

bay.org



bayecotarium™

ANNUAL REPORT 2021-2022



ACKNOWLEDGMENTS

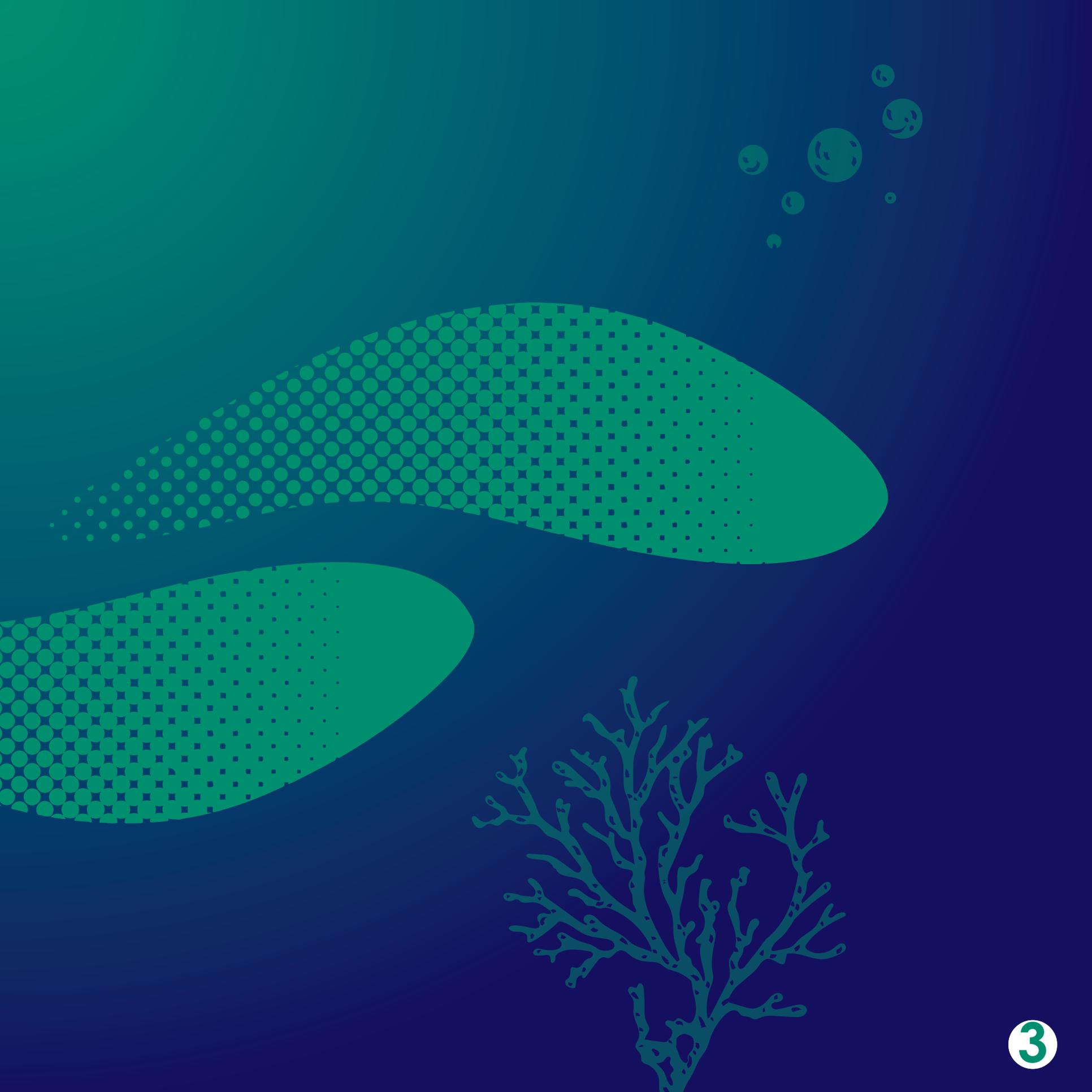
We are grateful to our Donors, Patrons, Sponsors and Members who have continued to support our programs through the last 26 years of the Aquarium of the Bay and 41 years of environmental advocacy through the Bay Institute. Our wonderful staff for their dedication, care, and hard work in nurturing the 24,000 animals in our collections. Our Board of Directors have remained alert to the fiscal challenges and emergency measures that we proactively put in place in 2020-21. Our external partners and international collaborators have demonstrated great faith in our ability to deliver amid adversity and challenges, that has continued to strengthen our resolve and explore new solutions and opportunities. We are most grateful to our advisors and in-kind supporters for helping us stay the course on our mission. Our Veterinarian Dr. Jill Spangenberg DVM, Ph.D. deserves a special debt of gratitude for volunteering her time and lending her expertise to give us the best animal care that meets the highest standards of excellence.

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Content: Department Directors

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The background features a gradient from dark blue at the top to a lighter blue at the bottom. Two jellyfish are illustrated in a stylized, line-art manner. One large jellyfish is in the foreground, and a smaller one is in the background. The word "CONTENTS" is written in white, bold, uppercase letters across the middle of the page, partially overlapping the large jellyfish.

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FINANCIAL
REPORT
2020-2021

BOARD OF DIRECTORS



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JACQUELINE MILLER



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National Geographic Explorer in Residence
Founder, Mission Blue; Deep Ocean
Exploration and Research



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Royal Canadian Geographical Society



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Retired Navy Vice Admiral; Former
Under Secretary for Oceans and
Atmosphere; Eighth Administrator,
NOAA



DR. DANIEL KAMMEN

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Goldman School of Public Policy;
Dept. of Nuclear Engineering
Founding Director, Renewable and
Appropriate Energy Laboratory



BRIAN BAIRD

Assistant Secretary, Ocean & Coastal
Policy, State of California; Former
Director, Coast & Oceans Program,
The Bay Institute



SUDHA PENNATHUR

Sudha Pennathur LP
Collections



M.R. RANGASWAMI

Founder Chairman, Corporate
Eco Forum



DR. BRANDEN BROUGH

Deputy Director, Molecular Foundry
Lawrence Berkeley National Laboratory



JASON CHAN

Vice President of
Asian Leaders Alliance



DR. SAM MOLYNEUX

Former Managing Director,
Chan Zuckerberg Initiative
Co-founder and Co-CEO, Poppy

Aquarium of the Bay staff celebrate the arrival of the new electric van for EcoXpeditions Sustainable Tours



EXECUTIVE LEADERSHIP



GEORGE JACOB FRCGS
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JAZ CARIOLA
General Manager



PAUL NAKAMOTO
Vice President
Guest Experiences



TEPPEI TOKURA
Controller



GARY BOBKER
Director, Rivers &
Delta Program



CHRIS LOW
Director, Facilities &
Life Support Systems



MELISSA SCHOUEST
Director, Animal Care



PATRICK DORAN
Director, IT Services



ANGELINA PREZA
Director, EcoXpeditions



KEVIN McELIGOT
Associate Director
Animal Care



JEFF WEAVER
Associate Director, Facilities
& Life Support Systems



VICKI DE WITT
Executive Assistant



MICHAEL LIKOSKY
Distinguished Fellow

SENIOR MANAGEMENT

HUNTER COUGHLIN
Manager, Studio Aqua
Multimedia & Promotions

BRIAN HARRIS
Senior Manager, Studio Aqua
Web & Graphic Design

JOJUAN CORBIN
Manager, Retail

ASHLEY McDONOUGH
Assistant Manager, Retail

ARSH SINGH
Manager, Finance

NETTIE MOORE
Manager, Operations

GLOBAL COLLABORATIONS





MESSAGE FROM CHAIR, BOARD OF DIRECTORS

December 14, 2021

Dear Friends of BayEcotarium:

As a business owner in San Francisco and in my capacity as the Chair of the Entertainment Commission of San Francisco, I experienced the crushing impact of COVID-19 pandemic that affected small businesses, entertainment, hospitality, and tourism destinations across the Bay Area. With cancellation of conferences, cruise ships, and business travel coupled with remote working and labor shortage, the city continues to project a cascading impact extending to 2025 before normalcy.

The Aquarium of the Bay, unlike many museums and indoor attractions, had a bigger challenge on their hands with 24,000 live animals on life-support systems and 24/7 animal and veterinary care linked to a unique supply chain of food. What the team managed to accomplish in the worst crisis in the 26-year history of the Aquarium is nothing short of a miracle. This year, it became the second most visited destination in the Bay Area.

As 2022 draws to an end, I am pleased to share that we have not only rebounded decisively forward, we have adapted to leaner methods of operation, explored newer streams of revenue and tapped into demographics previously unengaged. Our work and commitment to our mission has gained us numerous awards and recognitions that we are proud of. Much more to come in 2023!

Sincerely,

Ben Bleiman

Chair, Board of Directors, BayEcotarium
Commission President, San Francisco Entertainment Commission





MESSAGE FROM PRESIDENT & CEO

December 15, 2022

Dear Members, Patrons, and Friends:

As 2021 draws to a close, we have much to be grateful for. All seven of our branches pulled together to meet their goals and engage with each other for institutional success. Improvements and enhancements were incorporated in exhibits, content research, life support systems, animal care, retail merchandise and RocketRez ticketing systems. New exhibits were showcased in Discover the Bay and the Bay Lab. A NASA kiosk and a 3D display unit were installed in addition to wall murals and a whale sound audio-scape. The Aquarium released three new books titled – *Aquarium of the Bay Biodiversity Catalogue*, *Visit USA: A Dream Destination*, and *Visit California: The Golden State*. As visitor numbers held steady through the year, the Aquarium hosted the legendary Blue Angels Pilots during Fleet Week. October saw Grammy winners perform at the Blue Marble Event at San Jose City Hall with all Council Members signing a Proclamation in support of the BayEcotarium. Our Corporate Offices moved to Suite 330 on 55 Francisco and the Aquarium acquired an Electric Van to start Sustainable Wine Tours. Our Sustainable Seafood Alliance crossed over 50 restaurants as subscribers within weeks of its re-launch and our expeditions reached Greece, Baja, Hawaii, and Puerto Rico. We made airwaves on both radio and various television networks and were featured in numerous magazines and newspapers. The BayEcotarium Concept won its second International Design Award, and I was elected to the Board of Directors of US Travel Association.

There is much to look forward to in the coming year with new international outreach, expeditions, programs, grants, new exhibits including a coral reef tank and many new species to our collections. Sustainable fashions and a Climate Summit are also high on the agenda.

Stay tuned. Stay connected.

George Jacob FRCGS
President & CEO, BayEcotarium

Board of Directors ICOM US
Board of Directors CAL Travel
Board of Directors US Travel





EXECUTIVE SUMMARY

This year marked our 41 years of environmental advocacy through the Bay Institute policy work, and the 26th anniversary of ocean conservation through the Aquarium of the Bay programs and initiatives.

On June 8, 2021 - World Ocean Day - we became the first non-profit in the Bay Area to hold an in-person event graced by the Lt. Governor of California Eleni Kounalakis and the former Prime Minister of Greece, George Papandreou delivering the Keynote at the 28th TBI Awards and the Blue Marble Benefit where we honored the first Director of the Aquarium, Michael Gallagher, among others. In July, we were invited to meet the Prime Minister of Jamaica where we unveiled our Master Plan to develop a world-class \$132 million Oceanarium in Montego Bay and this year, we witnessed the groundbreaking ceremony of the Oceanarium initiative in Bergen, Norway.

Accolades of our efforts came from near and far, with the Aquarium of the Bay winning the Best of the Best in Bay Area Family Destination Award followed by the 2022 Global Sustainable Design Award and the 2022 SEAL Award for the

BayEcotarium. Our President & CEO George Jacob was elected on the Board of Directors of United States Travel Association and conferred the Queen Elizabeth II Platinum Jubilee Medal of Honor and our Multimedia Manager Hunter Coughlin was recognized as an emerging Tourism Professional by California Travel Association.

22 new exhibits were added to the galleries with added infusion from the Smithsonian Institution and NASA. Eco Expeditions programs thrived in Crete, Baja, Hawaii and Puerto Rico. The facilities underwent major renovations with office spaces, labs, pumps, generators, refrigeration units, elevators and a slew of other improvements. We released multiple seminal publications including Visit California, Visit USA and Marine Bio-diversity and hosted a sol-out Blue Marble Benefit with former SF Giants star celebrity Hunter Pence, Mayor of San Jose Sam Liccardo and multi-Grammy Winner Ricky Kej and Lonnie Park. Pledges have come from Silicon Valley and elsewhere in support of the BayEcotarium and its climate legacy, as we look to a promising New Year ahead!

SMITHSONIAN AFFILIATED

BAYECOTARIUM

(NON-PROFIT 501C3)

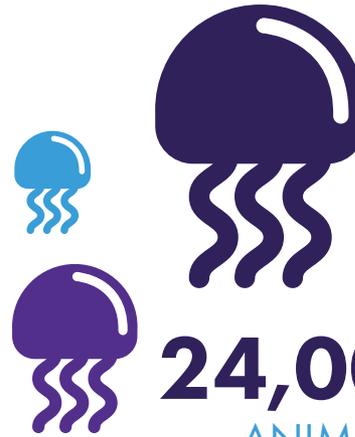
**INSPIRES CLIMATE RESILIENCE
AND OCEAN CONSERVATION,
THROUGH ENVIRONMENTAL
STEWARDSHIP TO
PROTECT AND PRESERVE
ECO-BIODIVERSITY, FROM**

SIERRA TO THE SEA™

41 YEARS OF ENVIRONMENTAL STEWARDSHIP

**2 MILLION
CHILDREN**

FREE STEAM
EDUCATION PROGRAM



24,000+
ANIMALS

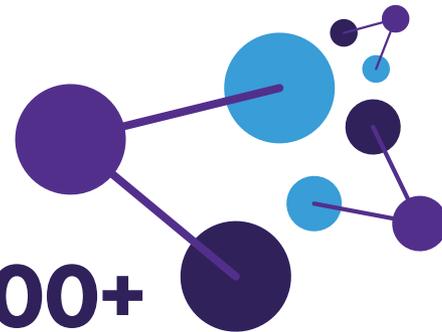
225
SPECIES IN OUR CARE



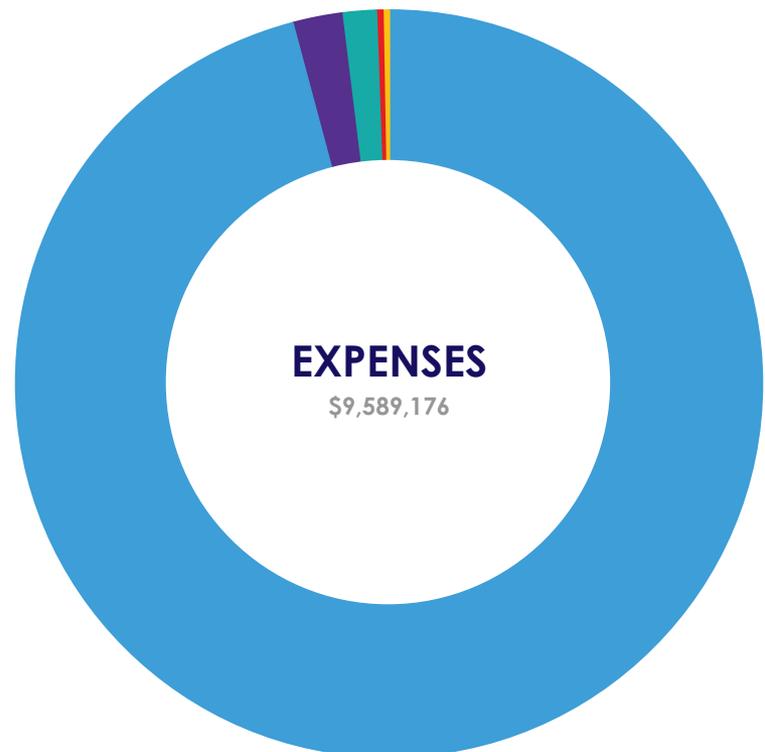
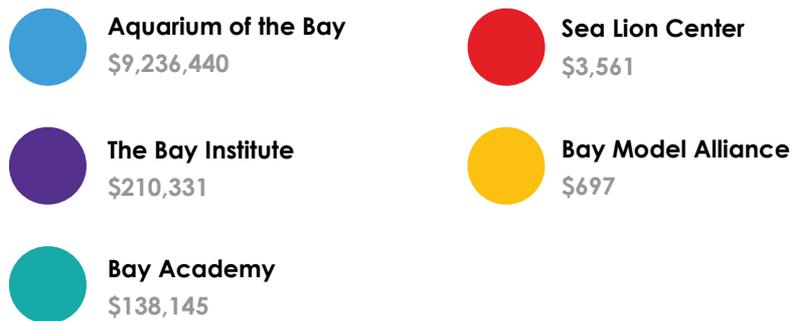
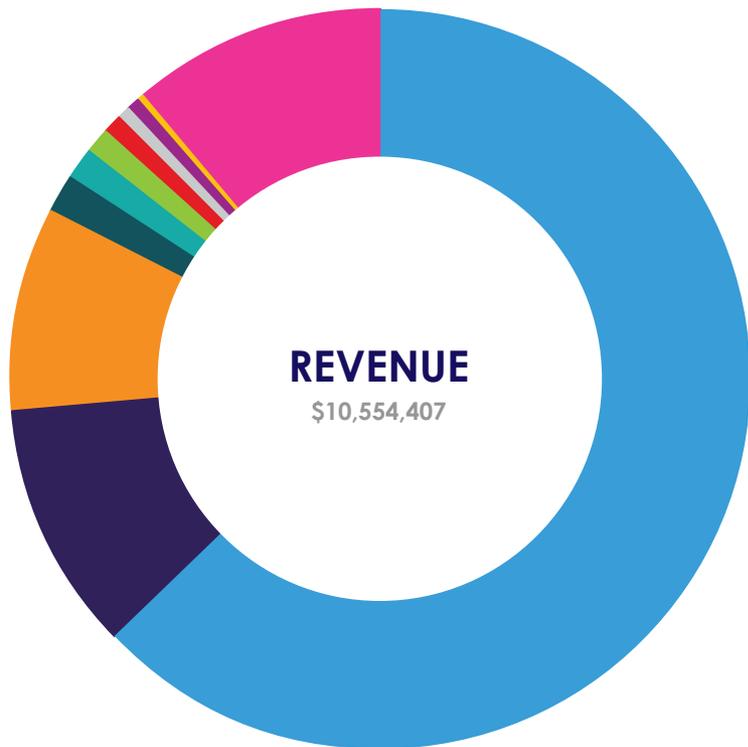
14 MILLION
VISITORS



12,000 LBS.
TRASH REMOVED FROM
BAY SHORELINE



100,000+
NETWORK FOLLOWERS



*Financial numbers include estimates for Q4 2021





ANIMAL CARE



With 2022 being the first full year of operations after the pandemic, the Animal Care team worked to forge a path towards normalcy for both the team and the animals within the institution's care in these unprecedented times. Maintaining the health and welfare of over 24,000 animals is the persistent baseline goal for the Animal Care team, and the department continues to strive to not only meet that goal, but to exceed it and pursue new objectives and improvements for the

animals depending on the Aquarium staff and donors.

In the preceding year, the department led and accomplished several exhibit improvements, the collection of new animals and continuing efforts to facilitate reproduction, completing vital training courses, rolling out a new digital recordkeeping platform, and preparing for the quinquennial reaccreditation with the Association of Zoos and Aquariums (AZA).



1. Newly collected pacific sea nettles drift around one of the holding tanks behind the scenes
2. Chris Grace patrols the surface on Kayak during a Timber Cove collecting trip
3. Isaac Koyama reels in an animal aboard the research vessel Mike Reigle
4. Blue tongued skinks are included among several terrestrial exhibits at the Aquarium. Their radiant blue tongue is meant to discourage potential predators in their environments.

4.



Pacific spiny lumpsuckers may be some of the world's worst swimmers, but certainly make up for it with their cuteness! These are among several of the species bred to increase conservation efforts at the aquarium.

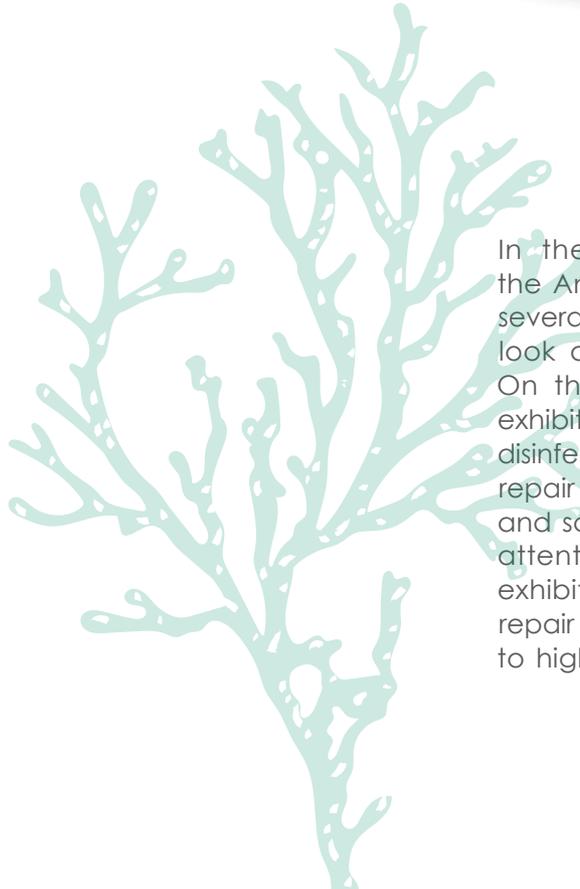
Associate Director of Animal Care Kevin McEligot & Biologist John Liu working on rock work in our California tide pool exhibit





◀ The California tide pool exhibit is home to many types of invertebrates such as sea stars, anemones, even sea cucumbers

▼ Visitors can touch anemones like these in our tide pool exhibit using one finger



In the exhibit improvement arena, the Animal Care team accomplished several goals – improving many exhibits' look and functionality in small ways. On the larger scale, the touchpool exhibits were sequentially drained and disinfected so that a professional exhibit repair technician could come to re-seal and sculpt several areas that needed attention. This work has given these exhibits a much-needed facelift and repair work – enabling them to continue to highlight the amazing animals and

provide interactive opportunities for the guests. The tortoise exhibit continues to undergo improvement and renovation to better care for the charismatic and long-lived tortoises in the collection, with improvements in airflow, lighting, and heat. In the kitchen, the Animal Care team worked with Facilities to renovate and replace the door to the walk-in freezer and the compressor that stores all frozen food for the animals on-site.



Several new animals and species were brought into the collection in 2022. Some novel species have begun reproducing, which is a welcome addition. A new California kingsnake has just finished quarantine and the biologists caring for it have begun work handling and working with the animal in the hopes of soon being exhibited and taking part in the animal ambassador program. Three new species have achieved reproduction milestones in the Aquarium's care – sailfin sculpin, big skates, and horn sharks. The sailfin sculpin have already hatched and are growing fast, providing a new generation of fish to display on exhibit and to send to other institutions. The big skates and horn sharks have laid a large quantity of egg cases, also known as mermaid's purses, and the team is monitoring them closely in the hopes that some are fertile and will hatch in 2023.

Several species of animal were brought into the collection that are new, including several Lingcod and gumboot chitons, charismatic local species that have enhanced the exhibits they reside in with their unique size and appearance. And several exhibits have new fish of their respective species swimming around impressing guests, including several species of rockfish and perch. The wolf eels that moved into the nearshore exhibit highlighted in last year's report have flourished and done well, with several of them approaching five feet in length – they are proving to be a diver favorite while working in this exhibit.





◀ Gumboot chitons like this one in our west coast beauties exhibit eat mostly red algae, sea lettuce and giant kelp

▶ California kingsnakes in the wild live on the west coast of the United States, as well as Nevada, Utah and Arizona



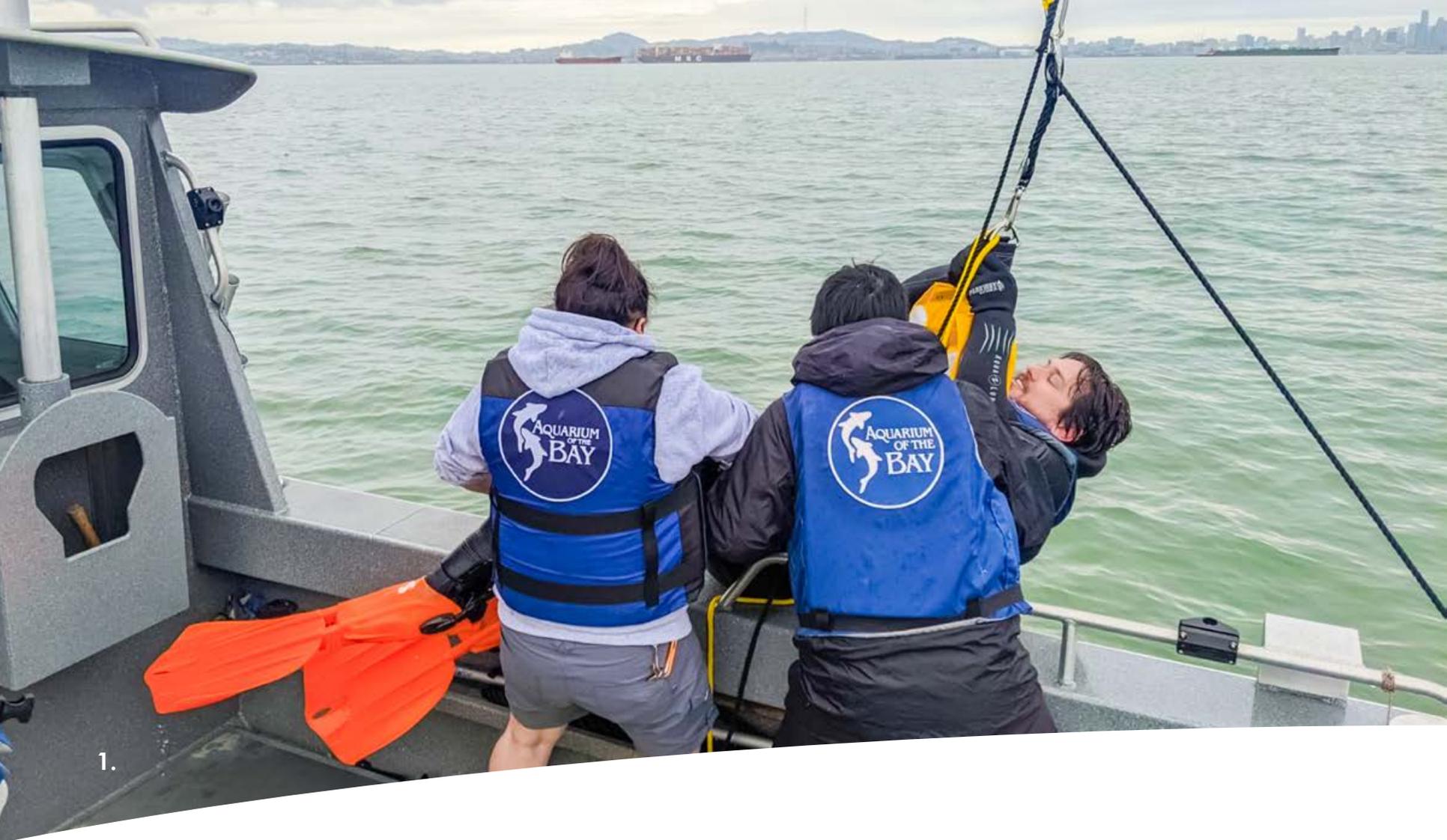


▲
Baby perch spending time in quarantine before moving to pier pilings exhibit in Discover the Bay

◀
Plainfin midshipmen, in the same family as toadfishes, produce a droning hum as an advertising call during mating season to attract a mate

Cherry head red-footed tortoises eat fresh fruits and veggies and prefer a warmer habitat temperature around 68-80 degrees Fahrenheit





1.

