubon chapters, and developing ways we can work together on common objectives. The exciting success of the **City College Audubon Club** (recognized and honored by National Audubon) has opened the possibility of helping establish new clubs. Further developing coalitions with other environmental groups and institutions has untapped potential. Expanding our collaboration with indigenous groups and leaders like the Barona Cultural Center and Museum, Native Like Water, and Renascence can deliver on shared goals. Project partnerships with corporate and civil entities are essential to addressing complex challenges. Offering marketing and co-branding opportunities can prove foundational to enduring relationships and elevating the importance and full impact of our work.

The Osprey's consummate design is without equal in fulfilling its raison d'etre—plucking large fish from the water's surface. Likewise SDAS strives to perfect its own design to achieve even greater effectiveness and productivity in the pursuit of its mission.

Strong, Smart, Good...

The transformative growth and well-managed expansion of the programs and projects of San Diego Audubon over the past two decades have established a secure foundation for the goals outlined in our newly adopted **Three-Year Strategic Plan**. We have left ample room, we trust, for adaptability and even shifts in direction as new opportunities arise. This is a "road map" with a fair amount of flex factored in. It does, however, give both clarity and focus to the central purposes and deep-rooted identity of our chapter. It will allow us to balance between the faithful core members who have not only supported but actively participated in building our organization, and the exciting potential of new faces, new blood, and new ideas that will help push past limitations, both seen and unseen.

The very real windows of opportunity opening up to us are given a sharpened sense of what is imperative by the tough challenges that require smart investment of our resources and gutsy decision making. To meet these challenges, our staff, board, and entire Friends family will need to work more effectively in our internal functions, as well as more thoughtfully in developing partnerships with our county's growing conservation-centered coalition. This is, indeed, an "all hands on deck" moment if we are to protect and restore the incredible biodiversity and the unique habitats in our region that have sustained our beloved avifauna for millennia. We've got to be strong, smart, and good to achieve the changes that are needed. In three years, if our efforts live up to the potential of the plan, we will be well down the road to fulfilling that vision.

David Stump, SDAS President

The graphic to accompany our newly minted tag line (above) is a contribution of one of our newest artists, Haiwa Wu. Her cheerful, imaginative drawing and playful style have already had an impact in our communications. Two relatively new members of the SDAS team, Karina Ornelas and Jenna Asperslag, contributed long hours translating into Spanish and meticulously formatting the Local Birds of San Diego *guide now available (see below). These are just three of the growing number of talented, committed members having a real impact on our programs.*

Pat Libby of Pat Libby Consulting successfully teamed with our Executive Director Travis Kemnitz, board, and staff to produce our Three-Year Strategic Plan. She has served as a CEO, academic, board member, and consultant to innumerable nonprofit organizations and foundations. Her firm works with organizations to think, plan, and govern strategically, and find practical solutions to other complex problems. Never incremental in approach, Pat seeks to bring about transformational change in organizations and systems. We believe she has helped us do just that.

(continued from page 4)

the dirt path bordering Mission Bay High School and can see the athletic fields, tennis courts, and Mission Bay Golf Course on the opposite side of the creek. This area is part of the City's *De Anza Natural* plan, and some mix of active recreation would be included here, along with regional parkland. The plan would also restore wetlands along the creek with a buffer between them and the parklands, a feature Meyer commends.

The dirt trail ends at the southeast corner of the high school, and I switch to the bike path, following it onto the bridge over Rose Creek. From the bridge, I have a perfect view of the creek entering the bay. The De Anza Point site lies east of the creek and the Campland site lies to the west. Both the *Wildest* plan and *De Anza Natural* restore wetlands where Campland currently sits. In *De Anza Natural*, however, an upland/buffer area would jut down into the wetlands, which environmental stakeholders, including San Diego Audubon, believe will continue to block the fresh water and sediment flow to Kendall-Frost. While the *Wildest* plan includes upland and transitional areas, they don't protrude into the wetland area. *Wildest* also would connect tidal creeks to existing storm drains at the end of Noyes Street and Olney Street to improve water flow and water quality to this area. Additional channels would be created to bring even more fresh water from Rose Creek.