Every year brings intensive and thorough training refreshers to keep the team ready and trained for emergency response, and 2022 was no exception. The team continued to execute and refine animal escape training, man overboard drills for boat operations, and critical CPR and AED training in the event of a dive emergency.

Tracks, a software platform designed as a holistic and dedicated recordkeeping system was finally deployed and configured by the Animal Care team through a generous donation after a long preparation time in 2021. It has come with its own challenges and learning curves but has already begun to pay off in several ways as it has streamlined several aspects of the department's recordkeeping system.

Lastly, as 2022 draws to a close, The Animal Care Team turns its focus to preparing for AZA reaccreditation, a twice-a-decade onsite inspection of the entire organization to ensure the institution maintains standards of care, safety, and operational responsibility. The Animal Care team is busy reviewing protocols, care manuals, and records, and utilizing the preparation time to review and consider improvement potential across the department.



Animal care team hoisting Dive Safety Officer Chris Grace out of the water during a training session



Tyler Jung & Rachel Petro displaying "Person Overboard" suits during a training session



2.

▶
Biologists Isaac v & Mike McGill
piloting the research vessel Mike
Reigle out on the SF Bay

▼
Biologist Tyler Jung releasing a
broadnose sevengill shark back
into the SF Bay





◀ Animal care team enjoying lunch together outside the Aquarium

▼ Melissa Schouest, Mike McGill, John Liu pose before a collecting trip to Bodega bay







◀
Biologist John Liu diving
and cleaning the tropical
reef tank exhibit

▶
Multimedia Manager Hunter
Coughlin surfaces after a check-out
dive in the Sharks of Alcatraz tunnel

▶
Director of Animal Care Melissa
Schouest diving to perform
maintenance on the shallow reef
tank in Discover the Bay





AQUARIUM OF THE BAY

GUEST SERVICES & RETAIL

In Q1, Operations transitioned from Galaxy to RocketRez point of sales system. With the much-needed transition, guests now have an improved experience with being able to use touchless mobile payment instead of needing their physical card or using cash. The new system has also made it easier for other donations to be added to orders with a new round-up function. With the new sleek machines, they now have the opportunity for guests to input their own personal information when they purchase memberships or if they choose to have their tickets/receipts sent to their cellphones. With the new system, there is no longer a need to print memberships on plastic cards, they can instead be emailed to the guest. This support helps to support the Aquarium's green business model with less paper and plastic waste.

The implementation of RocketRez has also allowed Operations to offer new benefits for guests. The Aquarium now offers gift cards that can be used for entrance and items in the gift shops, as well as memberships if someone wants to gift a membership to a loved one. RocketRez has also made it easier to implement a price increase. From the seller's point of view, there was very little change in the way that an order is processed. After implementing increased prices to help with the cost of inflation, RocketRez implemented a new service called YouShield – a program that handles all problems that a guest may experience at the Aquarium with ticketing.



1. Retail associate Daz working in retail 1
2. Retail associate Jarred arranging merchandise
3. Guest services team member Jodie stationed at an Aquarium ticket booth to sell tickets
4. Retail Manager Ashley McDonough, Operations Manager Nettie Moore & General Manager Jaz Cariola take a selfie along PIER 39



GUEST SERVICES

ENTER TO WIN AN AQUARIUM MEMBERSHIP!

Fill out this form with your business card information.

SCAN ME



NO OUTSIDE FOOD & DRINKS

PRICING (Before Tax)

ADULT (13+)	\$21.75
CHILD (4 - 12)	\$21.75
CHILD (0-3)	FREE
STUDENT (WITH VALID ID)	\$26.75
SENIOR (65+)	\$26.75
FAMILY OF 4 (2 ADULTS / 2 KIDS)	\$80.00



PROGRAM OPTIONS

- DATE MASK
- PHOTO SESSION

Gift

Small Gift	\$15.00
Medium Gift	\$25.00
Large Gift	\$45.00
Family Gift	\$75.00

Guest services team members Valerie & Jackie working at the front desk of the Aquarium



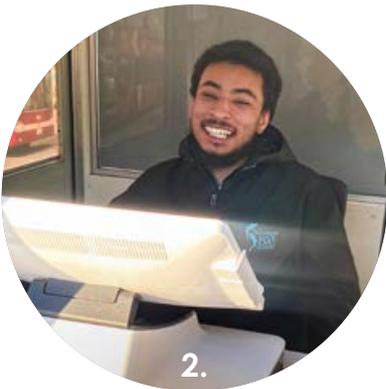
AQUARIUM OF THE BAY



The Guest Services team started an onsite pantry to help provide access to food for employees that may be facing food insecurity. The supervisors have also helped to make the Aquarium a safer place for guests and employees alike. During emergencies such as power outages and Code Adams, supervisors are the first line of defense. During power outages, supervisors first evacuate Discover the Bay and then move downstairs to the tunnels. Gift shop associates evacuate the gift shop and Education evacuates from Bay Lab. During Code Adams,

supervisors assure that every employee in the Aquarium is notified by making announcements over the intercom to try and get families reunited. Operations supervisors are also the people who inform the entire aquarium team that the emergency is over.

As the Operations team navigated this year, they were able to maintain a stable revenue stream. Most ticket sales were in-house or through the website rather than through third-party partnerships.



1. Retail associate Mario ready to help guests with their purchases at the retail 1 store
2. Guest services team member Jordan in the plaza ticket booth ready to sell general admission tickets
3. Senior retail associate (2022 Employee of the Year) Zenaida & Operations Manager Nettie at a restaurant outing



Andrea, Emely, Jodie, Jordan, Mario and Richard enjoying an outing at Players Café





AQUARIUM OF THE BAY

Merchandising and E-Commerce



This year was a whirlwind of changes for the Retail team. They have updated their POS system, which has in turn made them more efficient with the ordering and receiving process, as well as streamlining the inventory process which has helped them become more efficient across the board. The Aquarium's Retail team has launched new products this year such as Yoga Wear, reusable tote bags, and Nalgene bottles that are all in line with the Aquarium's mission to promote sustainable practices.

during the pandemic, the online store has been a unique and streamlined way for guests to purchase merchandise. The new addition of unique items such as masks and socks have sold very well where they would not have normally been through the physical storefront.



Retail sales at the Aquarium are still looking to recover to pre-pandemic levels, as people were choosing to spend money between experiences or souvenirs. While ticket sales increased, the recession had the biggest impact on retail. However, they did make over \$275,000 in sales over the summer. One of the Retail team's successes that continues to work in the Aquarium's favor is the online Eco-store. Born from a need to continue generating revenue

In Retail 1, the team relocated the Storibox photo area to the rear of the store. While this did take away from the floor space that was for merchandise, the move fixed significant bottlenecks and foot traffic in its previous location in Discover the Bay. Overall, the partnership with Storibox helps provide great value to the guest experience and its new home is much more suited to the floorplan. The Retail team also introduced the sale of refreshments in R2, purchasing a commercial refrigerator and tested selling various snacks. With sales going well, R2 will continue to sell beverages which has helped boost foot traffic and sales.



1. SOS Planet Earth book, sold in our retail store, tell climate action and hope stories from over 20 different celebrities & activists including BayEcoarium President & CEO George Jacob
2. New, reusable Aquarium of the Bay x Nalgene water bottles are available in a variety of different colors
3. EcoXpeditions apparel and reusable bags displayed in our retail store
4. CALM (Climate Action Living Museum) Yoga-wear in 5 different colors displayed in retail 1 store

ARIUM
OF THE
BAY

Set
Leggings & Bra
\$24.95

New Yoga Wear
Available Now!

Available online or in-store

aquarium bay

Sample sizes
Please see a
associate to
purchase

Available online or in-store

Pink
Sea Foam Green
Classic Blue
Black

Be the movement!

ON SALE ONLINE OR IN-STORE



New coral reef wall wrap and updated merchandise in Aquarium retail store





GEORGE JACOBI

MUSEUM
FUTURE'S
ZMG ALPHA

be
the Movement

VISIT
CALIFORNIA
GOLDEN STATE



Aquarium of the Bay hosted the primary session of the Fifth Berkeley Innovation Forum. More than 100 global CEOs and leaders of some of the world's most influential companies reflected on recent innovations and actions to combat climate change.





The final session of the event was hosted at the Bay Model Visitor Center in Sausalito and included presentations about industrial activities on the planet, how sustainability is key for the future, and best business practices to thrive in the modern business world.





AQUARIUM OF THE BAY



TRADESHOWS

Arival

Arival was a great opportunity for the sales team to learn how to best utilize OTAs and tour operators while at a great place to make new connections for the Aquarium.

Visit CA

Marketing and sales teams were able to get insight about California travel trends and how tourism is recovering. Aquarium of the Bay team members Hunter Coughlin, Hannah Woodall, and Cam Newton were able to hear from Visit California reps around the world and their approaches to bringing tourism to California.



IPW

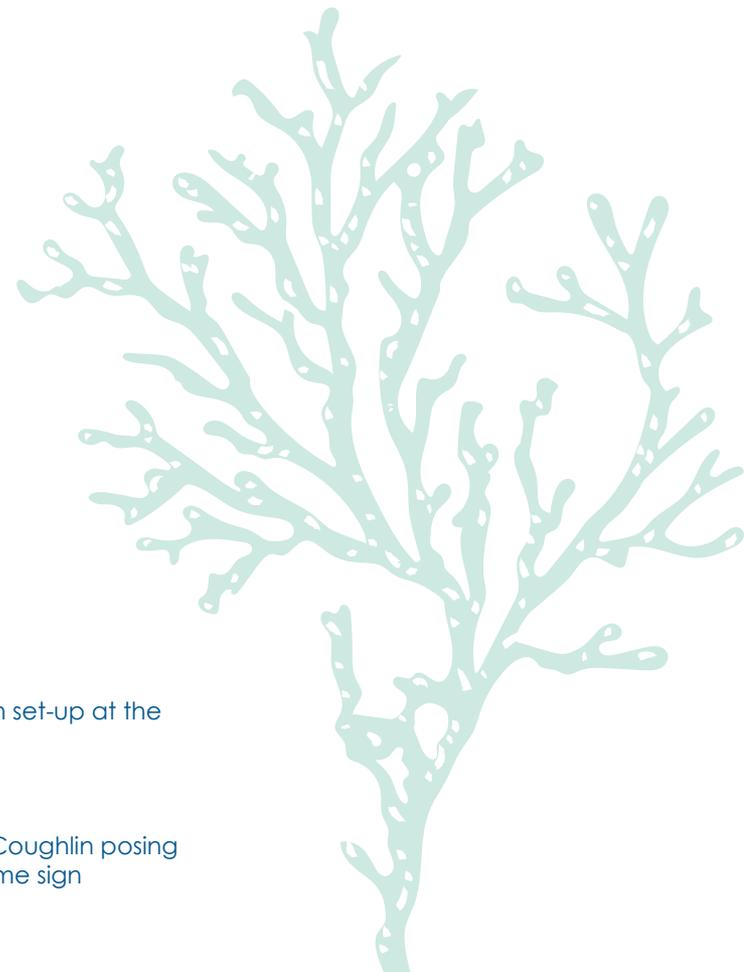
IPW gave insight on travel trends and how US Tourism is slowly coming back after the pandemic. The sales and marketing teams were able to share Aquarium updates, VIP tours, and EcoXpeditions with media, tour operators, and online travel agents. With over 40 appointments Hannah and Hunter met with existing partners and made new connections as well. The International Pow Wow is the Aquarium's most important show of the year, with tourism being as collaborative as it is.



All Things Meeting

Angelina Preza and Sean Hale attended the final All Things Meeting at the Exploratorium on March 29th. There they handed out private event flyers, brochure rack cards, and business cards. They even had some take home items such as plush toys, free tickets, and cell phone holders. While there, Hannah and Angelina also connected with other venues, CVBS, hotels, and attractions such as Visit Vallejo, California Academy of Sciences, Monterey Bay Aquarium, and more.

1. Aquarium of the Bay & EcoXpeditions booth set-up at the IPW tourism tradeshow in Orlando Florida
2. Pacific tree frog exhibit
3. Multimedia & Promotions Manager Hunter Coughlin posing upon arrival to Orlando with the IPW welcome sign





▲ Aquarium of the Bay and EcoXpeditions booth at All Things Meetings 2022.

▲ Multimedia & Promotions Manager & Events, Tourism, & Sales Manager Hannah Woodall pose with Andréa McBride, winner of the 2022 Visit California, California Dreamer Award, recognizing those that embody California's pioneering spirit for the largest Black-owned and female-led wine company in the nation.



AQUARIUM OF THE BAY



SEA LION STATUES

PIER 39 is home to many iconic San Francisco sights, and the sea lions are no exception. Originally viewed as large, loud burdens to the pier, many tourists and locals alike have now come to welcome them with open arms as they made the pier their permanent home. For the 30th anniversary in 2019, the Aquarium created 30 sea lion statues and commissioned local artists to paint them.

San Francisco's iconic animals than by introducing visitors to them where they are spending the night! The Aquarium gladly offered it to them, thus creating a great relationship with local hospitality experts. While handing out greeter coupons, Sean Hale asked more surrounding hotels if they were interested in providing a home to these wonderful art pieces.



Earlier this year, many nearby hotels inquired about adding a little bit of hometown feel to their business by including these statues on the premises. What better way than to commemorate

The Argonaut Hotel, along with 9 other San Francisco hotels, were all were excited to receive one. Just as the original sea lions found a new home, these new sea lion statues have as well to be adored by all those who visit them.

ONLINE TRAVEL AGENCIES (OTA)

This year, the Sales team investigated the Aquarium's existing contract and updated outdated rates to maximize

revenue. The Aquarium have contracts with 42 OTAs and Tour Operators.



1. Hyatt Centric Fisherman's Wharf
2. Riu Plaza Fisherman's Wharf
3. Holiday Inn Express Fisherman's Wharf

Argonaut Hotel

SHRIMP
cocktail

REAL DRINK
REAL FOOD
REAL PEOPLE

Jacks
SEAFOOD BAR

Jacks
AROUND
THE CORNER
OPEN THU 2AM

Jacks
BAR

Dei Monte
BRAND
WHISKY

START
HERE

SEA LIONS
30
YEARS





Aquarium of the Bay & Multi-Grammy winner Ricky Kej host a sustainable question & answer session at the Aquarium. About 100 guests in attendance were enlightened by this engaging fireside chat that included sustainable appetizers, beverages & a full aquarium tour!







AQUARIUM OF THE BAY

EVENTS

Night Waves

Guests enjoyed music, drinks and food after hours at the Aquarium's first Night Waves. Night Waves was a chance for guests to see the Aquarium in a different light. Guests were able to attend a special presentation by one of Aquarium of the Bay's amazing animal care staff, Mike McGill. The first attempt resulted in a profit, due to the work of the fantastic events and facilities teams.

Sofar Sounds

The Aquarium partnered with Sofar Sounds to be a part of their unique concert series. The Aquarium hosted two concerts with Sofar Sounds, all of which were resounding successes. These were intimate settings with a variety of performances ranging from jazz, indie, R&B, Rap, and bluegrass.

Berkeley Innovation Forum

On October 11, the Aquarium hosted the welcome dinner for Berkeley Innovation forum. Attendees were able to hear from R. Mukundan, CEO of Tata Chemicals on "Innovations at Tata for Earth's Sustainability" and George Jacob about the future of the Aquarium. On October 14th, UC Berkeley hosted its final day of the conference at the Bay Model Visitors Center in Sausalito. After the speakers concluded their presentations, Linda, a ranger with the US Army Corps of Engineers, led everyone on a private tour of the Bay Model which was thoroughly enjoyed by all.

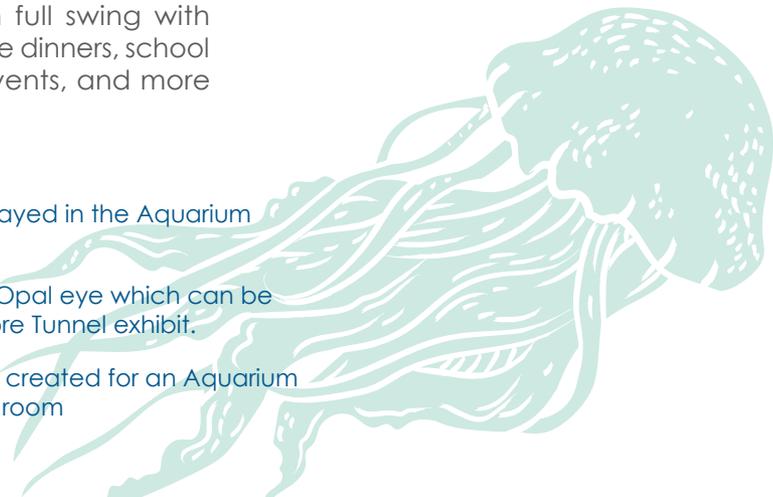
Fleet Week Blue Angles Watch Party

2022 marked the 2nd annual Fleet Week Watch Party at the Aquarium. The fog passed overhead just in time for guests to enjoy panoramic views of the air show. Over 100 guests were in attendance to take part the sights and sounds while enjoying the catered food and drinks provided by the Aquarium.

Private Events

The Aquarium held a variety of events this year. In what was a constant rotation of inviting guests to host events, the Aquarium was in full swing with birthday parties, private dinners, school dances, corporate events, and more throughout the year.

1. Water & coffee displayed in the Aquarium Farallon room
2. A strikingly beautiful Opal eye which can be found in the Nearshore Tunnel exhibit.
3. Custom lounge area created for an Aquarium event in the Farallon room





◀ Aquarium President & CEO George Jacob greets active duty Navy service members on the top deck at the 2022 Aquarium Fleet Week Watch Party in October

▲ Sofar sounds hosted an intimate evening concert in the Aquarium events room



▶ Smithsonian Institute hosts general information session at Smithsonian Affiliated Aquarium of the Bay



1. The 3rd floor deck of the Smithsonian Affiliated Aquarium of the Bay lends the perfect Fleet Week venue for out-door events overlooking the SF Bay and surrounding piers with military vessels & personnel.
2. US Navy Blue Angels enamored by the Sharks of Alcatraz tunnel
3. Blue Angels exploring the first floor of the Aquarium



4. Education Manager Doug Apple & CEO George Jacob guide the Blue Angels through the Sharks of Alcatraz exhibit
5. Blue Angels pilots performing inverted aerial stunts atop the Aquarium roof
6. Crowds seen at Plaza de California park during Fleet Week, between PIER 39 and Pier 35



AQUARIUM OF THE BAY



Blue Marble 2022

On October 24th, World U.N. Day, the Aquarium presented four Blue Marble Awards to individuals and companies who have shown tremendous commitment and dedication to ocean conservation, sustainability, and environmental advocacy. The winners of these awards - Alaska Airlines, Visit California, Clearinghouse CDFI, and Marie Harrison – received recognition for their work at the San Jose City Hall Rotunda. Distinguished speakers at the event included former San Francisco Giants player Hunter Pence, NetApp President and CEO George Kurian, and Mayor of San Jose Sam Liccardo.



The Blue Marble Awards is the annual awards ceremony and fundraiser of BayEcoarium, the Aquarium's parent company to honor, recognize, and promote individuals and organizations who have made outstanding strides in sustainability and environmental advocacy.

Alaska Airlines was awarded a Blue Marble Award for their implementation of sustainable fuel and their plan to reach net-zero emissions 2040. Visit California was awarded for introducing their Sustainable Travel Program, in

which they encourage sustainable travel habits and guide visitors coming to California. Clearinghouse CDFI was awarded for their emergency financial assistance to the Aquarium during COVID, which ensured the animals were able to be cared for and staff could continue their critical work. Marie Harrison was awarded her Blue Marble Award posthumously for her lifetime of work towards environmental justice and her relentless fight for the health and safety of the people living in the Bayview Hunters Point neighborhood of San Francisco.

The Aquarium also announced two winners of the Sylvia Earle Academic, or "SEA" Scholarship. Named for the famed National Geographic explorer in-residence, the SEA Scholarship is awarded to students who are pursuing a career in marine biology, conservation, sustainability, or other related fields. One of the recipients was Keenan Guillas, a graduate student at San Jose State University's Moss Landing Marine Laboratories. The other recipient is Vasiliki Balafa, a postgraduate of the Natural Hazards and Disaster Mitigation program at the University of the Aegean, Greece.



1. Blue Marble event space inside the San Jose City Hall Rotunda
2. Sea lion statues welcome guests along the blue carpet at the event entrance
3. Guests enjoy their evening at the Blue Marble

Arieann Harrison accepts a Blue Marble Award from BayEcoarium board member Angelique Tompkins, awarded posthumously to her mother, Marie Harrison, who was a Bayview-Hunters Point area environmental advocate and hero for the fight for environmental justice





1. Grammy Winner Lonnie Park & Keith Middleton pose following an epic Blue Marble Awards vocal performance
2. Master of Ceremonies, ABC-7 new anchor Dan Ashley welcomes the crowd to start the evening.



3. Multi-Grammy winner Ricky Kej addresses the Blue Marble Awards reception audience
4. Set in beautiful downtown San Jose, the SJ City Hall Rotunda lends a dramatic and spectacular venue for an ocean-conscious awards reception
5. NetApp CEO George Kurian addressing the audience
6. Former SF Giant Hunter Pence poses with a sea lion statue after delivering the Key Note address
7. George Jacob with SJ Mayor Sam Liccardo following the proclamation of BayEcotarium Day on October 24 in San Jose
8. Audience members enjoying world class musical performance on stage
9. Jazz band Radio Gatsby performs to open the event

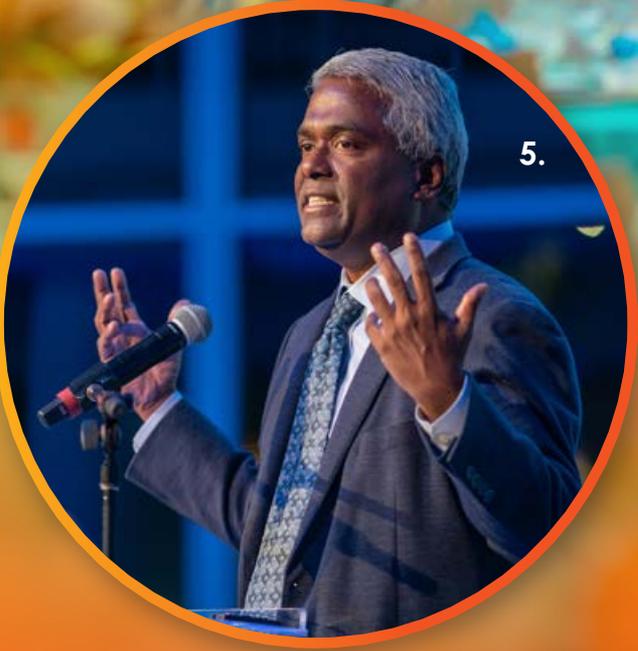


4.



Blue Marble

2 • 0 • 2 • 2



1. Gene Zanger, Owner, Casa de Fruta & Chair, Visit California, gives a speech after receiving the Blue Marble Award

2. BayEcoarium President & CEO George Jacob presents Alaska Airlines Managing Director, Public Affairs California David Tucker with their Blue Marble Award

1.



2.



4.



3.

3. BayEcoarium Board Chairman Ben Bleiman poses with Blue Marble Award winner CDFI Clearinghouse and its CEO Doug Bystry

4. Blue Marble Awards

REUBEN, JUNIUS & ROSE, INC.

JOY & DARLA FISHER FOUNDATION

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PAY TO THE ORDER OF **Vasiliki Balafa** \$ **4,000.00**

Four Thousand and $\frac{00}{100}$ Dollars

FOR Sylvia Earle Academic (SEA) Scholarship *[Signature]* MP

⑆123450067⑆ ⑆⑆9876⑆⑆5321⑆⑆

Greek Consul General Socrates Sourvinos, center, accepting the Sylvia Earle Academic check on behalf of Greek Marine Biologist Vasiliki Balafa



AQUARIUM OF THE BAY



RocketRez

Rocket Rez Ticketing System

Bringing in the New Year, the IT team of Patrick Doran and Evan Louie signed a contract with Rocket Rez as the new ticket platform. This is a switch from Galaxy which has served as the ticketing since opening. Part of the benefits of switching is now guests who decide to enter their phone number during checkout will get a reminder via text with link to their tickets directly.

As part of this switch, the Aquarium has gone to digital ticketing, and the system can still print tickets if guests ask but default to all digital ticketing to reduce wastepaper and improve guest check-in speed. In switching they have generously donated 9 new

POS (point of sale) machines and 9 EMV (credit card machines) devices, meaning the front desk and retail staff have all new computers to work on. This generous donation of equipment was sorely needed as older equipment was pieced together over time, so it had different sets of hardware which made for difficulties in diagnosing problems.

Large Entrance TV

Directly as guests enter Discover the Bay, they are greeted by a 98" TV welcoming them with associated images of what animals they are likely to see further inside. This TV weighs 100+ pounds and needed to be lifted in place with help from the great Facilities team.



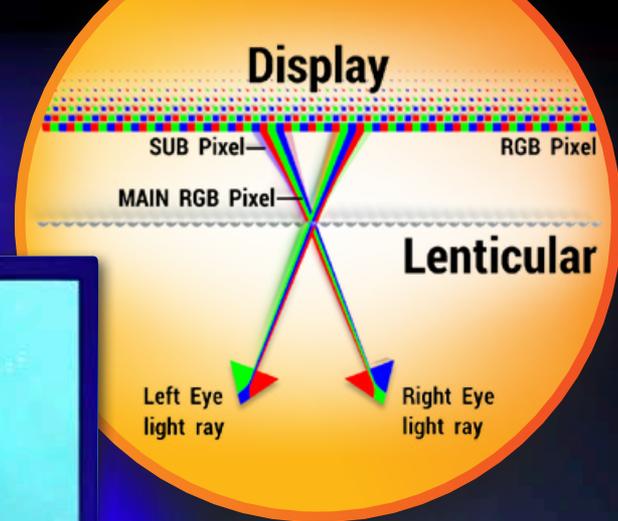
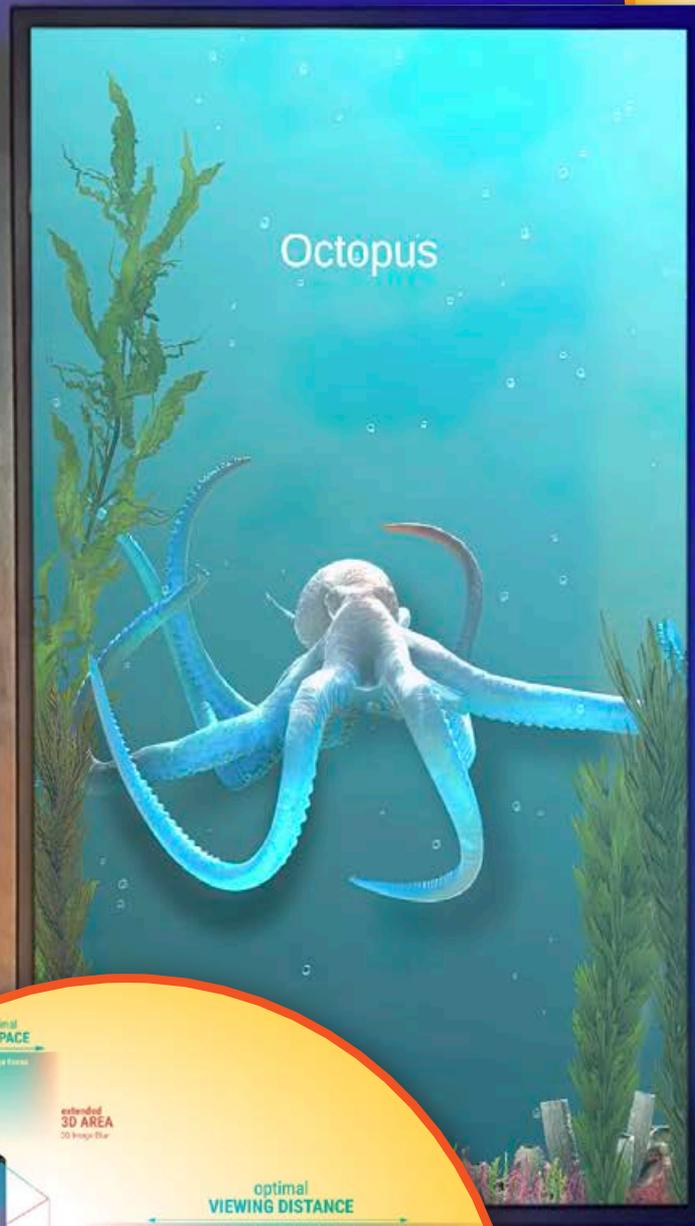
▶ New EMV (credit card machines).



▶ New text alerts to customers after purchasing tickets.

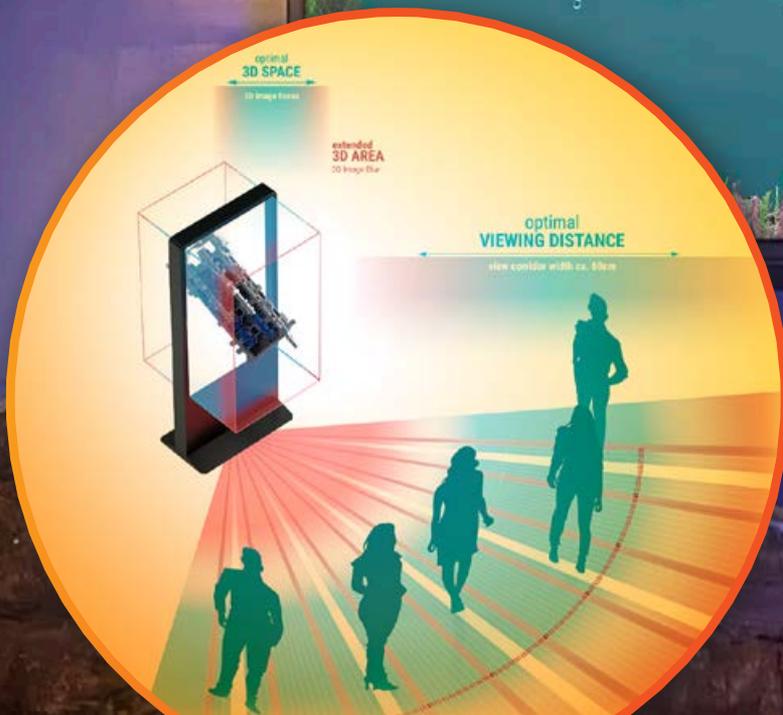
▶ New point of sale machines installed in the aquarium front desk





3D TV

Working with United-Screens, the IT team installed a new digital animal experience that uses glasses-less 3D technology to display a 3D projection of various animal species. This new exhibit will be displayed in the Cephalopod Gallery along with the Red Octopi and Lumpsumckers.





INFORMATION TECHNOLOGY

NASA Kiosk and Tardigrade Exhibit

When Education and IT (Information Technology) were working on getting the NASA kiosk from the Smithsonian Affiliate program, they were brainstorming ways to tie it to the Aquarium. IT wanted to include parts of the 3D printing program and Education and Animal Care wanted it to feature something about animals. They decided to combine their ideas by taking NASA's experiments using Tardigrades and 3D printing in the ISS, into what you see today. Since tardigrades are microscopic, they 3D printed a large-scale model of what the little water bears look like. Tardigrades A.K.A. Water Bears have been sent to the ISS as part of their experiments on the long-term effects of animals in space. The Tardigrade had to be printed in 3 sections and then pieced together and painted. In total, the almost 2 ft. statue took 21 hours to print and behind the kiosk they included some 3D printed NASA themed items, including an actual working model of an item that was 3D in space for an Astronaut.

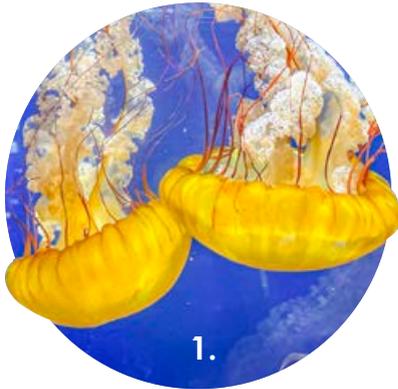
1. Pacific brown sea nettles drift together in the Go with the Flow gallery. New digital screens
2. IT Director Patrick Doran examines a 3D printer as it prints a large-scale Tardigrade model for the NASA exhibit
3. NASA astronaut holding a 3D printed object at the ISS

Jellyfish Exhibits

In the Jellies exhibits, the older digital display screens were reaching their end of life, so the IT team decided to replace them with new 22-inch TV displays in the Portrait format. These new screens allowed for the use of dynamic videos instead of slides like presentations that flow better and visually look better. These new screens worked so well they have determined to phase out all old displays with these new screens over the next year.

Whale Sounds at the Front Entrance

As part of improving guest experience before guests enter the door, the IT team placed thematic sound speakers near the front doors.



OBSERVING WITH NASA

Here are some amazing amateur astrophotographs created by people just like you!



OBSERVING WITH NASA

With a specially designed new observation tool, you can explore the universe and discover the secrets of the cosmos. The new tool...



Printed in 3 parts, glued together, and painted, a Tardigrade AKA Water Bear has been displayed to augment the NASA kiosk & its messaging regarding space





Aquarium of the Bay holiday party featured an ugly sweater contest, raffle prizes, festive decorations & delicious food and beverages. From left to right, Events, Sales & Tourism Manager Hannah Woodall, Facilities team member Eric Calistro, Director of Animal Care Melissa Schouest, Executive Administrator Vicki De Witt & Finance Manager Arsh Singh, and Facilities Director Chris Low show off their holiday sweaters and try to pick a raffle prize!





1.

1. George Jacob, President & CEO of BayEco-tarium, and Congresswoman Loretta Sanchez meet with Esther Coopersmith in her Washington DC home. Coopersmith has a long legacy of "bringing people together," known as Washington's most famous hostess, and a household name in DC diplomatic circles. She is a former public member of the US delegation to the United Nations, from 1979-80, then advised US delegates to the UN Status of Women Commission in Vienna from 1981-83. In 1984, she became only the second woman to receive the UN Peace Prize for her efforts to foster dialogue and understanding among different cultures and faiths, especially in the turbulent Middle East. In 2009, Coopersmith was named UNESCO Goodwill Ambassador.



2.



3.

2. 200 California wolf eels, like the one pictured here, were born at the Aquarium in 2018. After successful up-brings most were re-entered into their original exhibit and some were sent to other Accredited Association of Zoos & Aquariums facilities throughout the United States.
3. Red octopus is a species of cephalopod that has 9 brains, 8 arms & 3 hearts! These intelligent creatures can shift color almost instantly using chromatophores, or color-changing pigments in their skin.



1. George Jacob, President & CEO of BayEcotarium, meets with NASA Administrator Astronaut Bill Nelson
2. George Jacob was conferred the late Queen Elizabeth II Platinum Jubilee Medal of excellence. Jacob's investiture was presided by RCGS Governor Hon'ble Lois Mitchell, left, at a sobering ceremony held at McDougall Center in Calgary, Canada on Nov 28, 2022.





3.

3. Giant sea bass are currently a critically endangered species that were fished almost to the brink of extinction in the 1930s. They can grow up to 500lbs and live for almost 70 years!

4. Moray Eels have 2 jaws, one called the oral jaw and one called the pharyngeal jaw. This double powered jaw system is both effective and unique as moray eels are the only invertebrate that transport and restrain their food with them.



4.



RIVER OTTER SNOW DAYS

River otter snow days have always been a huge hit at the Aquarium. Thanks to A La Rocca Seafood company on Fisherman's Wharf for their generous donation, 4 huge tubs of fresh ice were dumped into the north American river otter exhibit for all 4 male otters to enjoy. Combined with Christmas trees from The Guardsmen Christmas tree lot at Ft. Mason, these elements provide stimulating enrichment for our river otters including new smells, textures, and temperatures, among others. This past year, the Aquarium hosted its first VIP early access viewing for river otter snow days, featuring coffee & pastries at 10 AM, followed by an early viewing opportunity at 10:30 AM before the Aquarium opens. The otters always have their best night sleeps after river otter snow days!







AQUARIUM OF THE BAY

FACILITIES AND LIFE SUPPORT SYSTEMS (LSS)

2022 has been a productive year for Facilities and Life Support Systems team. The year started out with some much-needed work on the walk-in freezer. The walk-in freezer has been a reliable piece of equipment running 24/7 for the last 26+ years, but it was starting to have an issue with its compressor and the freezer door. The compressor needed to be serviced on a regular basis, and the repair technicians said it was only a matter of time before it would give out completely. The freezer door, over time, had gotten moisture inside and was swelling due to the moisture freezing and expanding. This made it impossible to get the door to seal properly and team members were constantly chipping ice from around the door as the cold air escaped and froze in the door frame. The compressor and door were both replaced and that has added some additional life to the freezer, not to mention reduced energy load and staff time. Working with Studio Aqua, the design and marketing wing of Aquarium of the Bay, there have been changes to signage and flooring to create a more immersive and consistent brand throughout the facility.

There was also some moving that took place this year. The administration office moved from the 7th floor of 55 Francisco to the third floor of 55 Francisco. The new office creates a smaller footprint that is a more appropriate size for the reduced staffing levels the organization had after the pandemic. The other move was out of the Sea Lion Center @ PIER 39. Once again due to the pandemic, Facilities team was unable to staff and open it to the public.



1. New compressor for walk-in freezer
2. Old compressor decommissioned after 26+ years of 24/7 service
3. Old walk-in freezer door being removed
4. New freezer door being prepared for install





▲ Facilities team after a successful team-bonding fishing trip

▲ New megalodon jaws displayed in Discover the Bay gallery educates about the largest species of shark to ever live!



AQUARIUM OF THE BAY



The aquarium opened 3 new exhibits this year replacing old, outdated exhibits, one being opened in an unused nook in the otter exhibit area. The first exhibit, Sharks in and Beyond the Bay, highlighted the work of the Animal Care Team's research project, interesting shark facts, and a replica of a megalodon shark jaw in the Discover the Bay gallery. The next exhibit that demonstrates how noise pollution in the water affects whales was opened in the Bay Lab gallery. The last exhibit was a NASA Kiosk that allows visitors to explore planets, the sun, and galaxies with actual photos from NASA telescopes. Guests can add different filters to the images and email them to themselves. It also highlights the microscopic water bear, the actual name being Tardigrade, which opened in the Otter gallery.

The 5-year Association of Zoos and Aquariums re-accreditation application was also due this year and the inspection team visit follows in January of 2023. The Animal Care and Facilities team did a complete walk-through of the facility documenting all issues. This was then converted into a worklist which was divided into floors and categories identifying the timing of projects.



Highlights

- An addition to the squirrel exhibit to satisfy USDA requirements.
 - Tortoise exhibit upgrades to maintain the proper heat and moisture in the exhibit.
 - Exterior wood railing re-finish.
 - Alarm panel work.
 - Emergency generator service and new timer clock installed.
 - Aquarium office moves and spring purge/cleaning.
 - Green business 5-year re-certification.
 - Relocated photo concession and retail point of sale.
 - New addition to the Facilities and Life Support Systems team.
1. This year the facilities team replaced multiple pieces outdated original hardware including pumps, compressors and other equipment
 2. A full sea lion skeleton displayed in acrylic being moved from the former Sea Lion Center back to the Aquarium

Go with the Flow

1.



2.



1. New display screens throughout the Go with the Flow sea jellies exhibit supplement serene jelly animal encounters with informative educational information
2. Young purple striped jellies newly added to the Go with the Flow exhibit.
3. Upside down jellies exhibit, one of few tropical marine species at the Aquarium

3.





▲ New BayEcotarium Administrative offices in the 3rd floor suite

▶ Deconstructed office cubicles sit waiting to be moved into the new offices





A new Bay Lab exhibit featuring noise pollution & its effects on marine mammals being installed. This new space includes 5 cetacean artifacts as well as an anatomical diagram of a sperm whale, the loudest animal on the planet.

hundreds of pieces of baleen found in a filter food, much like a rake. The pieces of the blue whale (*Balaenoptera musculus*), the largest animal on earth with a mouth that can stretch 100 meters in length.

GRAY WHALE VERTEBRAE

This massive bone is one of 36 vertebrae making up the spine of a gray whale. It supports the whale's head, which averages 40 feet (12 meters) long.

SPERM WHALE

This is the skull of a sperm whale, the largest toothed whale. It is made of a dense, dark material called spermaceti, which is used for echolocation and communication.

SPERM WHALE

This is the skull of a sperm whale, the largest toothed whale. It is made of a dense, dark material called spermaceti, which is used for echolocation and communication.



1.



CONSERVATION OF SHARKS

With fear circumscribing the conservation of sharks, scientists and environmentalists have aimed to improve the understanding of sharks by our management strategies, and influence policy and legislation. Sharks are also a critical link in marine ecosystems and essential to the food web. Large sharks also consume gray seals and harbor porpoises and other mammals. In fact, sharks are some of the few predators of large marine mammals. Because of this, their presence or absence can have a large effect on prey populations.

HUMAN IMPACT
100 million sharks are killed every year by humans.

VULNERABLE
Sharks are highly vulnerable to overfishing and habitat destruction.

SHARK FINNING
Shark finning is the practice of removing the shark's fins and discarding the rest of the animal. This is done to supply the shark fin soup market.

PROTECTION
The International Union for Conservation of Nature (IUCN) lists many shark species as vulnerable or endangered. The U.S. Shark Conservation Act of 2010 provides for the protection of shark populations.

2.



1. Newly installed wall graphics highlight the effects of climate change and global warming on ocean ecosystems & milestones achieved by The Bay Institute entering its 42nd year
2. Cherry-head red-footed tortoise in Bay Lab
3. Baby leopard sharks can be touched with 1 finger in the Aquarium touch pool
4. Newly wrapped terrestrial exhibits in Bay Lab in front of a life size whale shark mural highlighting shark conservation





AQUARIUM OF THE BAY



HUMAN RESOURCES AND AWARDS

Human Resources (HR) has seen a very busy year in 2022. The Aquarium has welcomed a range of new staff members, all of whom have hit the ground running. HR has gone through significant staff training for their respective positions, fire drill training, and sexual harassment training. In addition, they have promoted workshops for improving individual skills to assist in their professional careers.

In addition to training and workshops, HR also took steps to ensure that the workplace remains fun and engaged through potlucks, fishing trips, staff excursions, breakfast, trips to the theater, and more. Doug Apple of the Bay Academy went on several international trips this year to promote education programs, network, and develop partnerships. In November, he visited Puerto Rico to do just that.

2.



**SUSTAINABILITY
ENVIRONMENTAL
ACHIEVEMENT
LEADERSHIP**

Awards

The Aquarium is also the recipient of several awards this year.

1. Hunter Coughlin, manager of Studio Aqua, received the CalTravel Emerging Leaders award for his hard work and dedication to the Aquarium's mission.
2. 2022 Business Sustainability SEAL Awards honored the BayEcotarium with a SEAL Sustainable Innovation Award. This award recognizes innovations that represent game-changing ideas that bring us to a more sustainable future.
3. Another award received by the Aquarium is a conceptual design award for the BayEcotarium – the APR Global Future Design Award. The BayEcotarium design, coming from the brilliant minds of designers and architects is now a winner of this award for two consecutive years.





GLOBAL FUTURE DESIGN
A W A R D S
SILVER AWARD
WINNER 2022

**Climate Museum
Wins 2022 Global
Future Design Award**

XTU



bayecotarium™
SAN FRANCISCO



AQUARIUM OF THE BAY

SUSTAINABLE SEAFOOD

The Aquarium’s Sustainable Seafood Alliance was first created in 2012 with the goal to educate and advocate for responsible seafood sourcing and consuming, as well as honor the restaurants in the San Francisco Bay Area already implementing sustainable practices. Unfortunately, due to the COVID-19 pandemic that temporarily closed restaurant doors and public gatherings, the program was put on hold. In 2022, the sustainability, marketing, and education teams collaborated to reimagine the Alliance and develop a more inclusive and accessible campaign for sustainable seafood awareness.

In two months, the Aquarium gathered 45 new and returning Alliance members who pledged to either become more sustainable or maintain their current sustainability practices. The Alliance’s restaurant and vendor partners are committed to serving and sourcing products that leave as little negative impact as possible on the environment. The Sustainable Seafood Alliance provides resources such as a

consumer guide on best seafood choices and details on the Aquarium of the Bay website about fishing vs farming, local and seasonal consuming, and what to look out for when picking out fish in the supermarket. The objective is to avoid eating species from the IUCN endangered species “Red List” without compromising quality and flavor.

Members of the Alliance are dedicated to sourcing and serving the finest quality and freshest seafood for restaurants and their patrons. 45 new restaurants in 2 months pledged to become more sustainable or maintain sustainable practices to be involved. The Alliance is committed to serving and sourcing products that are responsible with as little impact as possible on the environment and is dedicated to educating the San Francisco Bay Area about the positive effects of eating the finest quality seafood from local vendors who supply products that are less harmful to the environment and better for overall public health.



Darren’s Café
BREAKFAST & LUNCH



San Francisco
Corte Madera
Walnut Creek
Santa Clara
Campbell
Cupertino
Dublin
Sunnyvale
Mountain View
Palo Alto
San Mateo
La Jolla



San Francisco
International
Airport
San Francisco
Mill Valley
Burlingame



Smithsonian
Affiliate
aquarium
of the
bay



SUSTAINABLE
SEAFOOD
ALLIANCE





BAY ACADEMY

AQUARIUM OF THE BAY

Return of on-site Aquarium Classroom Programs

2022 saw the return of the beloved on-site Aquarium classroom programs after a nearly two-year hiatus following the COVID-19 pandemic. For local schools, reintroducing in-person field trips into the curriculum was a slow process with only a handful of them allowing the option in 2021, however 2022 saw a gradual uptick in engagement. During the 2021-22 school year, the Education team served roughly 4,500 local students. Now, only a few months into the 2022-23' school year, student numbers are already matching the previous school year with new bookings happening each day. The grand total for students for the calendar year of 2022 is now roughly 7,000.

When visiting the Aquarium on school field trips, Bay Area schools have the option to add an Aquarium Educator led program to the visit. Options are available for all grade levels K-12. Some familiar favorites include the Between the Tides program where students learn about the different intertidal communities found locally in the San Francisco Bay area. New options include the Kraken lab specific for middle school students to learn the ins and outs of squid and the grant funded 3D Printing lab for high school students. The new 3D printing lab had been in development for over a year entering 2022 and as local schools began to reintroduce field trips into the curriculum, the lab finally gained traction with local high schools.

Aquarium VIP Experience Tour Launch

In April of 2022, the Education team launched a new ticketing option for purchase: the VIP Experience Tour. Available each day at 10:00am sharp, these new tours offer a unique and intimate experience for guests to visit the Aquarium a whole hour before the doors open to the general public. Led by expert educators, guests receive a private tour of the facility. VIP Experience Tours offer an in-depth look at how the Animal Care team works to prepare habitats for the day, provide enrichment sessions, and even provide breakfast to many of the animals who call the Aquarium home. To conclude the tour, Education staff provide a detailed presentation on the Watershed Ambassadors of the Aquarium: The North American river otters.



Aquarium educator leads
a program on watersheds

RIC SHARK

OCEAN POLLUTION

The threat to fisheries, aquaculture, and to shell resources is high because of the threat of contamination of the water column and the seabed.

Oil spills, sewage, and other pollutants can cause significant damage to the marine environment.

OIL SPILLS

WASTE

Aquarium Educator, Sabrina Hale, chatting about the Bottom of the Bay tank during a VIP Tour





Aquarium educator leads a Halloween themed animal ambassador presentation

Aquarium Public Program reintroduction

Public programs also saw their reemergence during the year 2022. Prior to the 2020 closures, the Education team led multiple daily public programs to Aquarium guests. Due to staffing constraints, these programs were either put on pause, or in some cases, led by the Animal Care team until May of 2022. While still operating with reduced staff, the Education team is slowly rolling these programs back into daily operations and currently holds 3-4 each week. These public programs host a wide range of content but all thematically incorporate the Aquarium's mission. Public program options include public Squid Dissections led by an educator with a discussion on sustainable fisheries, River Otters and Sea Otter chats to learn their differences and their ecological importance, and even thematic holiday discussions such as

Spooky Costumes where animal camouflage was discussed for Halloween.

The most exciting reintroduction for public programs has been the return of Animal Ambassador Presentations. Prior to May of 2022, Animal Ambassador programs were led by the Animal Care team following the reopening of the Aquarium in 2021 on a limited basis. They began to offer training to Education staff to lead these presentations once more in May of 2022. The Aquariums Animal Ambassador Presentations include the cherry head red footed tortoise, the blue tongued skink and the California king snake, all animals that act as climate change ambassadors to discuss human impact on these animals and their respective



Campers searching for plankton and microplastics under a microscope after a collection

Aquarium Grant programs: Summer by the Bay, Earth Optimism, Observing with NASA Kiosk

The Education team experienced more grant success during 2022 for several unique projects and activities. Through the Department of Children, Youth, and Families (DCYF) Summer Together program, the Education team was able to offer 4 weeks of day camp over the summer once again! This year's camp became known as "Summer by the Bay". The grant brought in \$30,000 to offer free summer camp to 60 underserved youth aged 9-12 from the San Francisco area. Through the expert care of the Education Specialist, campers spent their days enjoying yoga in the tunnels, exploring local beaches, and learning about the conservation efforts here at the Aquarium. While the primary purpose of camp was to offer an enriching and enjoyable experience for the campers, offering

insight into current environmental threats and conservation issues sat at the core of every activity. In September of 2022, the Education team also received an Observing with NASA (OWN) Kiosk on loan through January of 2023. This kiosk offers a new interactive exhibition within the Aquarium for guests of all ages. The Kiosk allows users to explore the stars and learn about the importance of digital imaging in astronomy, and even create their own masterpiece from real star clusters. Along with the Kiosk itself, the Aquarium was also awarded \$4,000 in support of it. This funding was in turn used to create and host even more on-site Aquarium Classroom Programs specifically for use of the kiosk to over 100 different students from several local elementary schools.