Where the two plans greatly diverge is on the east side of Rose Creek, and the difference is stark. In *De Anza Natural*, the De Anza "boot" would remain mostly intact, with the majority of it dedicated to low-cost visitor accommodations (50 acres with approximately 600 campsites for "RVs, cabins, or other eco-friendly accommodations"). A channel would cut through the middle of the boot, with additional low-cost accommodations on the other side.

The yellow line marks the boundary for either plan.

While environmental stakeholders support shoreline camping, they would like to see it moved up to the regional parkland to both maximize and protect the area devoted to wetlands, as well as ensure resilience to sea-level rise. "I think the City should be extremely wary of investing any infrastructure dollars in anything close to sea level, other than a wetland," says Costa, adding that "it is extremely likely to be a wetland or *wet land* in a few years anyway." With this in mind, the *Wildest* plan converts the *entire* De Anza Point area to wetland and upland habitat. While *Wildest* doesn't include the regional parkland and active recreation area in the plan, one of the ReWild Coalition members, Citizens Coordinate for Century 3, created a plan that does include that area, showcasing how camping and many of the recreation opportunities included in the City's plan could coexist with the Wildest plan's wetland restoration configuration.

The goal of the channel between the two areas of low-cost accommodations is to provide fresh water and sediment flow to De Anza Cove from Rose Creek, but many of the environmental stakeholders involved see this as problematic. ReWild's feasibility study, which looked at similar scenarios, showed that it didn't improve water quality. "De Anza Cove is pretty deep, and it wasn't increasing flushing very much," says Meyer. He adds that the channel would be hard to maintain because sediment would build up in it, requiring regular maintenance. "Our feasibility study was focused on low-maintenance wetlands," he adds. "You don't need to dredge a wetland because it works on its own. Any kind of flare that the City puts on it is one more thing that you're going to have to riprap shoreline, which is not useful habitat to birds, and dredge, which increases your carbon emissions." But as an indication of the City's positive direction, the plan does include small areas of wetland habitat along the western side of the boot and on the other side of De Anza Cove.

It's a lot to take in, but as I look out across the bay, I can't help feeling optimistic. The vision of restoring wetlands to this corner of Mission Bay is one step closer to reality, but there's still work to be done. The next step is for the City to create an *Environmental Impact Report (EIR)* for *De Anza Natural*. In public comments to the City in response to *De Anza Natural*, major environmental stakeholders for the project, including the Coastal Conservancy, San Diego Regional Water Quality Control Board, U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the UC Natural Reserve System all called upon the City to consider the *Wildest* plan alongside *De Anza Natural* in the EIR. San Diego Audubon and the ReWild Coalition are heartened by this response and will continue to push the City to make our *Wildest* dreams come true.

Restoring a People to Mission Bay

by Rebekah Loveless and Brandon Linton, 'Ilpay (Kumeyaay)/Cupa, Renascence

Prior to the Mission era, San Diego's indigenous people, the Kumeyaay, inhabited the coasts, valleys, mountains, and deserts of California and Baja. While many have historically been confined to reservations, cut off by borders, forced into assimilation, or found other means of survival, their connection and love of their homeland has gone unchanged since the birth of time. Fortunately, the Kumeyaay are resilient and remain in their unceded homelands. With their presence, community, and partnership, we have the opportunity to salvage and restore a small portion of the original wetland in Mission Bay.

Through the De Anza area, the City has before them an opportunity for restoration of our depleted wetlands. Restoration of our capacity to enjoy our natural resources. Restoration of natural habitat for wildlife and plant life, and restoration of space for the original inhabitants to reestablish their connection with their homeland and have equitable access.

Our elected officials have the unique chance to design and support a model project that puts San Diegans first, creating a space that allows for all inhabitants and visitors alike to enjoy the natural beauty of a functioning wetland and the cultural education brought in by shining a light on the importance of Kumeyaay traditional knowledge through land-management opportunities. The possibilities are endless.

Those of us with intimate knowledge of the San Diego landscape would love to see the wetlands restored, the natural harmony of man and earth restored, access for Kumeyaay to gather cultural resources and to gather as a people restored. The *Wildest* plan allows accessibility to all life forms that inhabit San Diego, including birds, mollusks, plants, and people. Imagine a place of cultural engagement, healing, and a feeling of welcomeness to all. Not only do we create a place of healing, but also a chance for eco-tourism, sustainability, and a chance for us to define who we are to the world as a city and community. If done with the focus of inclusion, this plan could create a legacy of sustainable mixed use.