BAY ACADEMY

Trout in the Classroom

The Aquarium continued its partnership with the California Department of Fish and Wildlife providing sponsorship support for the Trout in the Classroom Program. This year 10 teachers from 8 schools all over San Francisco were delivered trout eggs at the end of February. Teachers and students foster the eggs while they develop and once they hatch, release them into Lake Merced in the Southwest part of the city. The eggs come from a hatchery in Northern California and are driven down to the designated pick-spot at the Berkeley Marina. As the sponsor, the Aquarium provides the materials needed to hatch the fish, from the tank to the chiller, to the food they will need if they are held too long. This little-known program is one of the highlights of the Education team and is one of the only K-12 programs that does not take place in the Aquarium.

TROUT *in the* CLASSROOM 2022





1. Steelhead Trout
2. Education Assistant Manager, Mayra Rivas, holding a clutch of trout eggs set to be released
3. Aquarium guests exploring the stars at the Observing with NASA Kiosk

Aquarium guests exploring the stars at the Observing with NASA Kiosk

One of the more exciting grant projects the Education team at the Aquarium has recently begun working on is the Earth Optimism Youth Action and Leadership (EOYAL for short) project in conjunction with Smithsonian Affiliations. The EOYAL project tasks a handful of Smithsonian Affiliates around the country to partner with local underserved high schools. The Affiliate works with these students and an educator from their school to learn about environmental threats to their local community. Students learn from local experts in various fields working to combat these issues, and from there, work to develop their own action plan based on what they learned. Once a project is developed, students then have the opportunity to present their project to potentially earn seed funding to carry it out! This multi-year project began in the Fall of 2022 with one high school with the plan of incorporating a second during the 2023-24' school year.



BAY ACADEMY

DIVING FOR CITIZEN SCIENTISTS

The Bay Academy arm reimaged the Diving for Citizen Scientists program previously offered in July of 2022. The program is now led by NAUI Instructor and the Aquarium's Manager of Education and Outreach, Doug Apple with support from PADI Master Instructor and the Aquarium's Senior Dive Safety Officer, Chris Grace. The Diving for Citizen Scientists course offers continuing education certifications through NAUI to local certified divers as both Underwater Naturalists and in Kelp Restoration. The extensive course includes seven total dives. On the first three dives, students learn about tools used in underwater

sciences and how to measure abundance of organisms in various marine communities. The next three dives then work on a project created by the Giant Kelp Restoration (G2KR) organization to restore wild kelp populations. Divers work to remove the over abundant sea urchin populations that have devastated kelp communities on a specific research site as part of a 5-year study sanctioned by California's Department of Fish and Wildlife. The final dive is a celebratory dive in the Aquarium's own 300,000+ gallon Nearshore Tunnel.



1. Wild warty sea cucumber photographed in Monterey Bay
2. Student diver glides through the water during an Underwater Naturalist specialty certification
3. Wild egg yolk jelly hangs in the Monterey Bay water column



Divers in the NAUI Kelp Restoration specialty course are trained to find and “cull” sea urchins, a method of animal removal using a specialized hammer. This removal allows kelp, a very important habitat for a variety of animals, to regrow in locations that have been turned barren by sea urchins.





STUDIO AQUA

EXHIBITS

The Aquarium has continued to experience a powerful improvement in exhibits and wall graphics throughout the building. Each of them are themed with a specific terrestrial or ocean conservation awareness narrative while keeping brand identity, captivating visual appeal, and prioritized information deliverability. At the entrance of the Aquarium lies the Discover the Bay exhibit. Here, guests are met with a dramatic juxtaposition featuring a pacific sardine tank that exemplifies the bottom of the food chain, shadowed by a three-part multimedia shark display exhibit that highlights the importance of great white sharks, shark research here at the Aquarium, and replica jaw of the prehistoric Megalodon, the largest species of shark to ever live! This display includes an

immersive white shark research video, facts about the shark research happening in the San Francisco Bay, and a fantastic opportunity for a selfie in front of the megalodon jaw amongst many engaging facts and statistics.

On the opposite side of the room, guests can view a newly installed 80 inch TV monitor that introduces the raw, majestic ecosystems and animals of the Pacific Ocean. This screen beautifully places the San Francisco Bay and its animals as the “Gateway to the Pacific” to convey the importance of ecosystem interconnectivity and the fact that all people reliant on one Ocean. Dolphins, whales, kelp forests, sea lions, turtles, mantas and many other megafaunas are presented on this dramatic display.



Great white shark exhibit with custom lighting and a recessed display.

WHITE SHARKS WATCH WHAT THEY EAT

Humans are not on the menu

Despite their rows of razor-sharp teeth, powerful bodies, and keen senses, white sharks are extremely shy prey animals. Almost blind, both female and male white sharks are shy, leaving their mouths shut or when marine mammals and large fish.

BITE FIRST, ASK QUESTIONS LATER

White sharks in the wild rarely attack humans, and the animals are sometimes fed, then hunted for the sake of protection. In the event of a bite, a researcher might be the wrong person, but that's a different story. In the wild, a shark would be the wrong prey to bite, so it's usually not an issue.

sharks IN & BEYOND THE bay

MAKING A DIFFERENCE

Shark Research at Aquarium of the Bay



Exhibit about sharks
and research done at
Aquarium of the Bay

sharks

IN & BEYOND THE

bay

For 450 million years, sharks and their ancestors have swum in nearly every marine habitat. Whether you look Below arctic ice or on tropical reefs, shallow sandflats or deep-sea trenches, sharks are among the most diverse and widespread animal groups on Earth.

MAKING A DIFFERENCE

Shark Research at Aquarium of the Bay



juvenile great white shark jaws

Compare the size of these jaws to the jaws of a great white shark. The jaws of a juvenile great white shark are about the size of a human's hand. The jaws of a great white shark are about the size of a human's head.

CALIFORNIA SHARK SPECIES

Many shark species serve important roles in the ecosystem and are under unique and significant threat.

ABOARD THE RV MIKE REIGLE
Aquarium of the Bay's Active Care team used the RV Mike Reigle to capture, tag, and monitor the growth of several sharks, as well as to provide medical care to patients in the field. These observations are important to the development of the species and the health of the ecosystem.

SHARKS IN OUR CARE
Broadnose grayside shark
Scalloped shark
Laysan shark
Holehead shark
Small shark

ICONIC SPECIES
It is believed that San Francisco Bay is the only known nursery for transient shortfin mako along the West Coast. Bay City is known for the presence of the species. In California, the Active Care team continues to find opportunities to help conserve and further understand the species within the Bay.

Researchers use the RV Mike Reigle to capture, tag, and monitor the growth of several sharks, as well as to provide medical care to patients in the field. These observations are important to the development of the species and the health of the ecosystem.

RESEARCH IS CRUCIAL

Despite these opposing factors, many sharks and species in the bay are vitally monitored and the Active Care team is leading an effort to document the life history and learn more about these animals in the hopes of guiding future conservation efforts.

PROPER SHARK RESEARCH METHODS
Our Active Care team is focused on the best available research methods to ensure maximum safety and minimize stress on animals in the field.

- Minimize disturbance
- Handle equipment's delicate components
- Minimize contact with the animal
- Avoidance to the sun/light





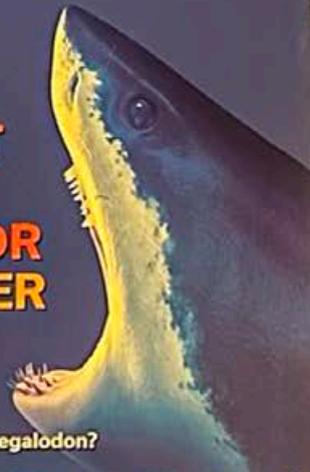
▲ Megalodon jaws exhibit

▲ United Nations Sustainable Development Goals (SDG) exhibit

megalodon

PREHISTORIC SHARK

LARGEST OCEAN PREDATOR THAT EVER LIVED



How **BIG** was the megalodon?



MAXIMUM WEIGHT
The megalodon is estimated to have weighed up to 60 tons (130,000 pounds).



BIG TOOTH SHARK
The megalodon - sometimes nicknamed the "big toothed giant shark" - was the largest shark that ever lived.

What did it **EAT**?

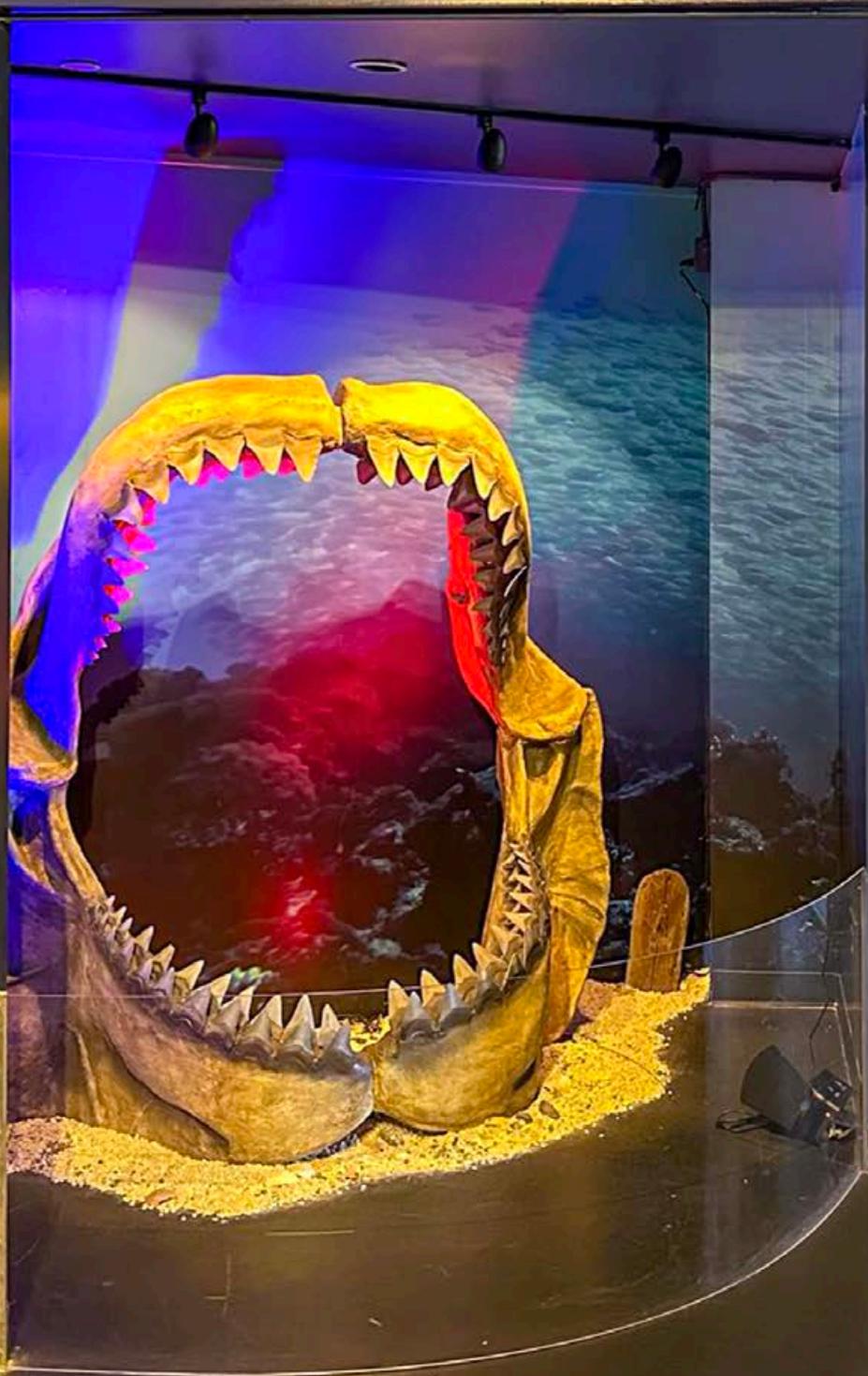


WHEN did it live?



Why did it go **EXTINCT**?

The Earth experienced a number of changes during the last ice age, including a decrease in the amount of greenhouse gases in the atmosphere and a decrease in the amount of sunlight reaching the Earth's surface. These changes led to a global cooling event that caused the extinction of many species, including the megalodon.





Newly updated graphics inside of the main first floor exhibit tunnels, Nearshore and Sharks of Alcatraz, have also been updated with current brand standards and exact, descriptive information for all species in these systems.

Also on the first floor, all digital screens in the Go with the Flow and sea jellies exhibit have been replaced and updated with immersive, descriptive content subjective to the five jelly species currently on exhibit. These include Pacific brown sea nettle, moon jellies, purple striped, egg yolk, and upside-down jellies.

As guests take the elevators back up to the 3rd floor and continue through Bay Lab, a newly designed set of two walls next to the California tide pool exhibit

teaches guests about marine mammals, cetaceans specifically, and the role noise pollution has played on the decline of aquatic species that use sound as their primary sense. This multimedia display features a video specifically about sound pollution in the ocean, supplemented with five artifacts from cetaceans featuring detailed descriptions. These include a full-size gray whale rib bone and vertebrae, a partial orca jawbone, baleen from a blue whale, and a sperm whale tooth! Sperm whale sleeping behavior is also discussed in conjunction with a description of echolocation. The Aquarium retail store and events room benefited from a newly installed coral reef design graphic. This design features fun reef fish and coral illustrations to give an immersive feel to the store, events room, and aquarium exit.



Exhibit on the role noise pollution has played on the decline of aquatic species



Studio Aqua also had a chance to work with the IT team to facilitate the acquisition of a 3D animal display screen. This screen merges visuals of animals such as wolf eels, puffer fish, angler fish, lumpsuckers and other odd-looking creatures to create a 3D motion image of the animal!



Education Manager Doug Apple holds 2 gray whale rib bones, set to be displayed as part of a comprehensive exhibit highlighting whales, other cetaceans, and the negative effect that human-caused noise pollution has had on marine mammals.



SDO

SOLAR DYNAMICS OBSERVATORY

Since it launched on February 11, 2010, NASA's Solar Dynamics Observatory (SDO) has been our unrelenting eye on the Sun. SDO studies how solar activity is created and drives solar weather. The spacecraft's measurements of the Sun's interior, atmosphere, magnetic field, and energy output all work to help us understand the star from which we depend.

These **CORONAL LOOPS** can reach tens of thousands of kilometers into space.

THE SUN



OBSERVING WITH NASA

Learn how to analyze real solar data. Complete a challenge lesson.



TARDIGRADE

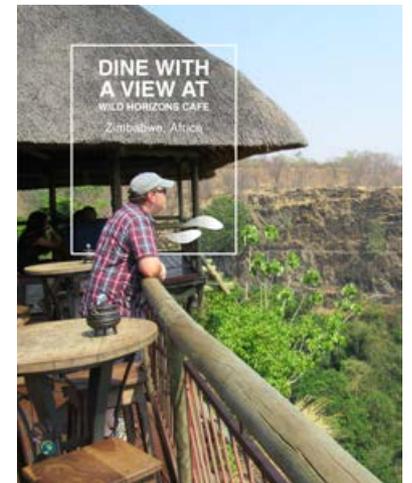
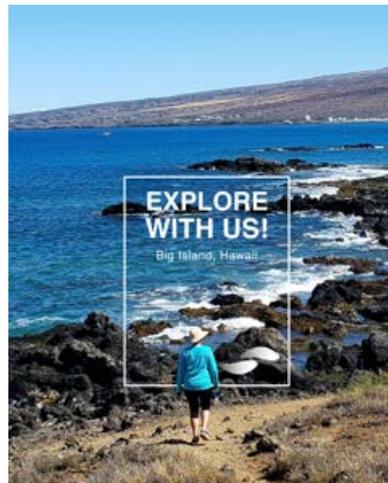
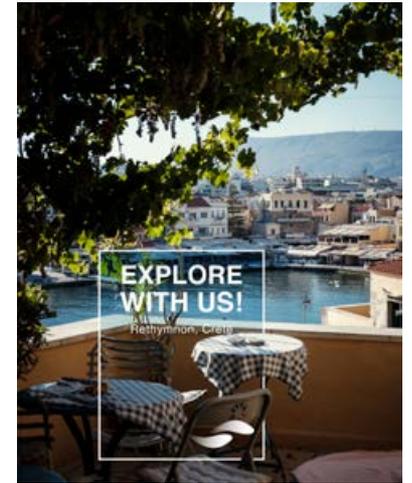
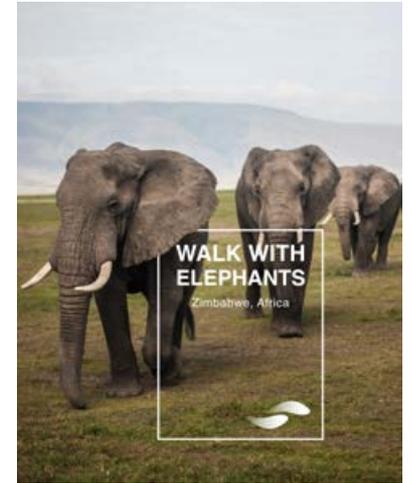
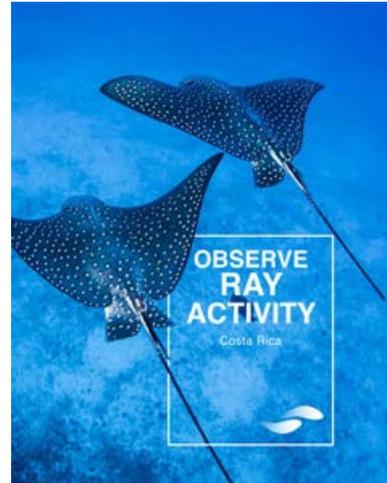
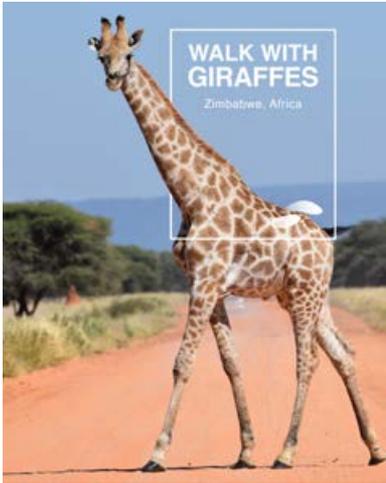
(water bear)

BEARS IN SPACE

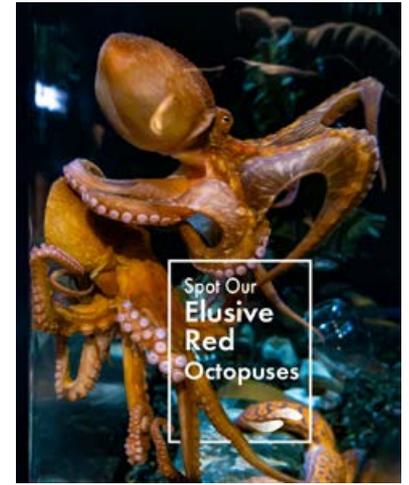
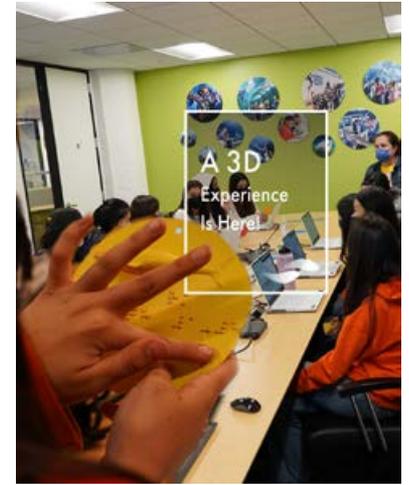
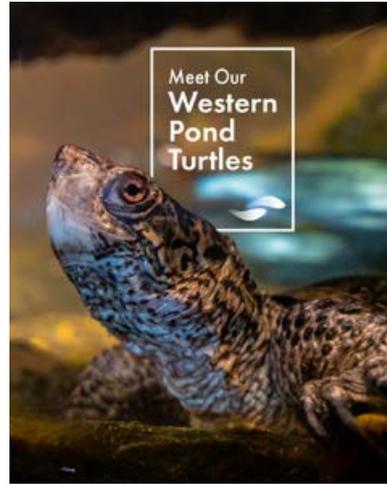


New mural and
stairway install at
Aquarium of the Bay

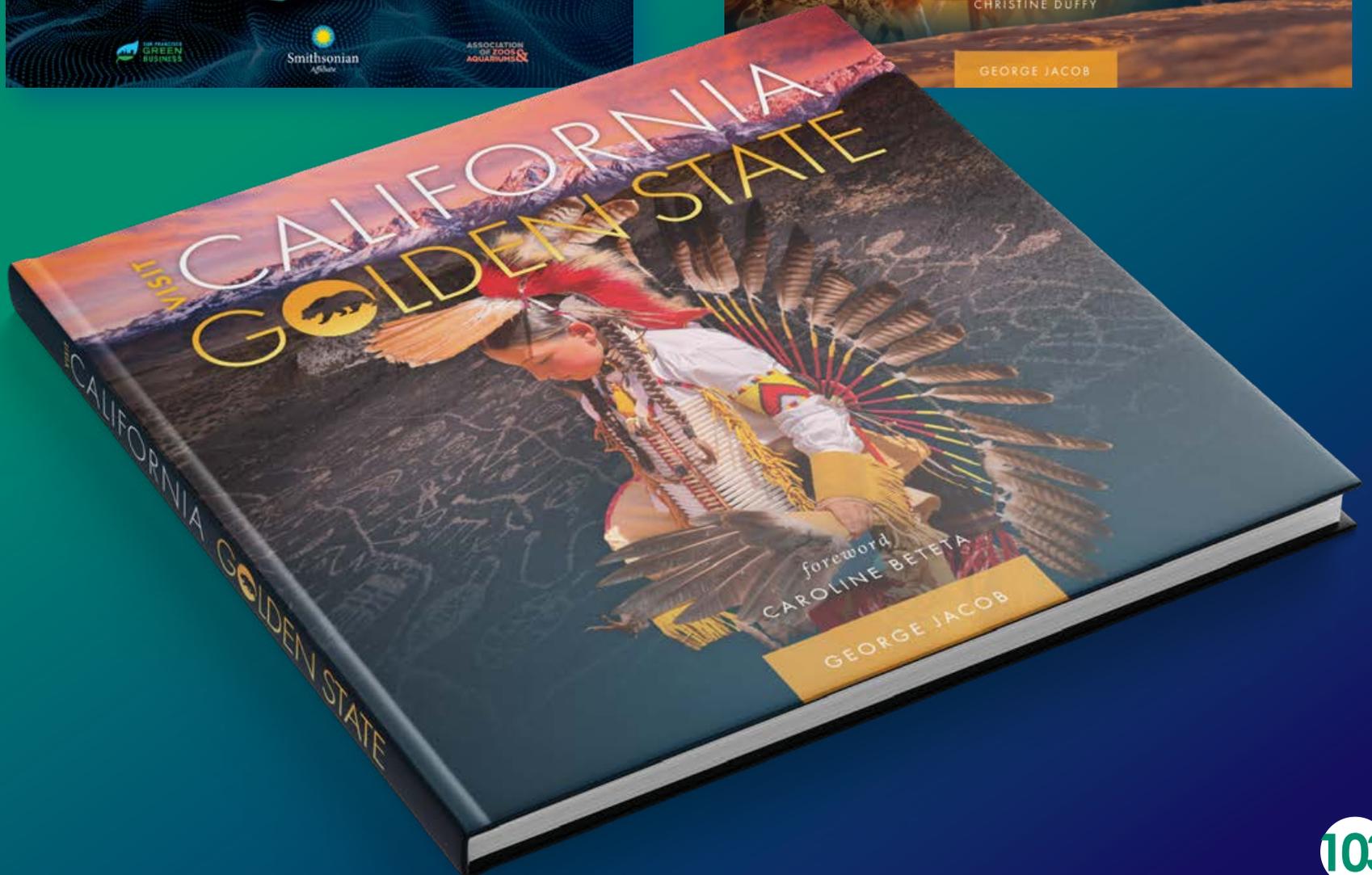
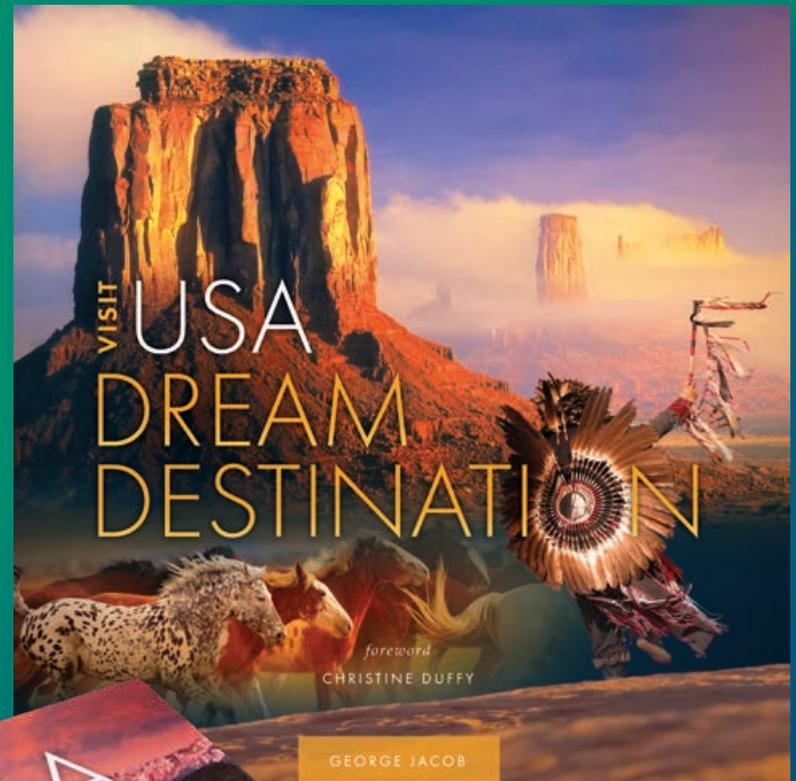
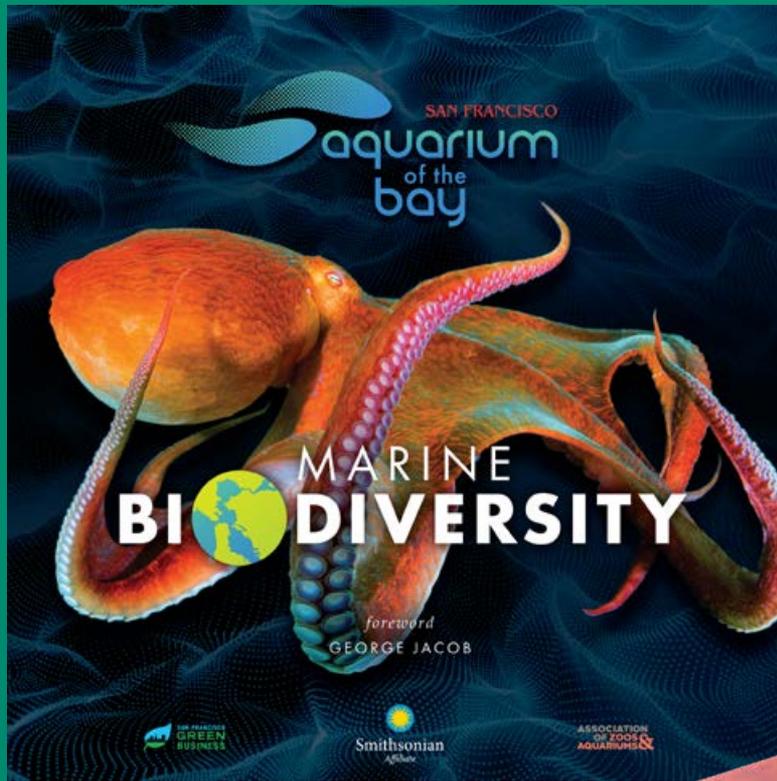




EcoXpeditions social media campaign



Online social media campaigns for Sustainable Tours, publications, Aquarium of the Bay, and education programs



JOIN US FOR AN EVENING WITH

Multi-GRAMMY® Winner

RICKY KEJ

UNITED NATIONS GOODWILL AMBASSADOR

DATE: DEC. 14, 2022

TIME: 5:30 PM

VENUE:
AQUARIUM OF THE BAY, PIER 39
The Embarcadero & Beach St.
San Francisco, CA 94133

WINE & HORS D'OEUVRE



aquarium of the bay Smithsonian Affiliate

Dr. George Jacob FRCGS
President & CEO, BayEcolarium

RSVP@BAYECOTARIUM.ORG



Aquarium of the Bay
hosts the primary and final session of the

2022 BERKELEY INNOVATION FORUM

BAY MODEL ALLIANCE VISITOR CENTER | SAUSALITO



MARINE BIODIVERSITY

“ There is no better place to explore the amazing Marine Biodiversity of San Francisco Bay, than in our 300 ft. long clear acrylic saltwater tunnels that hold 24,000 live animals. Come visit **YOUR** aquarium celebrating its 26th anniversary! ”

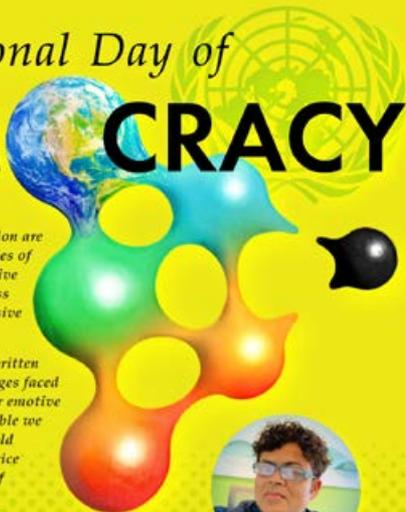
George Jacob FRCGS
President & CEO

ASSOCIATION OF ZOOS & AQUARIUMS & **aquarium of the bay** Smithsonian Affiliate

International Day of DEMOCRACY

“ Democracy and Climate Action are synonymous on core principles of informed governance, proactive policy and engaged awareness leading to decisive and cohesive mitigative measures. ”

Much has been spoken and written about the existential challenges faced by humanity and the need for emotive resonance with the Blue Marble we call home. Democracy has held steady and survived the avarice-driven scarring and pillage of consumerism, despite the proverbial Socratic hemlock.



On this United Nations International Day of Democracy, perhaps a personal pledge for United Nature can be that clarion call for conscious curation for a better tomorrow. ”

George Jacob FRCGS
President & CEO

aquarium of the bay Smithsonian Affiliate

ANIMAL ENCOUNTERS ARE BACK

Starting April 22

EARTH DAY 2022

26th ICOM General Conference, 20 - 28 Aug

ICOM PRAGUE 2022
THE POWER OF MUSEUMS

ICOM International Council of Museums
ICOM International Council of Museums

“The soft power of museums is embedded with cultural diplomacy. ICOM 2022 should leverage this collective power to take the lead in uniting humanity towards world PEACE in this dangerous time of conflict and strife. That in itself would be the essence that defines Museums as institutions in public service.”

George Jacob FRCGS
President & CEO, BayEcolarium
Board of Directors ICOM US

sustainable **Tours**

ecopeditions

VISIT: AQUARIUMOFTEBAY.ORG/XPEDITIONS

RED TIDE
triggers massive fish die-offs
in San Francisco Bay

“An estimated 10 species of 10,000 dead fish due to harmful red algal bloom that draws on nitrogen and phosphorus, is unprecedented in its scale. Warmer water temperatures aid algae growth and more algae in turn, absorbs more sunlight, making water even warmer and promoting more blooms...”

George Jacob FRCGS
President & CEO

INTERNATIONAL **YOGA DAY**

JUNE 21, 2022

YOGA WEAR PRE-ORDER

Your purchase supports our mission of protecting and preserving the San Francisco Bay and its ecosystem from **Sierra to the Sea™**

Smithsonian Affiliate
aquarium of the bay
ASSOCIATION OF ZOOLOGICAL AND AQUARIUMS

VISIT: AQUARIUMOFTEBAY.ORG/YOGA-WEAR

SHACK15 | SPECIAL EVENT

APRIL 14, 2022
6:00 PM

**ECOSYNTHESIS:
OUR FUTURE**
Climate Museums in the Making

George Jacob FRCGS

With Climate Change increasingly becoming an existential threat, the single biggest impediment for policy makers and regulators is lack of awareness among stakeholders on staggering implications of inaction and a clear cumulative path of sustained resilience embedded in circular economies. As a Bay Area based conservation group, their programs and policies have continued to influence and impact millions in the last 40 years. The BayEcotarium in San Francisco is on the cusp of expanding the footprint of climate awareness and action with an ecosystem of global content sharing, with their living climate museum initiatives gaining traction to translate this growing vision into a reality. President and CEO George Jacob will share a glimpse of climate and sustainable oceans living museums in the making.



aquarium of the bay **Smithsonian affiliate** **bayecotarium**

BE THE MOVEMENT
The BayEcotarium Song

8 GRAMMY® WINNERS
come together to compose our song to **PROTECT THE OCEANS**

WATCH THE VIDEO
youtube.be/gam15pqr7p

bayecotarium
CLIMATE RESILIENCE & OCEAN CONSERVATION LIVING MUSEUM

DONATE TODAY
aquariumofthebay.org/donate
Join the Movement • BE the Movement!

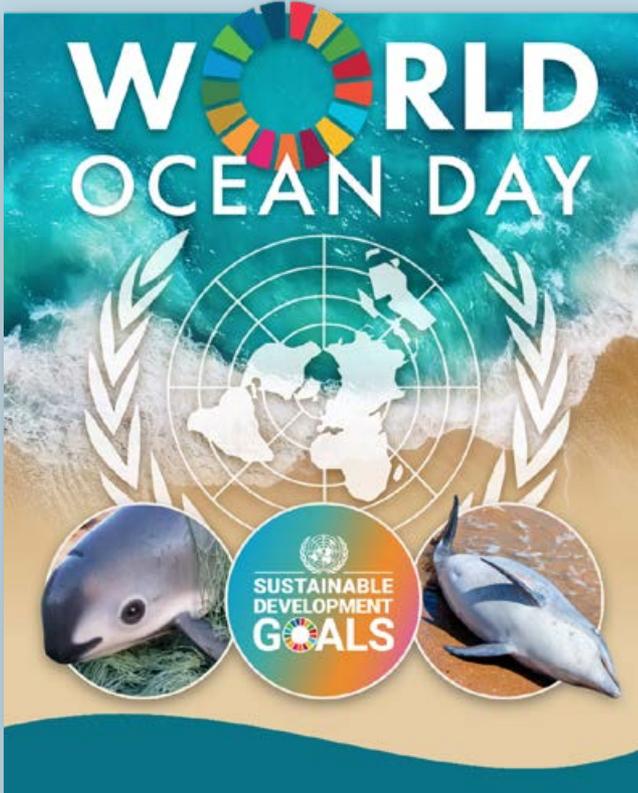


GRAMMY WINNERS: RON KORB (GRAMMY AWARD WINNER), STEWART COPELAND (THE PATCH OF GRAMMY WINNER), DARLENE KOLDENWIESEN (GRAMMY AWARD WINNER), YARSHIE BANERJI (GRAMMY AWARD WINNER), JON SAMSON (GRAMMY AWARD WINNER), RICKY KEJ (GRAMMY AWARD WINNER), JONNIE PARK (GRAMMY AWARD WINNER), JIM KIMO WEST (GRAMMY AWARD WINNER)

Logos: aquarium of the bay, Smithsonian affiliate, bayecotarium, ASSOCIATION OF ZOO AND AQUARIUMS, GREEN BUSINESS

WORLD OCEAN DAY

SUSTAINABLE DEVELOPMENT GOALS



Smithsonian Affiliate **AQUARIUM OF THE BAY** **ASSOCIATION OF ZOO AND AQUARIUMS**

THE BAY INSTITUTE **BAY MODEL ALLIANCE**

SEA LION CENTER **ecopeditions** **STUDIO AQUA**

BAY ACADEMY

bayecotarium

NEW YEAR GREETINGS!





INDIASPORA

CLIMATE SUMMIT

APR 19, 2022 | 8 AM - 10 AM PT

Join us for the upcoming Indiaspora Climate Summit on April 19th that will address topics around climate and environmental justice.

CLIMATE MUSEUMS: Moving from Awareness to Action

George Jacob FRCGS
President and CEO
BayEcoTarium

Manish Bagna
President & CEO of
NDC

Sunita Narain
Director of the Centre for
Science and Environment

Professor Veerabhadran Ramanathan
Cornell Climate Solutions
Scholar, CAIS, Cornell
University

Professor Anu Ramaswam
Principal Environmental
Institute

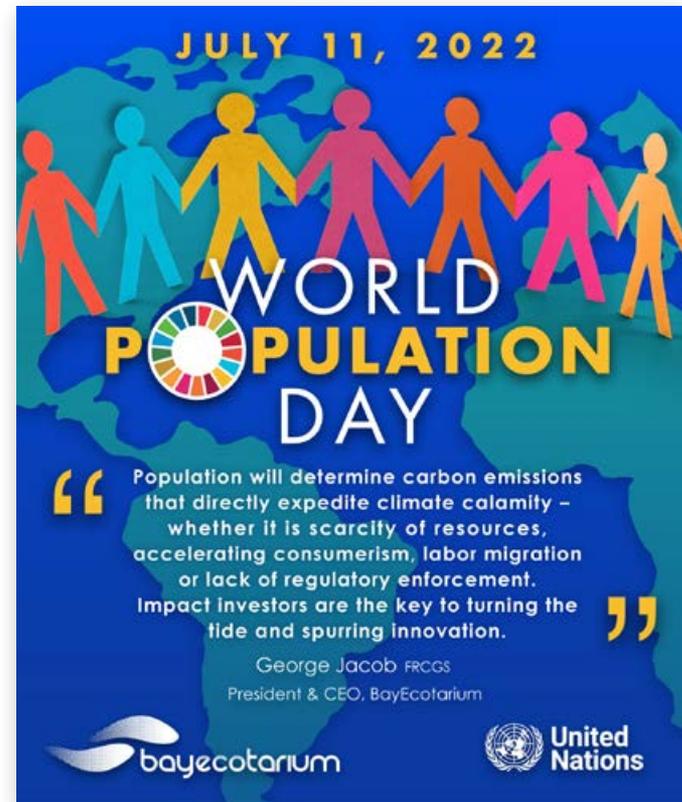
Mridula Ramesh
Founder of Sustainable
Climate Institute

Premal Shah
Co-founder and
Executive Chair of
Renewal Energy and
Co-founder of Inva

Vaishali Sinha
Chief Sustainability
Officer, Reliance Power

bayecotarium

REGISTER ONLINE | indiaspora.org/event



JULY 11, 2022

WORLD POPULATION DAY

Population will determine carbon emissions that directly expedite climate calamity – whether it is scarcity of resources, accelerating consumerism, labor migration or lack of regulatory enforcement. Impact investors are the key to turning the tide and spurring innovation.

George Jacob FRCGS
President & CEO, BayEcoTarium

bayecotarium

United Nations



UNITED NATIONS WORLD OCEANS DAY 2022

ELECTRIC FUTURE of MOBILITY

Reducing the life-cycle carbon emissions of vehicles by at least 50% is needed for Climate Change Mitigation.

Mercedes-Benz is taking steps to achieve this at every level

aquarium of the bay

Smithsonian Affiliate



EcoXpeditions all new electric van, custom wrapped to promote Sustainable Tours, EcoXpeditions, and Aquarium of the Bay.



Online event and program promotions

JULY 14TH, 2022

SHARK & RAY AWARENESS



IN THE FIELD, AQUARIUM STAFF UTILIZE A MODERN RESEARCH AND COLLECTING VESSEL, THE R/V MIKE BEGLE, TO COLLECT DATA ON LOCAL SPECIES. MANY SPECIES IN THE BAY SHARKS ESPECIALLY, SERVE IMPORTANT ROLES IN THE ECOSYSTEM AND ARE UNDER-UNIQUE AND SIGNIFICANT THREAT. DESPITE THESE OPPOSING FACTORS, MANY SHARKS AND SPECIES IN THE BAY ARE VIRTUALLY UNSTUDIED AND THE ANIMAL CARE TEAM IS LEADING AN EFFORT TO DOCUMENT THE LIFE HISTORY AND LEARN MORE ABOUT THESE ANIMALS IN THE HOPES OF GUIDING FUTURE CONSERVATION EFFORTS. STAFF SAFELY COLLECT AND RELEASE INDIVIDUAL SHARKS, EXAMINING PHYSIOLOGICAL AND PHYSICAL PROPERTIES, WHERE THEY ARE LOCATED, AND WHETHER THEY CAN BE LOCATED AGAIN.

-MELISSA SCHOUEST, DIRECTOR OF ANIMAL CARE &
KEVIN MCELIGOT, ASSOCIATE DIRECTOR OF ANIMAL CARE



HELP CLEAN THE OCEAN!

ESCAPE TO ADMIRE THE BEAUTY OF CORAL REEFS IS ONE OF THE BEST WAYS TO DOCUMENT THE BEAUTY OF CORAL REEFS. BRING A RECYCLED BAG AND BE SURE TO PICK UP ANY GARBAGE YOU COME ACROSS. THIS "BEACH CLEAN" IS ANIMAL-FRIENDLY & A GREAT WAY TO USE THE CHANGING POINTS TO MEET OUR GOALS FOR A SUSTAINABLE OCEAN.

EAT SUSTAINABLY

CORAL REEF AWAKENESS WEEK CAN BE A STRAIGHT UP FOR YOU TO EAT SUSTAINABLY. SO, NEXT TIME YOU WANT TO ENJOY SOME SEAFOOD, MAKE SURE IT COMES FROM A SUSTAINABLE SOURCE.

SPREAD THE WORD

THE MORE PEOPLE KNOW ABOUT THE AWAKENESS WEEK, THE MORE GOOD THERE WILL BE TO PROTECT CORAL REEFS. MORE PEOPLE WILL ALSO REALIZE THAT CORAL REEFS ARE ESSENTIAL FOR HUMAN BEINGS.

CORAL REEF AWARENESS WEEK

"CORAL REEFS ARE SOME OF THE MOST BIODIVERSE AND IMPORTANT ECOSYSTEMS ON THE PLANET. REEFS PROVIDE NURSERY HABITATS FOR SMALL FISH AND IMPORTANT SYMBIOTIC RELATIONSHIPS AS WELL AS PROTECTION FROM STORMS AND LARGE WAVES. THOUGH CORAL REEFS ONLY ACCOUNT FOR LESS THAN 1% OF THE OCEAN FLOOR, THEY ARE RESPONSIBLE FOR PRODUCING 1% OF THE OXYGEN CONTENT PRESENT IN THE EARTH'S ATMOSPHERE."




HAPPY VETERANS DAY

NOV. 11-13

FREE ENTRY FOR ACTIVE & VETERAN SERVICE MEMBERS

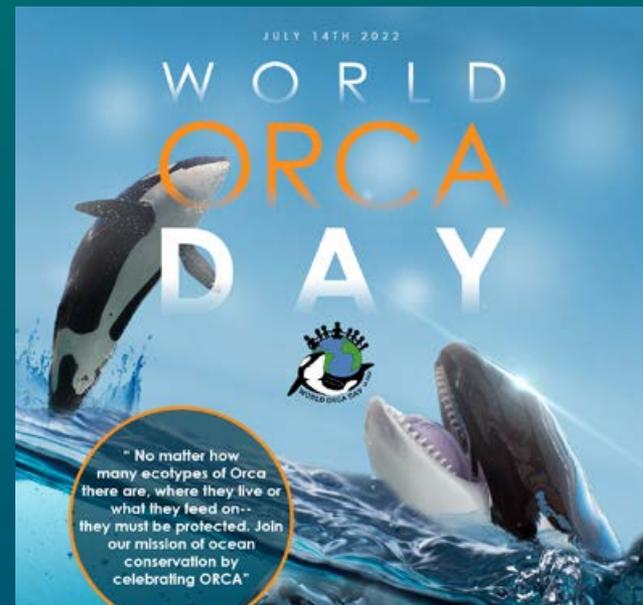
20% OFF FOR MILITARY FAMILY MEMBERS

MILITARY ID REQUIRED!



JULY 14TH, 2022

WORLD ORCA DAY



"No matter how many ecotypes of Orca there are, where they live or what they feed on-- they must be protected. Join our mission of ocean conservation by celebrating ORCA"



ASSOCIATION OF ZOOLOGICAL AQUARIUMS & GREEN BUSINESS
 Smithsonian *affiliate* eco *peditions*

SUSTAINABLE WINE TOURS

EMBARC ON A GRAND ADVENTURE INTO THE HEART OF BAY AREA COUNTRY TO TASTE AND LEARN ABOUT SUSTAINABLE WINE AND ENJOY WITH A CLASSIC CAR WINE TO GO.

AQUARIUMOFTHEBAY.ORG/TOUR

BREAKFAST WITH THE OTTERS

IT'S YOUR BEST MORNING WALK AT THE AQUARIUM.

Call: (415) 623-5326
 Email: events@bayecotarium.org
 Visit: aquariumofthebay.org/events

aquarium of the bay

CUSTOM HOLIDAY PARTIES

HOST YOUR NEXT MEMORABLE EVENT AT THE AQUARIUM.

Call: (415) 623-5326
 Email: events@bayecotarium.org
 Visit: aquariumofthebay.org/events

aquarium of the bay

RIVER OTTER SNOW DAYS

VIP EARLY VIEWING TICKETS AVAILABLE

10AM COFFEE & PASTRIES
 10:30AM EARLY ACCESS VIEWING
 11AM - 6PM GEN. ADMISSION

WATCH OUR RIVER OTTERS PLAY IN SNOW
 DECEMBER 21

*SNOW PROVIDED BY LA ROCCA SEAFOOD

aquarium of the bay ASSOCIATION OF ZOOLOGICAL AQUARIUMS & GREEN BUSINESS Smithsonian *affiliate* SAN FRANCISCO GREEN BUSINESS

NIGHT WAVES

aquarium of the bay

DIVE INTO THE ABYSS

NOVEMBER 29

GIVING TUESDAY

Smithsonian Affiliate

aquarium of the bay

ASSOCIATION OF ZOOS & AQUARIUMS

Help us **CONSERVE** and **PROTECT** the San Francisco Bay

MAKE A DIFFERENCE TODAY ▶

NOV. 29

GIVING TUESDAY

HELP US NURTURE 24,000 ANIMALS IN OUR CARE

Smithsonian Affiliate

aquarium of the bay

ASSOCIATION OF ZOOS & AQUARIUMS

MAKE A DONATION TODAY

THE BAY INSTITUTE 41 YEARS

GIVING TUESDAY NOVEMBER 29

AQUARIUM OF THE BAY 26 YEARS



NOV. 29
GIVING TUESDAY
HELP US CONSERVE AND PROTECT
SAN FRANCISCO BAY

aquarium of the bay | **Smithsonian Affiliate**

Dear Aquarium of the Bay Friends,
For 26 years Aquarium of the Bay has been protecting and conserving the San Francisco Bay and its diverse ecosystems from Sierra to the Sea. Our efforts have collectively provided over 2 million children with free STEAM education, removed over 10,000 pounds of trash from shorelines, and educated 14 million visitors.

Running a 24x7 operation, 365 days a year, requires dedicated resources. In this season of generosity leading to GIVING TUESDAY on November 29, we invite you to donate to the Smithsonian Affiliated Aquarium of the Bay, non-profit 501(c)(3).

From all of us (including those with fins and gills)
THANK YOU FOR YOUR LOVE FOR MARINE BIODIVERSITY
in the San Francisco Bay!

Learn how **YOU** can make a **DIFFERENCE!**



Smithsonian
aquarium of the bay

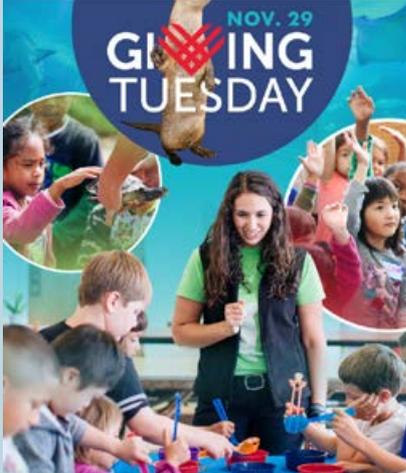
YOUR GIFT CAN PROVIDE

- \$25** Supplies for 1 Aquarium education program
- \$50** Feeds North American River Otters for 1 day
- \$100** Supplies for 50 beach cleanup volunteers
- \$250** Food for over 200 species in our 300 foot acrylic tunnels for 1 day
- \$350** Day Trip for 1 Class of 35 kids to the Aquarium
- \$1,000** Fund an Aquarium research trip on our vessel
- \$5,000** 1 week of aquarium education programs, reaches 200 kids
- \$5,500** 1 week of bay lab experiments
- \$6,500** Towards food for 200 species

SCAN TO DONATE TODAY
or return enclosed envelope

GIVING TUESDAY
NOVEMBER 29

Contributions to Aquarium of the Bay are tax-deductible to the extent allowed by law. 501(c)(3) Federal EIN: 90-0401015
AQUARIUMOFTHEBAY.ORG | 415.623.5300 | AQUARIUM OF THE BAY CORP. HQ, 55 FRANCISCO ST., SUITE 330, SAN FRANCISCO, CA 94133



NOV. 29
GIVING TUESDAY

FUND SUPPLIES FOR EDUCATION PROGRAM
for just **\$25** this Giving Tuesday!

Smithsonian | **aquarium of the bay** | **ASSOCIATION OF ZOOS & AQUARIUMS**



NOV. 29
GIVING TUESDAY

FUND 6 MONTHS OF ENRICHMENT FOR OUR OTTERS
for just **\$150** this Giving Tuesday!

Smithsonian | **aquarium of the bay** | **ASSOCIATION OF ZOOS & AQUARIUMS**



NOV. 29
GIVING TUESDAY

THANK YOU
for your **Generosity** on
Giving Tuesday

Smithsonian | **aquarium of the bay** | **ASSOCIATION OF ZOOS & AQUARIUMS**



EcoXpeditions promotional murals installed at Darren's Cafe in San Francisco and Aquarium of the Bay administrative offices

SAN FRANCISCO • PIER 39



Meet SHARKS, OCTOPUSES, OTTERS and more!



SEE THE SHARKS OF ALCATRAZ

Aquarium of the Bay is located at PIER 39 in the heart of San Francisco's Fisherman's Wharf.



★ Visit us to get a close up look at our exhibits.