Teaching Moments *Real Outdoor Education Returns!*

by Rebekah Angona, Director of Education

When schools abruptly closed their doors during the pandemic, I don't think anyone imagined it would take more than two years before we would be able to get our students back out on the trail. Those two years felt like an eternity. We canceled our programs for Spring 2020, and the 2020-2021 school year saw the introduction of virtual programs. By Fall 2021, we were finally allowed to teach on school campuses. Although these programs provided students with a glimpse into the natural world, nothing could replace experiencing nature firsthand, outside, in the natural elements.

Finally, in March 2022, we were able to return to the beauty and simplicity of nature with our students. I'm not sure who was more excited—the students, the teachers, or our Naturalist team. During our in-class Silverwood Science Discovery program, we explained to the students how they could prepare for their upcoming field trip to the Silverwood Wildlife Sanctuary. The students asked, "Why do we need hiking clothes for a virtual field trip?" They couldn't believe they were going on a *REAL* field trip again. Similarly, as a cohort of students ran off the school bus toward our Naturalists at the Anstine-Audubon Nature Preserve, they yelled, "This is our first field trip in years!" And, it's not just the students who were excited to get back outdoors. At Bayside Elementary in Imperial Beach, the principal ran down the sidewalk filming the students going out on their first field trip since the pandemic closures. He was so excited for them that he couldn't wait to share the news with his school community.

Though the past two years brought challenges none of us were prepared to endure, it also gave us the opportunity to strengthen our community partnerships, reflect on our teaching practices, and most importantly, long for the day we were able to teach outdoors again. This gave us the well-needed opportunity to fall in love with outdoor education all over again.

An American Kestrel is displayed by Clementine of the Agua Hedionda Lagoon Discovery Center for an attentive group of excited (but slightly apprehensive) children from Beaumont Elementary. Education Director and Anstine Manager Rebekah Angona savors the proceedings from the back row. Photo by Nigella Hilgarth.

Silverwood Calendar for July 2022

Silverwood Wildlife Sanctuary in Lakeside is free and open to the public on Sundays from 9 a.m. to 4 p.m. ***Registration required.*** To sign up for a visit RSVP at **www.sandiegoaudubon.org/what-we-do/silverwood.** Please note that COVID-19 safety rules may still be in place during your visit, and should be respected.

Silverwood is also open on Wednesdays, 8 a.m. to 12 p.m. *for SDAS Friends members only*. Please call a week in advance of the day of your visit at **(619) 443-2998**. See our web page for all updates.

Silverwood will be closed August and September. Anstine is closed July through September. We'll see you in October!

ReWild: What's Good for Birds Is Good for Kids

by Vi Thuy Nguyen, M.D.

Wetland conservationists and pediatricians have a lot in common. The conservationists work to preserve habitat for endangered birds. Pediatricians advocate for a built environment that promotes children's health. We also have in common the northeast corner of Mission Bay, which is critical to the health and well-being of birds and children. The ReWild wetlands site is a literal nursery for juvenile fish and bird species and is the figurative nursery we seek to make available for children to improve their health. This is how the collaboration formed between San Diego Audubon and the American Academy of Pediatrics (AAP) San Diego.

I work through the AAP California Committee on Environmental Health, trying to help move legislation to protect the environment as it relates to children's health—a pediatrician's prime responsibility. Climate change is a pediatric public health crisis. The long-term health consequences of climate change have disproportionately affected children, with increasing cases of asthma and higher rates of premature birth. Children are the most vulnerable victims to climate-related natural disasters. Air pollution, heat waves, and water-born pollution affect little bodies more because their organs are still developing. A child's greater body-to-surface area of epithelium to total body surface area exposes them to more environmental toxins. Children will suffer the most due to climate change, especially those who live in environmental justice areas.

Our communities need to commit to ReWild Mission Bay. The local climate change math does not add up unless we maximize wetland restoration. But when I think of the ReWild work, I also think of the possibilities of how this area can function to improve the physical and mental health of children. AAP San Diego has officially joined the ReWild Mission Bay Coalition to bring healthcare voices to wetland conservation. Pediatricians as a group have spent many hours with wetland conservationists at this site. Working together, pediatricians and wetland conservationists are imagining how we can collaborate and make this wetland part of community healing.

It is well established that reflective time in nature improves mental health. There is now a national call to document adverse childhood events (ACES). Children who have suffered more ACES have

Onward and Upward *A Grateful Farewell from a Conservation Champion*

Closing words from Megan Flaherty, Conservation Manager

For nearly seven years, I've had the great pleasure of working for the Conservation department of the San Diego Audubon Society. I was first hired in 2015, less than a week after completing my master's thesis and flying home from my graduate program abroad. Despite having just obtained this new degree, there was still so much that I needed to learn about the species, habitats, and most importantly, the people, that I was going to work with in the years to come.

I was fortunate to have wonderful mentors to lead me in that process—our previous Director of Conservation, Rebecca Schwartz, and Board Members David Kimball and Jim Peugh, who prodded me along as I mastered the skills needed to carry out large-scale habitat restoration projects. I would end my days dirty but satisfied, soil on my clothing and beneath my nails, but energized by the dedication of the volunteers that consistently turned up for work parties in the early hours of a Saturday or Sunday morning.

That pool of volunteers grew and morphed into something else—a community. Many of these friends and allies took on additional roles in the areas that they were most passionate about, whether that be watching over nesting Least Terns and their chicks, celebrating wetlands at Kendall-Frost, or pushing for action on climate change at City Hall. Volunteers that started out pulling weeds became so inspired by the mission of San Diego Audubon that they joined our Conservation Committee or Board of Directors. I have watched as many of these volunteers grew up, navigated the process of applying to college, or found their first job in the environmental field. The deep care that each of these people had for our region's natural beauty, and for the natural world in general, was contagious, and I found so much joy in stewarding these developing passions.

This network has allowed us to achieve important wins for San Diego's birds, other wildlife, and their habitats. It has also provided a deep well of support for when times get tough, and steeled us against the onslaught of deregulation that we had to endure through the last administration. I have watched in awe as the ReWild Coalition (with our Director of Conservation, Andrew Meyer, at its helm) has grown by leaps and bounds, creating an inclusive alliance with visionary plans for a restored, resilient, and truly accessible and equitable Mission Bay. We are so much closer to achieving our Wildest dreams than we were a mere seven years ago.

These experiences have further cemented in me a belief that people-powered advocacy is at the heart of successful environmental work. Each time that I saw the "ah-ha" moment in a new volunteer, or watched a newly trained Advocate speak out about a cause they care about; every successfully fledged Least Tern or restored patch of habitat—I will take all of these moments with me as I continue to fight for a healthy future for our planet.

Megan plans on pursuing a career in environmental law at Lewis and Clark Law School in Portland, Oregon. Help us wish her farewell at our **Volunteer Appreciation/Going Away Party** on Thursday, July 28th, from 5-7 p.m. at De Anza Cove in Mission Bay.

(Above left) CLT decoys are hand-painted by students to help real terns find good nesting locations. (Above) A recently hatched California Least Tern chick reveals the cryptic coloration that boosts their survivability on open sand.

higher levels of toxic stress. This has been associated with adverse health outcomes like asthma, heart disease, and poor mental health. Programs that combine nature bathing, mindfulness, and mentoring from caring adults like healthcare professionals and scientists would be a nature-based solution to ACES. Rather than building more concrete clinics, would it be possible to practice medicine on the wetlands? Meandering the wetlands with children, together listening to the sounds of the marsh, noting the anatomical details of our bird friends, and then checking our own vital signs? I think we will all find what studies have shown—our subjective well-being and stress levels are improved. I imagine affordable and accessible primitive camping opportunities for local San Diego children, as camping is shown to be one of the most effective ways to address the sleep problems facing our increasingly digitized young people. AAP San Diego invites you to come and meet us on the wetlands and let your imagination wander. Join us in this important work. For me, the northeast corner of Mission Bay has been a literal nursery—where I've brought pediatric patients and my own teenage children to wander and heal. And this is where I realized after meeting wetland conservationists, that what's good for birds is good for kids. San Diego Audubon and AAP are aligned and working together for the *Wildest* option for the northeast corner of Mission Bay.

Vi Thuy Nguyen, M.D., is Assistant Chief of Pediatrics at Kaiser San Diego. She is a Fellow of Environmental Health as part of the American Academy of Pediatrics and serves as Co-Chair of San Diego's AAP Climate Change and Health Committee

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Photo by LaTresa Pearson

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