- Discover the Bay
- Nearshore Tunnel
- Sharks of Alcatraz Tunnel
- Go with the Flow
- Bay Lab
- River Otter Exhibit




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aquariumofthebay.org | 415.623.5300



SUSTAINABLE SEAFOOD ALLIANCE

JOIN US AND OTHER BAY AREA BUSINESSES IN SUPPORTING RESTAURANTS THAT RESPONSIBLY SOURCE THEIR SEAFOOD.


























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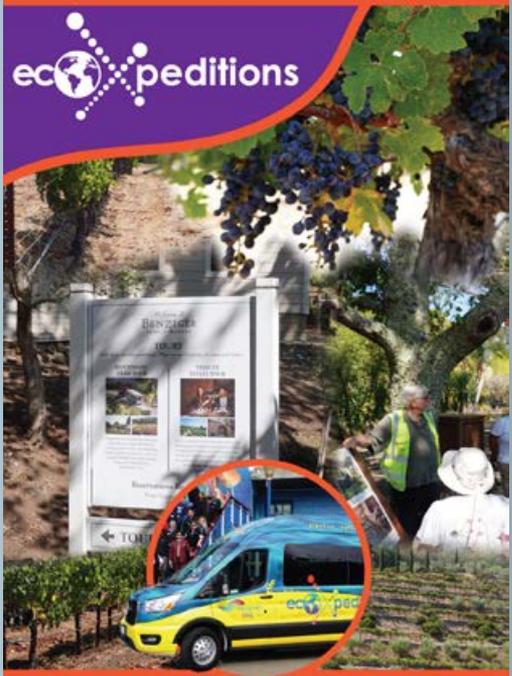
aquariumofthebay.org/sustainable | 415.623.5300

SUSTAINABLE WINE TOURS





Looking for a fun way to experience the culture of the Bay Area? Join the Aquarium of the Bay on a specially curated wine tour in beautiful Sonoma County! With an all-electric bus, tours depart from the Aquarium of the Bay in San Francisco and bring your group to sustainable Sonoma wineries for the day.

AQUARIUMOFTHEBAY.ORG/TOUR

Rack cards for Aquarium of the Bay, Sustainable Seafood Alliance, and EcoXpeditions Sustainable Tours

aquarium
of the bay

Blue Marble

the arc of transformation

PROGRAM • 2022
OCTOBER 24
UNITED NATIONS DAY

bayecotarium

13

MUSICAL TRIBUTES

Ricky Kej
Multi-GRAMMY® Winner

2x GRAMMY® Award Winner, US Billboard #1 artist, GQ Man of the Year 2020, Ricky Kej is an internationally renowned Indian Music Composer and Environmentalist. He has performed at prestigious venues in over 30 countries, including the UN Headquarters in New York and Geneva. Ricky has won over 100 music awards in 30 countries. He serves as the UNESCO MGSF "Global Ambassador for Kindness," UNCCD "Land Ambassador," UNICEF "Celebrity Supporter" & Ambassador for "Earth Day Network."

Lonnie Park
GRAMMY® Winner

An American musician, singer, songwriter, multi-instrumentalist, and record producer based in Freeville, New York. In addition to TV, film score, and Billboard charting appearances, his catalog of work includes decades of multi-genre work from jazz, new age, children's, world, gospel, country, and folk, to progressive metal. Lonnie's work has received 9 GRAMMY® Awards, multiple GRAMMY® Nominations, the Global Peace Song Award, Global Music Award, multiple SAMMY Awards, and the United Nations Action Award.

MILESTONES 1980 - 2022 ▶

5

WELCOME REMARKS

Sam Liccardo
Mayor, San Jose

"We must confront climate crisis: the threat is not merely possible or probable, but palpable, as we routinely endure bouts of drought, fires, and extreme heat. They also present San Jose with a unique opportunity to reduce carbon emissions by greening our grid on 100% renewables. The Governor recently announced goals for decarbonizing California's grid by 2045... San Jose will achieve that goal 20 years ahead of schedule."

KEY-NOTE ADDRESS

Hunter Pence

Hunter Pence, nicknamed "The Reverend", is an American former professional baseball right fielder and designated hitter. He played in Major League Baseball (MLB) for the Houston Astros, Philadelphia Phillies, San Francisco Giants, and Texas Rangers. In the 2004 Major League Baseball Draft he was drafted in the second round by the Astros. He is a four time All-Star and was a member of the 2012 and 2014 World Series championship teams with the Giants.

OPENING REMARKS

George Kurian
CEO, NetApp

"It's our belief that the world's ongoing energy challenges require innovative solutions. At NetApp, we're steadfastly committed to developing energy-efficient technologies that allow our customers to greatly reduce their carbon footprint. Our vision is to help customers get the most out of their data built on the idea that technology can deliver positive impact for everyone — including the environment."

NetApp

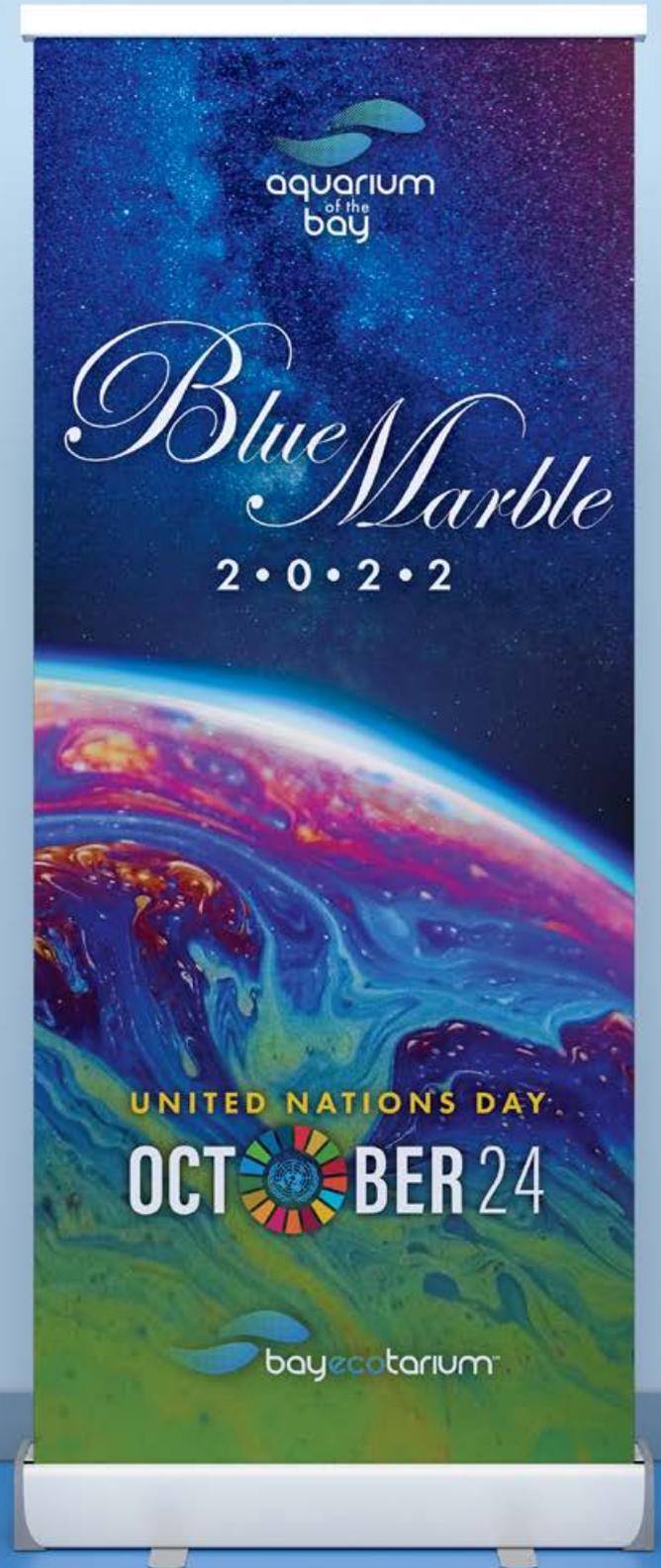
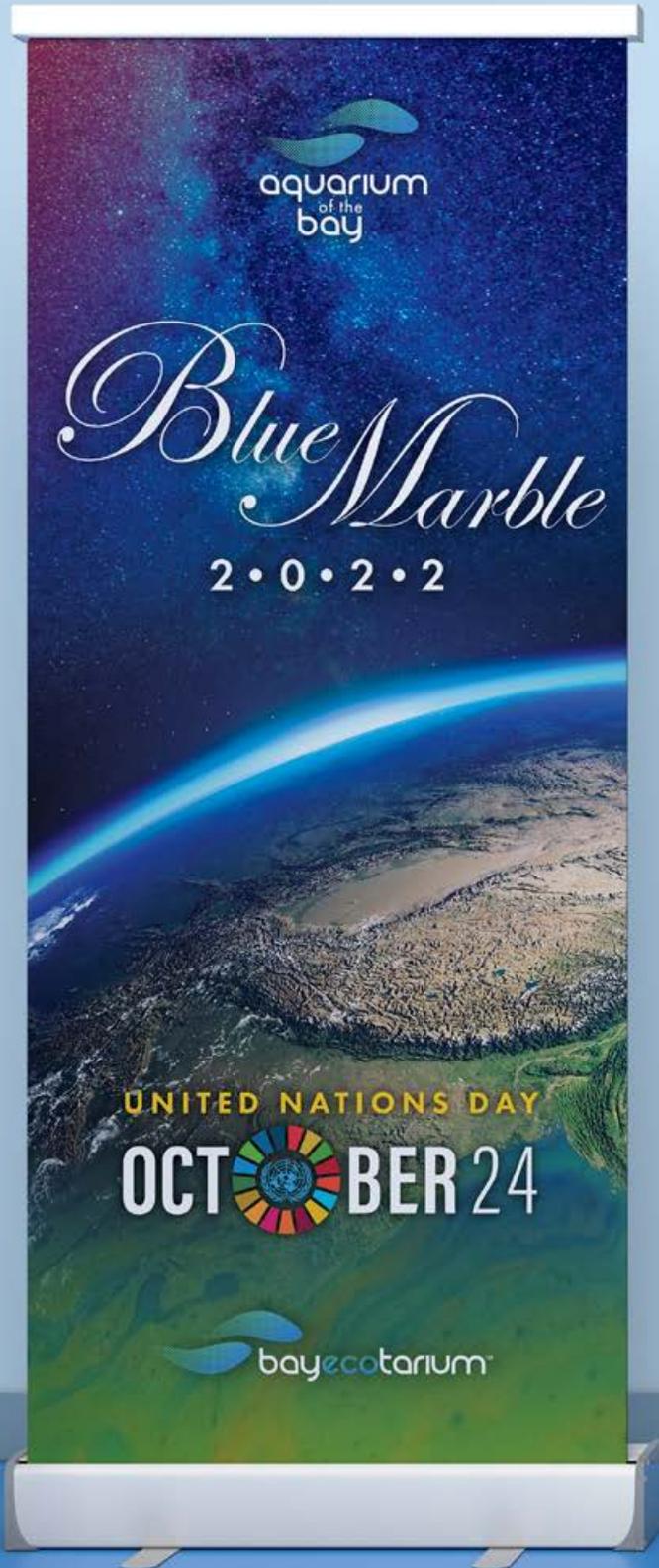
The Bay Institute is the premier, non-profit, environmental policy and advocacy arm of the Bay Area's business, working in coalition of public and academic partners. Recent statements in Los Angeles, San Francisco, DC, The Bay Institute advocates for the necessary policy, regulatory, and economic changes necessary to ensure the health of the greater San Francisco Bay.

1981 THE BAY INSTITUTE ESTABLISHED

1996 UNDERWATER WORLD OPENS AT PIER 39

MILESTONES 1980 - 2022

Blue Marble 2022 retractable event banners



Blue Marble 2022 event posters

Blue Marble
aquarium of the bay bayecotarium

UNITED NATIONS DAY
OCTOBER 24, 2022

Join us as we share the vision for **SUSTAINABLE OCEAN & LIVING CLIMATE MUSEUM**

BLUE CARPET RECEPTION
Dress Code: Blue Formal
4:00PM (PST)
San Jose City Hall Rotunda

LIVE MUSIC
Multi-GRAMMY Winner Ricky Ke)
GRAMMY Winner Lonnie Park

KEY-NOTE SPEAKER
Hunter Pence (Former SF Baseball Player)
4X All-Star | 2X World Series Champion

MASTER OF CEREMONIES
Dan Ashley

WELCOME
Sam Liccardo
(Mayor, San Jose)

OPENING REMARKS
George Kurian
(CEO, NetApp)

TICKETS AVAILABLE NOW
www.bayecotarium.org/bmb

Sponsors: Alaska Airlines, Alcatraz citycruises, REUBEN, JUNIUS & ROSE, Clearinghouse CDFI, UnionBank, SAN FRANCISCO BUSINESS TIMES, LocalGetaways, CITY NATIONAL BANK, storibox, JON & DARLA FISHER FOUNDATION

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Blue Marble
aquarium of the bay bayecotarium

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Blue Marble 2022 event signs

Blue Marble
aquarium of the bay bayecotarium

EVENT MAP & TABLES

ENTRANCE

STAGE

BAR

MERCHANDISE & RESTROOMS

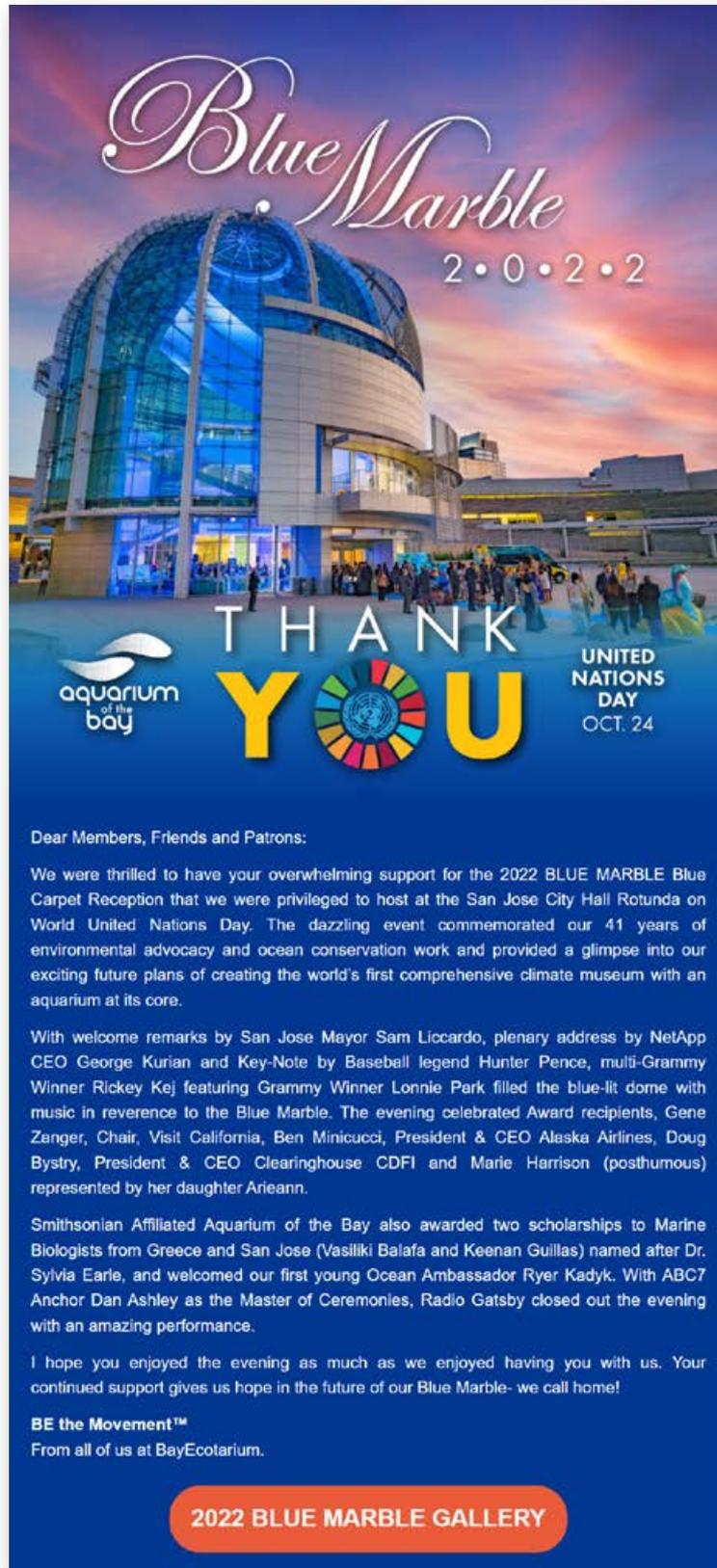
LIVE MUSIC

Tables 1-30 are arranged in a circular pattern within the main hall.

THANK YOU TO OUR SPONSORS

Blue Marble
aquarium of the bay bayecotarium

Sponsors: Alaska Airlines, Clearinghouse CDFI, Alcatraz citycruises, UnionBank, SAN FRANCISCO BUSINESS TIMES, LocalGetaways, REUBEN, JUNIUS & ROSE, CITY NATIONAL BANK, JON & DARLA FISHER FOUNDATION, storibox, Red Curtain Addict, ARGONAUT, armanino, CALIFORNIA TRAVEL ASSOCIATION, visit California



The graphic features a large, illuminated glass dome structure at night, likely the Aquarium of the Bay. The text "Blue Marble" is written in a large, elegant script font at the top. Below it, "2022" is displayed in a smaller, spaced-out font. The "THANK YOU" message is prominently displayed in the center, with "YOU" in large, bold, yellow letters. The United Nations Day logo and "OCT. 24" are also visible. The Aquarium of the Bay logo is in the bottom left corner.

Blue Marble
2 • 0 • 2 • 2

THANK
YOU

aquarium of the bay

UNITED NATIONS DAY
OCT. 24

Dear Members, Friends and Patrons:

We were thrilled to have your overwhelming support for the 2022 BLUE MARBLE Blue Carpet Reception that we were privileged to host at the San Jose City Hall Rotunda on World United Nations Day. The dazzling event commemorated our 41 years of environmental advocacy and ocean conservation work and provided a glimpse into our exciting future plans of creating the world's first comprehensive climate museum with an aquarium at its core.

With welcome remarks by San Jose Mayor Sam Liccardo, plenary address by NetApp CEO George Kurian and Key-Note by Baseball legend Hunter Pence, multi-Grammy Winner Rickey Kej featuring Grammy Winner Lonnie Park filled the blue-lit dome with music in reverence to the Blue Marble. The evening celebrated Award recipients, Gene Zenger, Chair, Visit California, Ben Minicucci, President & CEO Alaska Airlines, Doug Bystry, President & CEO Clearinghouse CDFI and Marie Harrison (posthumous) represented by her daughter Arieann.

Smithsonian Affiliated Aquarium of the Bay also awarded two scholarships to Marine Biologists from Greece and San Jose (Vasiliki Balafa and Keenan Gullas) named after Dr. Sylvia Earle, and welcomed our first young Ocean Ambassador Ryer Kadyk. With ABC7 Anchor Dan Ashley as the Master of Ceremonies, Radio Gatsby closed out the evening with an amazing performance.

I hope you enjoyed the evening as much as we enjoyed having you with us. Your continued support gives us hope in the future of our Blue Marble- we call home!

BE the Movement™
From all of us at BayEcoarium.

2022 BLUE MARBLE GALLERY



The gallery features a blue background with several circular inset photos. The top right photo shows George Jacob FRCGS and San Jose Mayor Sam Liccardo. The middle photo shows Hunter Pence speaking at a podium. The bottom photo shows Angelique Tompkins presenting a globe to Arieann Harrison.

George Jacob FRCGS
President and CEO

Board of Directors, ICOM US
Board of Directors, US Travel
Board of Directors, CAL Travel

San Jose Mayor
Sam Liccardo

“
Planting trees helps us breath better, sequesters carbon, and is an important mitigation measure for climate change.
”

Baseball Legend
Hunter Pence
Former SF Giants

Board member
Angelique Tompkins (right) presenting the posthumous Blue Marble Award for Marie Harrison, accepted by her daughter, Arieann Harrison, Founder and Executive Director of Marie Harrison Community Foundation.



THE BAY INSTITUTE



The Bay Institute (TBI) is the policy, research and advocacy arm of Bay.org. TBI's scientists and policy experts work to protect the San Francisco Bay estuary's unique fish and wildlife species. Their scope also includes restoring the habitats and processes that support a healthy ecosystem. They promote sustainable water and land management practices and measure how well the ecosystem - and management efforts to protect it - is doing. To achieve these goals, TBI conducts technical analyses, engages in regulatory, legislative and voluntary decision-making processes, and educates media, decision-makers, and the public on key climate issues.

SAN JOAQUIN RIVER RESTORATION



Construction of Friant Dam by the U.S. Bureau of Reclamation in the 1940s destroyed the state's largest Chinook salmon run. After helping negotiate (along with partner organizations) a historic 2006 agreement to restore flows and fisheries to the dewatered reaches of the river, TBI now works with the Restoration Administrator and federal Restoration Program to implement the agreement. Year-round flows and salmon reintroduction began in 2016; three years later salmon returned naturally to the river to spawn for the first time in over half a century.

and produced a video that publicized how the Exchange Contract harms the river. They gathered signatures on a petition to the Bureau of Reclamation and educated media on the subject. This effort paid off in October when Reclamation formally kicked off the process to renegotiate the Exchange Contract.



They co-led a successful campaign to renegotiate the San Joaquin River Exchange Contract, which gives a handful of irrigation districts twice as much water as Los Angeles gets in a year. Four times in the last decade, deliveries to the Exchange Contractors dewatered the river. This year, it happened during the peak spring-run Chinook salmon migration period. Working with San Francisco Baykeeper and the makers of the documentary film "River's End", TBI obtained drone footage of the dry river

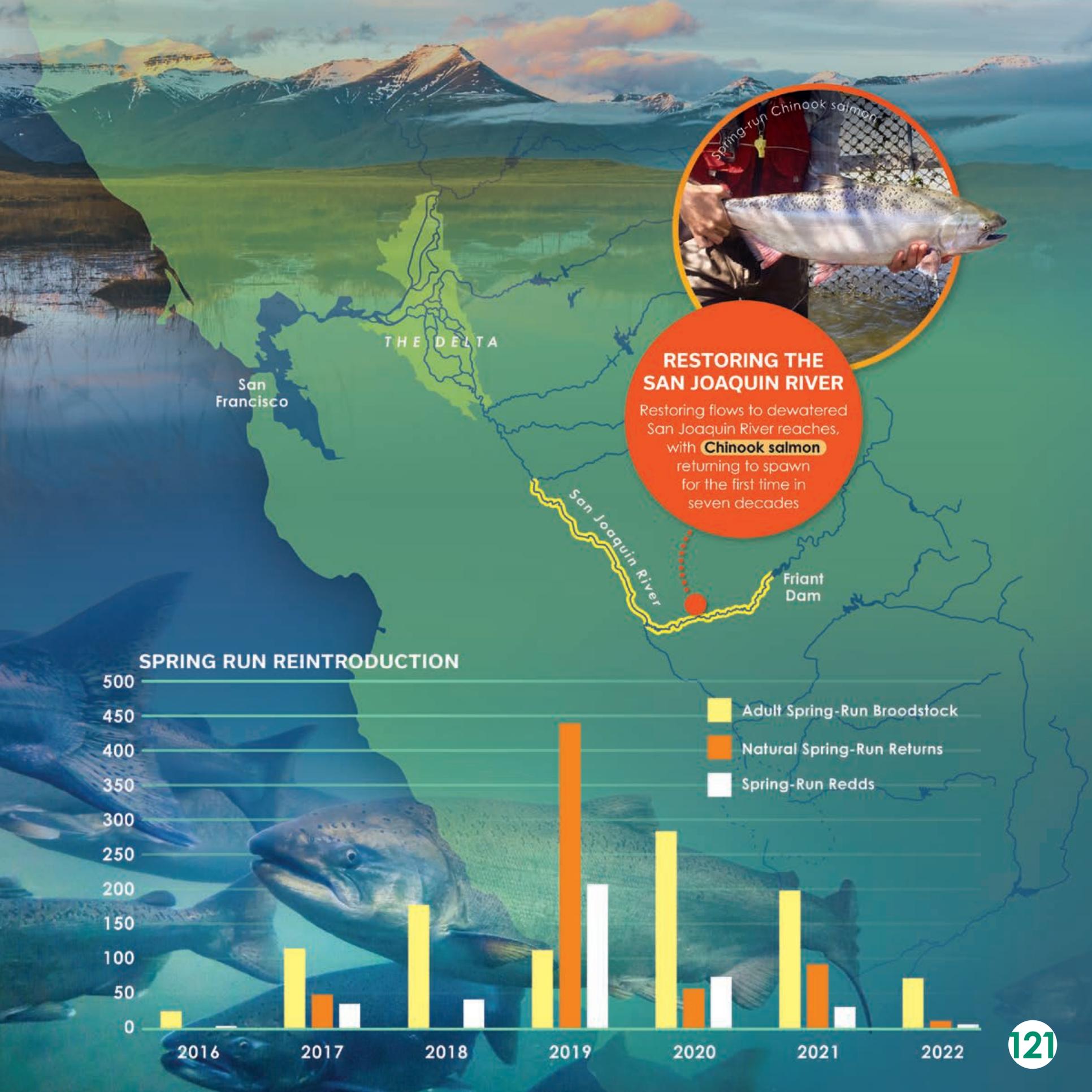
The Bay Institute analyzed preliminary designs for Reach 2B floodplain restoration, the Sack Dam fish ladder, and Arroyo Canal fish screens. Making progress on these projects is critical to securing adequate conditions for migration of salmon and other native fish species.

Following up on previous work with Restoration Program partners, they demonstrated that fourteen Groundwater Sustainability Plans (GSPs) in the San Joaquin Basin were inadequate as well as the state's decision to disapprove those GSPs. The TBI team analyzed and commented on the revised and reissued plans and began a collaborative regional investigation into groundwater-surface water connections along the river.

1. [San Francisco Bay, Satellite View](#)

2. [San Francisco Bay Delta Estuary](#)

3. [Black-necked Stilt](#)



RESTORING THE SAN JOAQUIN RIVER

Restoring flows to dewatered San Joaquin River reaches, with **Chinook salmon** returning to spawn for the first time in seven decades

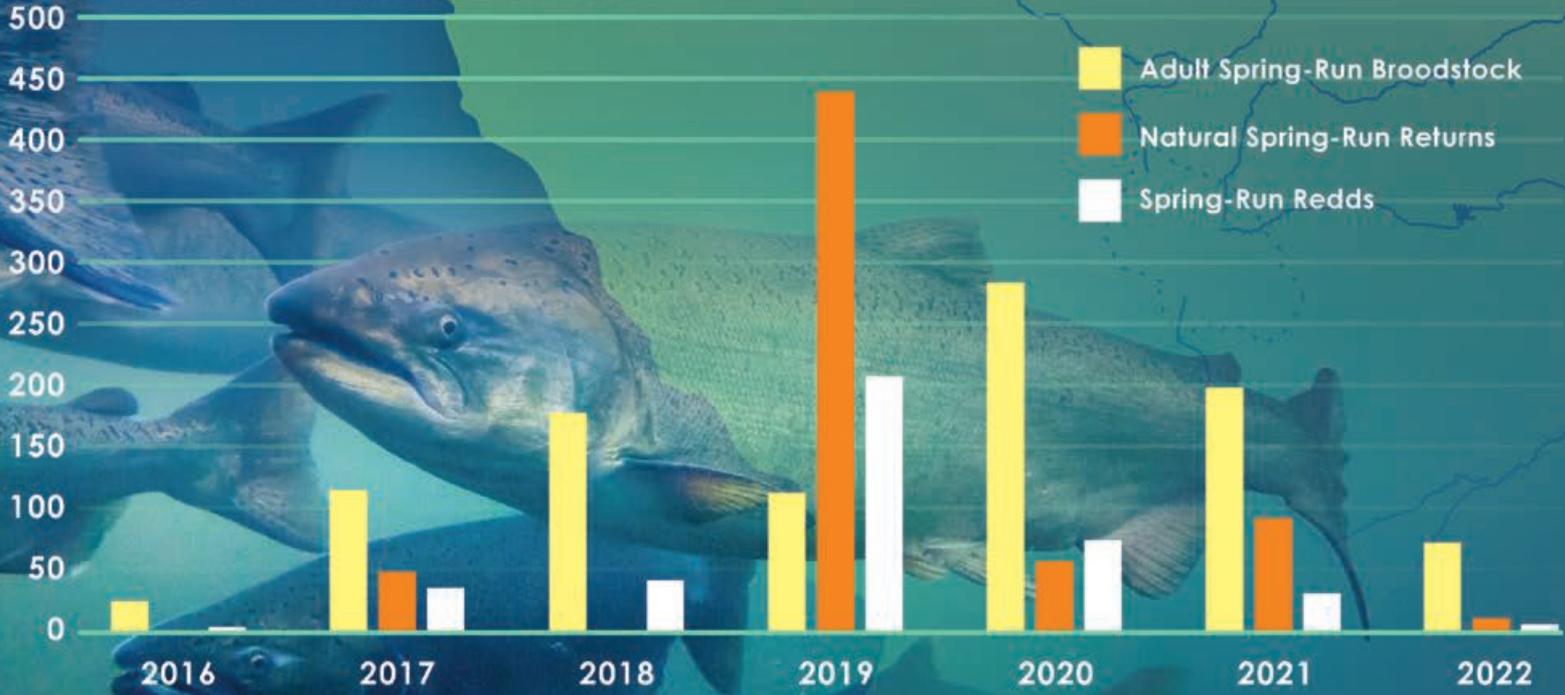
San Francisco

THE DELTA

San Joaquin River

Friant Dam

SPRING RUN REINTRODUCTION





PROTECTION FOR ENDANGERED SPECIES AND ECOSYSTEMS

Existing state and federal regulations to protect endangered or rare Bay-Delta aquatic species and the habitats and processes they depend on to survive and flourish are clearly in need of updating. Many native fish populations have declined to record or near-record low levels in recent years. TBI continues to play a leadership role in defending and improving management actions for native species like Chinook salmon and Delta smelt, providing the scientific basis for large-scale improvements in flow and habitat conditions to support endangered species and ecosystems. They also worked on securing regulatory and management changes to achieve those needed improvements and opposing water development projects and water management policies that would further undermine environmental conditions. Additionally, they opposed proposed relaxations of water quality standards in the Delta and along Central Valley rivers that would have devastated fish and wildlife.

TBI analyzed environmental documentation for proposed Sites Reservoir and identified major potential adverse impacts to



1. Delta Smelt (endangered)
2. California Brown Pelican (endangered)
3. Chinook salmon (endangered)

ecosystem health and water quality. They also pursued ongoing legal challenges to inadequate endangered species permits for the state and federal water projects and worked with their coalition partners to promote more protective alternatives in the re-consultation process to redo the federal permits. They completed the second of three phases in their Salmonid Recovery Project, working with multi-interest partners to develop an effective and implementable strategy for achieving long-term salmonid recovery targets. Lastly, The Bay Institute modeled suites of management actions to reverse decline of the once common, now rare delta smelt in 5-10 years.

PUBLICATIONS

TBI's publication history includes many pioneering works, including the first comprehensive ecological history of the Bay-Delta estuary-watershed and the first ecological scorecard for the estuary.

In 2022, TBI worked on two new major reports scheduled for publication next year that graphically illustrate how water is used in California, "The Atlas of Water Use and Water Equity" and "The Year in Water 2020-2022".

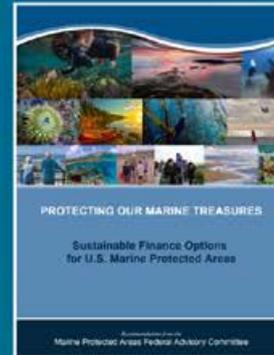
THE BAY INSTITUTE PUBLICATIONS



The Year in Water
2018 & 2019



From the Sierra to the Sea
20th Anniversary Edition



Protecting Our
Marine Treasures
2017



Golden State Waters
2016



Horizontal Levee:
The Oro Loma Project
2016



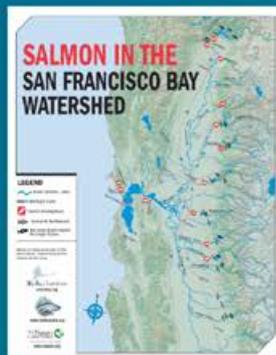
San Francisco Bay
Freshwater-Starved Estuary
2016



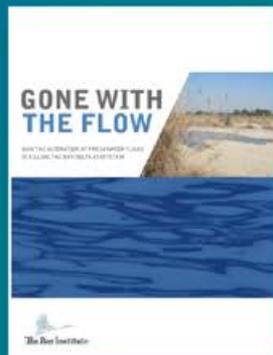
Horizontal Levee
Cost & Benefits
2013



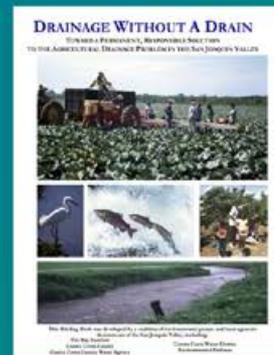
Collateral Damage
2012



Salmon Viewing Map



Gone With the Flow
2010



Drainage without a Drain
2003



SCAN TO VIEW
PUBLICATIONS



BAY MODEL ALLIANCE

Bay Model Alliance with U.S. Army Corps of Engineers, continues to bring about a stronger collaboration between the two institutions. An international forum was held at the Bay Model Visitor Center jointly with the UC Berkeley Haas School of Management. With structure issues impacting the sea wall under the San Francisco Embarcadero, the opportunity of enhancing community awareness has become a necessity which will be addressed through a pop-up exhibit in the coming year. The venue will also be utilized to stage film & lecture series, traveling exhibits, book signing events, and innovation forums in 2023.

Inside the Bay Model Visitor Center is one of the most fascinating scientific tools in the world: a working hydraulic model of San Francisco Bay and the Sacramento-San Joaquin River Delta systems that simulates tides, currents, and sediment movement the Bay Model is used by scientists and engineers.

What makes the model special is that its pipes and hydraulics make it a real simulation of the water environment of San Francisco Bay and the Delta. The analog model is used to simulate the effects of



everything from oil spills, upstream dams, and water diversions to floods caused by global warming. The Bay Model Visitor Center provides a variety of public events and educational programs each month.

The location provides a stunning venue for special events and presentations. Tours are available for groups with advanced reservations and can be tailored to the technical sophistication of the group. The Corps of Engineers also makes the Visitor Center available to scientific and educational groups for meetings and seminars. As part of the alliance, BayEcotarium assists in retail and merchandise.



1. The Bay Model in Sausalito
2. Members of the 2022 Berkley Innovation forum engage in a guided tour on the deck of the Bay Model Visitor Center
3. The Bay Model Visitor Center is one of the largest hydrological scale models in the country and was used to detect effects of earthquakes on the Bay Area in the 1970s. The model is still functional today
4. Information about Indigenous Bay Area Native American tribes is displayed through the Bay Model Alliance Visitor Center



3.

4.

Do you see the large bay northwest of the Richmond-San Rafael Bridge? The narrow, angular cuts marked on San Pablo Bay represent navigational channels maintained by the U.S. Army Corps of Engineers. These channels form part of highways, allowing ocean-going ships to safely navigate San Pablo Bay's shallow water.



For 2022, EcoXpeditions curated more destinations while continuing to reach out to its ever-growing database of conservation travelers. The new adventures brought them up close and personal to the hands-on conservation work and education on marine life in multiple locations around the globe.

2022 HIGHLIGHTS

TRIP 1: BIG ISLAND OF HAWAII

The Big Island of Hawaii, part of the largest Marine Protected Areas in the United States, was the first EcoXpedition of 2022 in February 21-27 with two of the travelers coming as return EcoXpeditions participants. The beautiful and tropical accommodations were located at the spiritually and historically significant area of Hawi.

Hawaiian Island Resorts is a gorgeous natural resort located on 50 acres in Hawi, and one can see remnants of the ancient Hawaiian canoe areas along its natural coastline. Travelers enjoyed the wonderful Hawaiian lomi lomi massages and other holistic treatments during their six night/seven day stay at this Hawaiian

retreat. Ways of giving back to the community included beach cleanup of Hapuna Beach, taking away plastic bottles and more.

The highlight of the Big Island trip was the evening snorkel to see the giant Manta Rays in Kailua-Kona Bay. Guests were not disappointed as the huge black and white Manta Rays started coming from all directions to eat the plankton that the group's night lights were attracting. Another highlight was walking along the Kona coast with a certified Hawaiian Bird Expert to view the tidepools, marine life, and ocean bird - many of which are indigenous to Hawaii.



2.

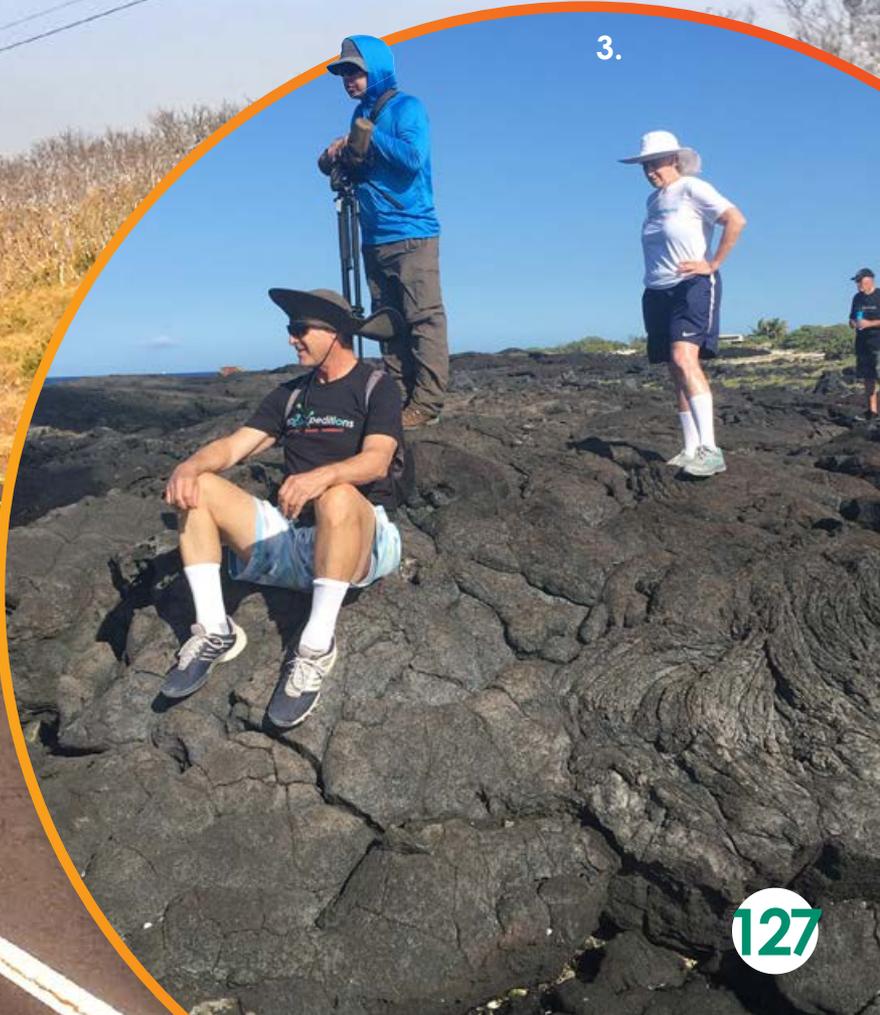


3.

1. Rare Jade plants in full bloom growing in tropical Hawaii Island Retreat, used to make stunning leis
2. Beautiful Hibiscus Flower, also known as Hawaii's State Flower
3. Return traveler David Jackson with Angelina Preza at sacred and historical Pololu Valley, the birthplace of Hawaii's first King, King Kamehameha

1. Rainbow on Kohala Coast near local towns of Hawi and Kapaau
2. Situated on 50 oceanfront acres, Hawaii Island Retreat is home to the “Council Rocks” used by past native Hawaiian royalty for inspiration and spiritual awakenings
3. Walk on the wild side on the Kohala Coastline to spot endangered seabirds such as the Hawaiian Petrel, with travelers Pamela and David Jackson, Ralph Mench, Angelina Preza and local Big Island Bird Expert
4. Hawaii Island Retreat’s private infinity salt water pool in a tropical setting

HAWAII





TRIP 2: BAJA MEXICO

Next on the EcoXpeditions trip schedule was going back to Baja Mexico in June, this time to see the migration of the mobula and manta rays in the Sea of Cortez. This trip included boat rides out to the middle of the immense and protected Sea of Cortez several times brought the group right on top of hundreds of both brown and black mobula rays all swimming just below the surface, foraging for plankton.

Another boat cruise day in the Sea of Cortez stopped after snorkeling near the reefs in the clear and turquoise waters to eat lunch, nap and participate in a beach cleanup on the private island of Cerralvo, also known as Jacques Cousteau Island. Travelers enjoyed the peace and tranquility and the immense amounts of sea life they saw while snorkeling and swimming in the pristine Sea of Cortez.



TRIP 3: CRETE IN GREECE

Early fall was welcomed by the third EcoXpeditions trip, this time to the beautiful and sunny isle of Crete in Greece, known as the largest island of the Greek Isles. Travelers were treated to a presentation by Archelon on how they educate the public and rescue sea turtles in and around Greece. Every day was a new adventure, with the first full day starting with a four-wheel drive up into the mountains of Crete to see the mountain cave where, according to Greek mythology, Zeus was born.

One of the highlights of the Crete EcoXpeditions was a private sail on a catamaran to the isle of Dia, where they anchored in a private bay and enjoyed swimming and snorkeling and the fresh ocean air of the Aegean Sea. A lovely dinner was put together by the crew and everyone enjoyed the clear and calm waters and the views of the private island of Dia before heading back to the isle of Crete. Crete, along with Greece as a country, as a destination for EcoXpeditions has been so well received that it is on the 2023 schedule.



1. Early morning departure from beachfront Palapas Ventana to scuba and snorkel in the Sea of Cortez near Cerralvo Island, also known as Jacques Cousteau Island, with Joyce Ambrosius, former NOAA Director, and friends
2. Our boat enroute to Jacques Cousteau Island in the protected Sea of Cortez, was followed by hundreds of playful bottlenose dolphins during our Baja Mexico Whale Sharks EcoXpeditions
3. Guides at Crete Greece explain four wheel drive tour up Crete Mountains to Zeus' Cave where Zeus was born, with a stop at the Roman Aqueduct of Lyttos, to EcoXpeditions traveler Donald Duszynski from New Mexico



1.



2.

GREECE



3.

TRIP 4: BAJA MEXICO

Once again, Baja Mexico is the destination of choice for travelers on the final EcoXpeditions trip in 2022 to swim with the Whale Sharks in La Paz. Participants who joined along on this trip were former officials of NOAA and personal friends of Dr. Sylvia Earle.

The itinerary included going on a sailboat out into the Sea of Cortez to swim with the sea lions and rays as well as stopping on the private island of Jacques Cousteau. There, activities included a luncheon on the white sand beaches, a little siesta, along with giving back by cleaning the beaches of plastic and ocean garbage. There was also a cooking class where they learned to make ceviche and tortillas that would be part of their dinner that evening.

1. As our sail nears the island of Spinalonga, a closer view of the intact Venetian Fortress comes into view prior to landing at the island's port
2. Our tour guide pointing out artifacts and the history of the Palace of Knossos in the town of Heraklion. The Palace of Knossos is where the dreaded Minotaur, part bull-part man, was said to have roamed the basement corridors.
3. EcoXpedition travelers Don Duszynski, Lee Couch, Devin Duszynski, Ralph Mench, Whitney Wassner with Angelina Preza in front of one of 60 tanks on display at CretAquarium, also known by its Greek name "Thalassokos" or "Sea World", one of the largest aquarium and marine research complexes in Europe.



UPCOMING TRIPS IN 2023

The 2023 EcoXpeditions schedule will include: Baja Mexico, Isle of Crete, Santorini, Big Island, Maui, Sardinia, Costa Rica, Belize, Colombia, Galapagos, Catalina Islands, Tanzania, and a South African Safari. Many of the EcoXpeditions are six nights and seven days, but the African safaris last ten nights and eleven days. The safaris are fully conservation-oriented by working with other nonprofit organizations and take place in conservation lands and work closely with the indigenous peoples to protect the wildlife and land. The focus once again will be on exciting and meaningful global EcoXpeditions with the following trips scheduled:

- **BAJA, MEXICO:**
February 9-14, 2023
- **GOLFO DULCE, COSTA RICA:**
March 1-7, 2023
- **BELIZE:** April 1-7, 2023
- **SARDINIA:** April 24-30, 2023
- **ISLE OF CRETE:** May 7-13, 2023
- **GALAPAGOS:** May 24-30, 2023
- **BAJA MEXICO:** June 9-15, 2023
- **BIG ISLAND, HAWAII:**
July 6-12, 2023
- **AFRICAN TANZANIA
LUXURY SAFARI:** July 17-24, 2023
- **COLOMBIA:** August 8-14, 2023
- **SOUTH AFRICA SAFARI:**
September 14-24, 2023
- **MAUI HAWAII:**
September 26-October 1, 2023
- **SARDINIA:** October 12-19, 2023
- **CATALINA ISLAND:**
October 27-31, 2023
- **BAJA MEXICO:**
November 29-December 5, 2023
- **GALAPAGOS:** December 12-18

EcoXpeditions is curating shorter trips within California and Baja to reach a market that is focused on fewer days away and easier on the pocketbook (under \$1000 per person double occupancy), but with the same experience of ocean and land conservation, outreach, local and sustainable activities, volunteering and making a difference.

Additionally, the brand-new Sustainable Wine Tours to Sonoma will fall under the EcoXpeditions umbrella, as well as Citizen Dives in areas such as Monterey Bay.

1. Morning sail from the Isle to Crete to the Island of Spinalonga with its Venetian Fortress and colony, now an important tour from the port of Elounda
2. Local Spiny Blue Lobster found in coral reefs fronting our resort Palapas Ventana
3. The church below is in the town of Chania in Western Crete famous for its beaches and Venetian culture, and the church a Greek Orthodox Cathedral of the Virgin Mary, and still used today.



eco  peditions

EXPL●RE ENGAGE EXPERIENCE



COME EXPLORE THE OCEANS WITH US!



SUSTAINABLE TOURS

The EcoXpeditions program has added some local destinations to its repertoire this year with the addition of Sustainable Wine Tours. This new program, in which guests are taken out on a specially curated tour of wineries in Sonoma, is centered around the business of sustainable winemaking in Northern California. This exciting program will be launching in the coming months and is a wonderful addition to what Aquarium of the Bay has to offer.

Made possible through a generous grant from the California Air Resource Board (CARBs), the Aquarium has acquired its first all-electric vehicle for EcoXpeditions to launch a new sustainable wine tour to Sonoma County. The Sustainable wine tours starts in San Francisco, across the Golden Gate Bridge through Marin County to Sonoma County where you will see beautiful farms, vineyards, and the scenic mountain ranges of the Mayacamas Mountains to the east and the Sonoma Mountains to the west. The tour stops for lunch in historic Sonoma Square - home of San Francisco Solano Mission and the site of the Bear Flag Revolt. There are shops, restaurants, and wine tasting opportunities to participate while there.

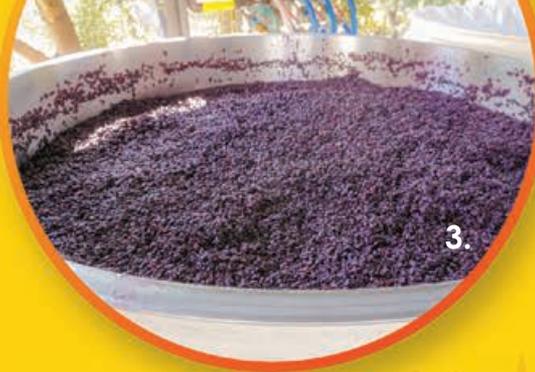
EcoXpedition wineries are selected based on how aligned they are with the Aquarium's mission to fight climate change, and all wineries on the tour are sustainably certified, meaning they must produce bottles with 85% certified sustainable grapes. Wineries are achieving this goal by using biodynamic farming techniques to create the best possible grapes without compromising future use of natural resources and supporting the ecosystem. Sustainable wineries also utilize naturally occurring elements such as yeast during fermentation process to grow more drought-resistant grapes. The tour operates on Fridays, Saturdays, and Sundays, departing from the Aquarium at PIER 39.

1. EcoXpeditions team: Jaz Cariola, Sean Walsh and Hannah Woodall enjoying wine tasting at a sustainable winery in Sonoma County
2. Red grapes growing and ready for harvest in one of many sustainable Sonoma County wineries
3. Red grapes in wine vat mark the start of sustainable wine making
4. Oak barrels for wine storage in sustainable wineries
5. EcoXpeditions new all electric sustainable van





2.



3.

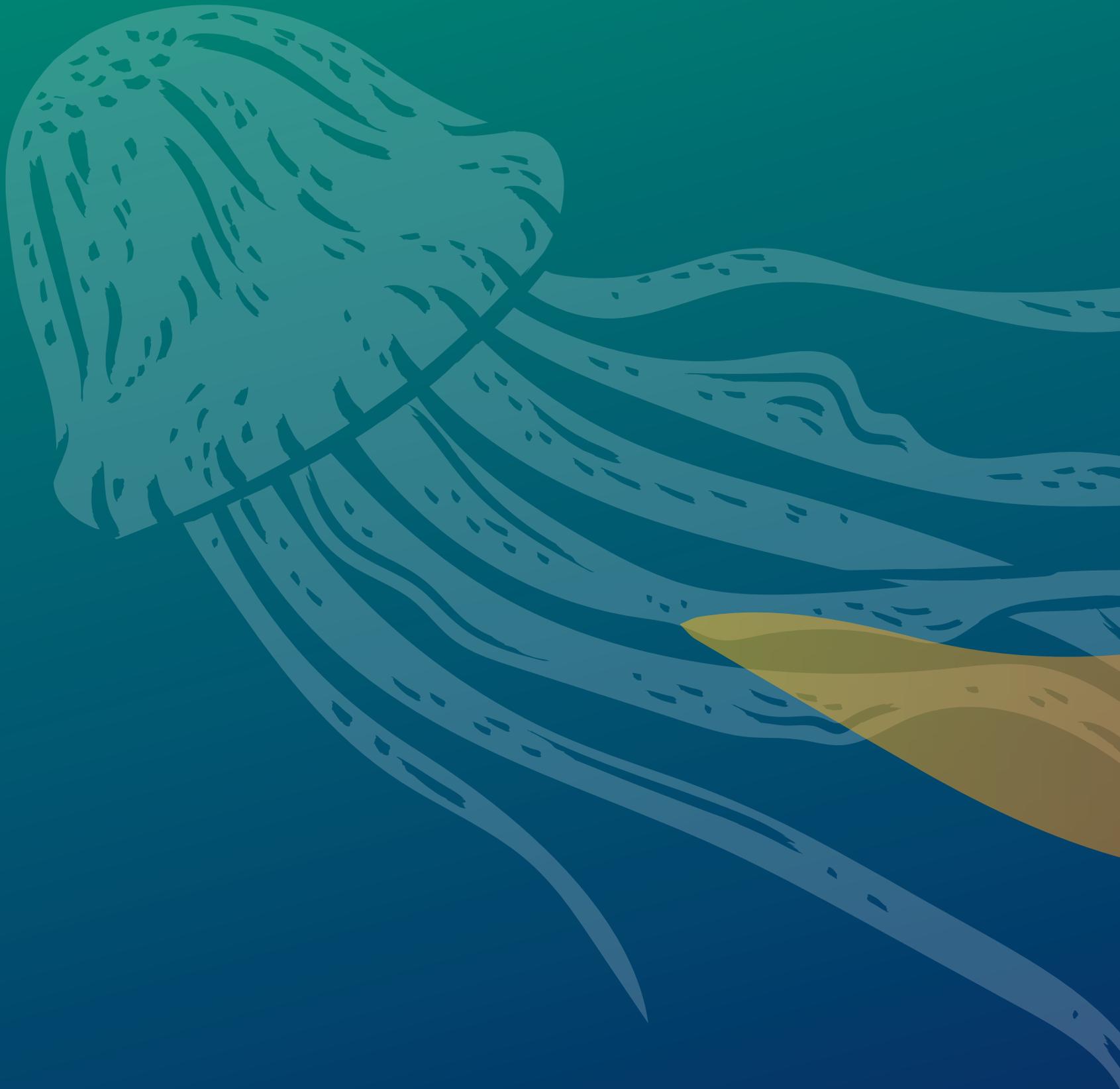


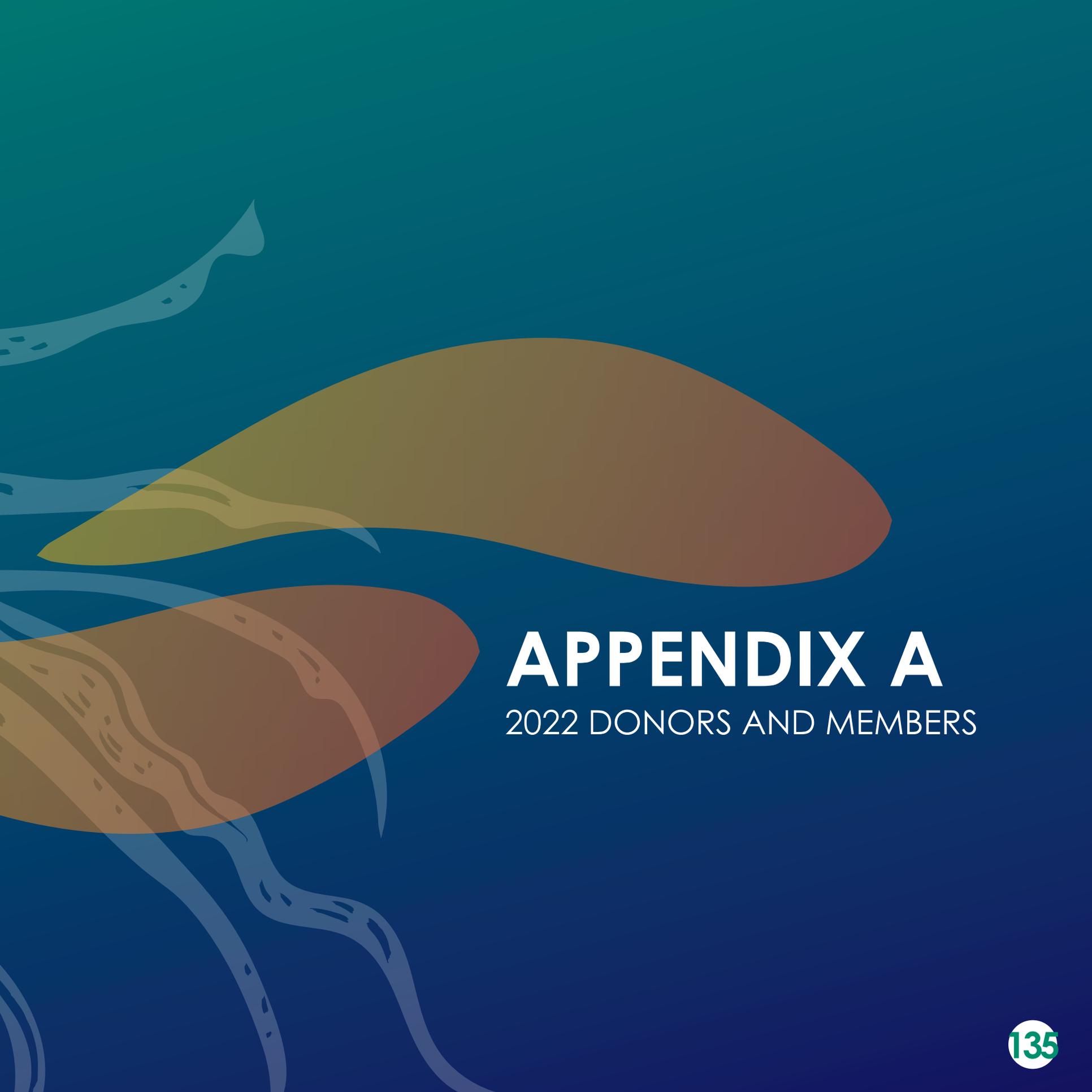
4.

sustainable Tours



5.





APPENDIX A

2022 DONORS AND MEMBERS

2021 DONORS

\$10,000 – \$25,000

Anthropocene Institute	Dr. Jill Spangenberg	Steven Machtinger
Tim Little	Alaska Airlines	

\$5,000 – \$9,999

Alcatraz CityCruises	City National Bank	Harney & Sons Tea Corp	Union Bank
Poshmark	Jon Fisher	Visit California	Clearinghouse CDFI

\$2,500 – \$4,999

Moor + South/Pier Management Co.	Enterprise Holdings Foundation	Insurance Agency
Craig McCullum	Marsh & McLennan	India Spora

\$1,000 – \$2,499

Benjamin Bleiman	Ashok Lalwani	Susan H Schwartz	Valley Water
Karen Carney-Filmore	John & Meryl Levine	The Schmitz-Fromherz Family Fund	
Alison Geballe	Arun Matthews		Armamino LLP

\$500 – \$999

Sinthia Arteaga	Vanessa Hernandez	Barbara Newton	Elsie Taketa
Jes Bayly	David McIntosh	Jeffrey Ota	Rosalie Tang
Donald Bradley	JJ Hanley	Schwab Charitable Funds	Andrea Thampy
Kaitlynn Cortez	Sean Hartman	Gwyn Stahlhut	Angelique Tompkins
Lauren DellAringa	Aidan Leu	Barbara Stewart	

\$499 AND BELOW

Kerry Adams Hapner	Nicole Bartow	Thomas Bradshaw	Kevin Chak
Giusi Adragna	Susan Becker	Annie Brashem	Sarina Chang
Jadelynn Alboro	Juan Beltran	Bright Funds	Lawrence Chen
Adam Barakat	Jose Bermudez	Dustin Brown	Peanut Chiweenie
James Barr	David Blais	Patricia Butkovich	Susan Christenson
Emma Barrett	Carolyn Horgan	Ronald Courtney	City National Bank
Janet Barron	Donald Bradley	Eric Carlson	Emerson Congleton

Michelle Contreras	Judith Jauhal	Ami Odom	Ian Ballentine
John Corbett	Amanda Jimenez	Kortney Opshaug	Peter St. Wecker
Kaitlynn Cortez	Zachary Joseph	Yelena Ostrovsky	Eva Anneli Margareta Staalnacke
Angela Craven	Ryer Kadyk	Pamela Palacios	Alison Cocotis
George Cummings	Barbara Kaio	Veronica Paul	Suzanne Streeter
Lucas De Leeuw	Becky Kollinski	Connie Paulsen	Carole Sweeney
Patrick Doran	Joan Lee	Avery Pearson	Misty Todisco
John Douglass	Phillip Lee	Erin B. Perlow	Estevan Trevino
Alexis Dulin	Josue Leon	Lauren Pinard	Rebecca Turner
Mark Dunphy	Aidan Leu	Alexa Pollock	Murali Vajapeyam
Ena Dykes	Arthur Z Li	Craig Potter	Rylie Velez
Mariana Eguizabal	Yu Li	Sean Powers	Laura Waters
Hollie Figueroa	Thomas Lippert	Alex Preciado	Lorie Webb
John Fitzpatrick	HaoTong Liu	Angelina Preza	Janie Winning
Elizabeth Funk	Samantha Liu	Jimmy Pulido	Mary Cantini
MarkLaurie Fusia	Elize M Brown	Jenny Ratzel	Nataly Canut
Natalia Gamba	Anthony Manha	Kayla Reckon	David Mosunich
Shannon Glenn	Mike Marcley	Johnel Red	Joakim Roy
Alan Goggins	Madison McDuffie	Rich Reimer	Sridhar Sarnobat
Alex Green	Madison Menard	Kyle Reinstadtler	Claire Wishba
Emma Grisham	Charlene Mercil	Tarin Rickett	Doug Apple
Chao Gu	N'Kayla Middleton	Gabriel Rios	David Ewing
Brittany Holmes	Zoe Miramontes	Matthew Robinson	Nicole Wood
Patrick Ha	Leyla Moeen-Ziai	Sam Roedger	Mark Allen Holler
Cassandra Hannon	Paul Nakamoto	Suzanne Romero	Freddie Clark
Sarah Hantke	Network for Good Inc.	Jane Sandoval	Hildy Shandell
Milos Haravan	Vy Nguyen	Bob Garbarino	Nuzha Bukhari
Suzanne Helle	Myzsaa Norvell	Joseph Santone	Katrina Grey
Marnie Herling	Katherine Noryko	Summer Schilling	Eileen Tsai
Steven Hibshman	Alanna O'Brien	Linda Scourtis	Aslak Sverdeup
Lilianne Huynh	Tamara Obra	Amy Siegfried	Katrina Stevens
Carlos Jaimes Silva	Albert Odom	Colby Smith	David Murphy

2021 NEW MEMBERS

Jeanelle Ablola

Kimberly Abrams

Devyn Ahern

Ahmed Ahmed

Caitlin Aiona Smith

Carlos Alas Grande

Dwayne Allen

Uemit Altay

Gladys Alvarez

Summer Aqrabawi

Ayrie Aranda

Richard Arauz

Ian Arca

Kathleen Aycock

Veni Ayer

Abdraimov Azamat

Anand Bahety

Stella Baltasar

Linh Banh

Gordon Barber

Zahar BarthManzoori

Rajaie Batniji

Darryl Beliel

Demitrius Bell

Karen Bellister

Emily Bender

Joseph Berkovitz

Mary Bernales

Brian Bircumshaw

Alison Block

Natasha Bowmen

Colleen Boyle

S Bravo

Ondrea Bryant

Maureen Burke

Jesus Cabrera

Jessika Cabrera

Kristian Cabugao

Mike Calderon

Julia Calderon

Meghan Callinan

amanda camello

Keyla Caneles

Jaz Cariola

Fabiana Carvalho

Leonardo Caudillo

Raul Chacon

Daniel Chan

Chia-Hsiang Chang

Michael Chang

Laura Chang

Jeremy Charette

Joyce Chen

Weibo Cheng

Alex Cheng

Eva Cheng

Kaki Cheung

Gabriel Chu

Cheryll Clark

Roberta Jean Colotti

Jeffrey Conn

Sarah Cooper

Johnson Cooper

Ana Corbova

Sergio Cotom

Sylvia Cox

Molly Cruit

Pete Cyril

Prissman Dani

Leonor Davila

Vicki De Witt

Nettie DeAugustine

Steven Deepa

Jamie Delodovici

Lydia Dennis

Ridhhiben Desai

Ali Dillon

Micah Dixon

Stephanie Djidjev

Patrick Doran

Roxanne Durr

Adan Espinoza

Maria Estevez

Matthias Felber

Emley Feldmann	Ivan Herrera	Benjamin Kimes
Raphael Feng	Jennifer Hogan	Jennifer Kinon
Roland Fernandez	Liam Hope	David Kogan
Sanam Finnegan	Salbel Houssien	Ben Komalo
Juana Flores	Daniel Hyduke	Kris Konawalik
Anthony Fong	Madalina Ion	Maja Kosic
James Freid	Sherry Isenbarger	Daniela Kostova
Elis Gadelha	Yulia Iskandar	Niko Kowell
Mark & Gwenyth Galbraith	Amal Jamal	Sunny Kumar
Sara Gamarra	Sierra Jett	Michael La
Ana Gamino	Choi Jieun	Shravan Lal
Qiong Gao	Ying Jin	Angie Landfair
Abderrezak Gharfara	Rachel Ann Johns	Jason Lee
Deepali Gholve	Scott Johnson	Tony Leong
Kimberly Gliberman	Sheri Jurnecka	Melba Lester
Jamie Goines	Madison Juschin	Herman Leung
Lynn Goldberg	Rachel Kahle	Mei Li
Antonieta Gomez	Chihlung Kao	Caiyun Li
Lucia Gonzalez	Praveen Kasireddy	Helen Liao
Albert Gonzalez	Katie Kelly Hankin	Donna Lieb
Tarah Grams	Katalin Kauser	Mengya Lin
Abbas HaiderAli	Vuthearith Keary	Chenfu Lin
Mystie Hansen	Nicholas Kelley	Frances Lisius
Jing Jing He	April keys	Yuchao Liu
Dustin Heestand	William Keyworth	Shaojun Liu
Ryan Heintz	Armine Khan	Jer Lo
Elana Henderson	Raymond Kim	Jake Loewenheim
Lois Hermans	Hyunseok KIM	Samuel Lois

2021 NEW MEMBERS

Chri Longstreet

Guadalupe Lopez Perez

Steven Lund

Guo Luo

Tongcui ma

Laura & Chris MacEwan

Elisa Maclellan

Mayra Madriz

Jean Mahone

Selvaraj Mani

Philine Marchetta

Maya Mark

Clarissa Marquez

Diana Martinez

Mayra Martinez

Olivia Martinez-Stewart

Olga Matiash

Elizabeth Max

Jamzyah Mays

Robert Mccartney

Cary McClelland

Candice Mei

Matt Meister

Alessia Melchor

David Mello

Elektra Mercutio

Matt Messerli

Craig Meyer

Cassie Meyers

Charlie Miles

SarahBeth Minkus

Krishna Miriyak

Ashwin Raghav Mohan Ganesh

Mohammadreza Mojudi

Fatima Moncada

Benjamin Mondragon Coello

Sarah Moradi Fard

Ritesh Mordani

Aislinn Morrow

Lisa Morse

Weiwei Mou

Branden Muller

Gurpreet Singh Multani

Micheal Murphy

Dane Mustola

Thomas Nagle

Elizabeth Nakamura-Scruggs

Randall Nelson

Christopher Nguyen

Bob Ni

Allison Nilsson

Duc Nim

Paweena Nunabee

Mehmet Oguz

Hannah Osborne

Gogi Overhoff

Lilly Owsley

Alexander page

Jenny Palin

Xiao Xiao pang

Aditi patel

Harriet Patterson

Lizzy Paul

Brittany Perez

Mandy Phi

Delia Ponce

Mark Pope

Amanda Porter

Carolina Prieto

Nisha Puri

Halim Qayum

Lan Le Quach

Junior Quintero

Tricia Rafeedie

Chandrashekar Raghavan

Selvam Ramanathan

Arunkishore Ramgopal

Samanta Ramirez

Meg Rankin

Daniel Ratner

Alex Reyes

James Rhemer

Jay Richards

Justin Roberge

Brittanie Roberts

Mia Rodriguez

Julia Rolstad

Thomas Ronay

Alvin Rosales

Ann Russell

Jose Salinas

Carina Saltiga

Carlos Sandoval

Alicia Sanguinetti

Matthew Sapowith

Katarina Sayally

Eric Scahill

Sierra Scarlatta

Carrissa Serrato

Ganna Shiromi

Judith Silva

Stephanie Sims

Jasmeet Singh

Yuhuan Situ

Sacha Skifter

Steven Smith

Nelsa Smith

Kevin Smith

Ryan Smith

Sara Solis

Carolina Solorzan

Nichelle St Helen

Hallie Stern

Riley Sullivan

Changyu Sun

Abhinav Swarup

George Tan

Kelly Tarkman

John Taylor

Diana Taylor

Rachel Tegano

Dong Thach Acik

Yoissy Thomas

Stian Throndsen

Irene Yan Tieh

Ashley Till

Loretta Tolentino

Audrey Towle

Marcus Trott

Robert Urbina

Parth Vaishnav

Courtney Valdez

Adriana Valdivia

Michael Valladares

Luis Vasquez Tapia

Sandy Vella

Anna Marie Verma

Kirsten Vernon

Barbara Vong

Tatiane Wade

Catharine Wallace

Nancy Watkins

Robert Watson

Brigitta Whiting

Jayson Whitney

Mark Wiesen

Aiesha Williams

Hayden Wolf

ZhiMin Wu

Fang Xia

Steven Yao

Poying Yeh

Jodie Young

Isadora Zachariah

Yan Zeng

Xinxiao Zhang

Sujiang Zhang

Jackie Zhang

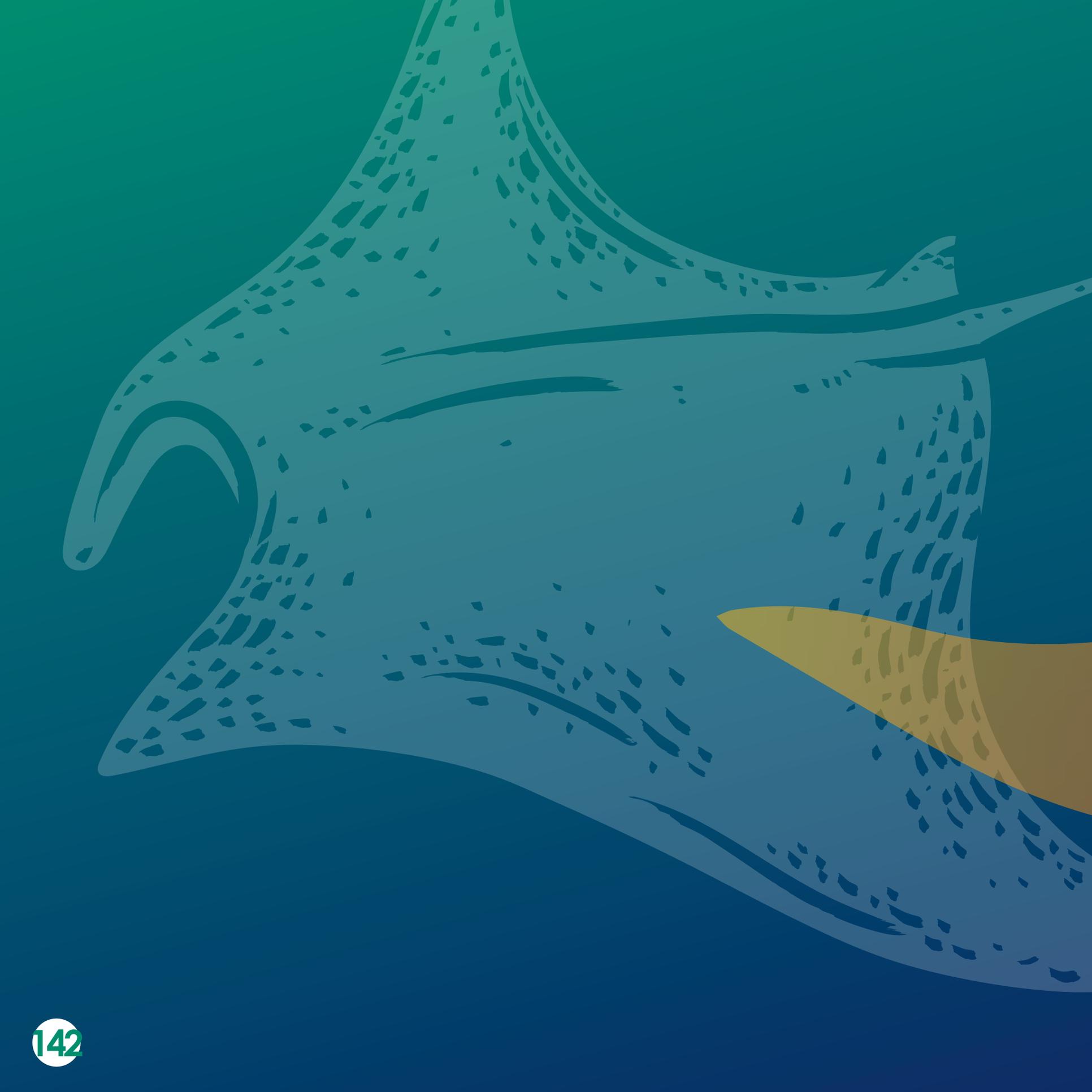
Jingyi Zhao

Shuai Zhu

Mary Ziegler

Stacy Zink

Lauren Zletz





APPENDIX B

AUDITED REPORT 2020-2021

BAY.ORG

Financial Statements

December 31, 2021 and 2020

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INDEPENDENT AUDITOR'S REPORT

Board of Directors
BAY.ORG
San Francisco, California

Opinion

We have audited the accompanying financial statements of BAY.ORG (the "Organization"), which comprise the statements of financial position as of December 31, 2021 and 2020, and the related statements of activities, functional expenses, and cash flows for the years then ended, and the related notes to the financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of BAY.ORG as of December 31, 2021 and 2020, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis of Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of BAY.ORG and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

As described in Note 11 of the financial statements, on March 11, 2020, the World Health Organization declared the novel strain of coronavirus ("COVID-19") a global pandemic and recommended containment and mitigation measures worldwide. However, the ultimate financial impact and duration of these events cannot be reasonably estimated at this time. Our opinion is not modified in respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about BAY.ORG's ability to continue as a going concern within one year after the date that the financial statements are available to be issued.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements, including omissions, are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of BAY.ORG's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about BAY.ORG's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Armanino^{LLP}
San Ramon, California

December 15, 2022

BAY.ORG
Statements of Financial Position
December 31, 2021 and 2020

	2021	2020
ASSETS		
Cash and cash equivalents	\$ 1,813,483	\$ 556,363
Cash restricted for loan payments	30,425	337,486
Accounts and grants receivable	201,466	152,473
Inventory	85,662	108,780
Prepays and other assets	77,834	39,299
Property and equipment, net	4,009,955	4,744,825
Total assets	\$ 6,218,825	\$ 5,939,226
LIABILITIES AND NET DEFICIT		
Liabilities		
Accounts payable	\$ 1,925,583	\$ 1,707,000
Accrued expenses	426,377	347,244
Deferred rent	-	115,162
Loan payable (Paycheck Protection Program)	999,017	999,018
Loan payable (Economic Injury Disaster Loan)	150,000	150,000
Notes payable, net	5,444,060	5,437,543
Total liabilities	8,945,037	8,755,967
Net deficit		
Without donor restrictions	(2,727,212)	(2,816,741)
With donor restrictions	1,000	-
Total net deficit	(2,726,212)	(2,816,741)
Total liabilities and net deficit	\$ 6,218,825	\$ 5,939,226

The accompanying notes are an integral part of these financial statements.

BAY.ORG
Statement of Activities
For the Year Ended December 31, 2021

	Without Donor Restrictions	With Donor Restrictions	Total
Revenues, gains, and other support			
Contributions and grants	\$ 877,352	\$ 59,500	\$ 936,852
Tickets and other operating revenues	7,004,482	-	7,004,482
Retail revenues, net of cost of sales of \$316,645	465,565	-	465,565
Special events	14,980	-	14,980
Gain on forgiveness of loan payable (Paycheck Protection Program)	999,018	-	999,018
Other income	136,957	-	136,957
Net assets released from restriction	<u>58,500</u>	<u>(58,500)</u>	<u>-</u>
Total revenues, gains, and other support	<u>9,556,854</u>	<u>1,000</u>	<u>9,557,854</u>
Functional expenses			
Program	<u>7,741,310</u>	<u>-</u>	<u>7,741,310</u>
Support services			
Management and general	980,512	-	980,512
Fundraising	<u>745,503</u>	<u>-</u>	<u>745,503</u>
Total support services	<u>1,726,015</u>	<u>-</u>	<u>1,726,015</u>
Total functional expenses	<u>9,467,325</u>	<u>-</u>	<u>9,467,325</u>
Change in net assets	89,529	1,000	90,529
Net deficit, beginning of year	<u>(2,816,741)</u>	<u>-</u>	<u>(2,816,741)</u>
Net assets (deficit), end of year	<u>\$ (2,727,212)</u>	<u>\$ 1,000</u>	<u>\$ (2,726,212)</u>

The accompanying notes are an integral part of these financial statements.

BAY.ORG
Statement of Activities
For the Year Ended December 31, 2020

	Without Donor Restrictions	With Donor Restrictions	Total
Revenues, gains, and other support			
Contributions and grants	\$ 524,099	\$ -	\$ 524,099
Tickets and other operating revenues	2,105,464	-	2,105,464
Retail revenues, net of cost of sales of \$316,645	188,064	-	188,064
Special events	36,983	-	36,983
Other income	42,684	-	42,684
Net assets released from restriction	<u>122,024</u>	<u>(122,024)</u>	<u>-</u>
Total revenues, gains, and other support	<u>3,019,318</u>	<u>(122,024)</u>	<u>2,897,294</u>
 Functional expenses			
Program	<u>6,677,715</u>	<u>-</u>	<u>6,677,715</u>
Support services			
Management and general	952,133	-	952,133
Fundraising	<u>282,801</u>	<u>-</u>	<u>282,801</u>
Total support services	<u>1,234,934</u>	<u>-</u>	<u>1,234,934</u>
Total functional expenses	<u>7,912,649</u>	<u>-</u>	<u>7,912,649</u>
 Change in net assets	(4,893,331)	(122,024)	(5,015,355)
 Net assets, beginning of year	<u>2,076,590</u>	<u>122,024</u>	<u>2,198,614</u>
 Net assets (deficit), end of year	<u>\$ (2,816,741)</u>	<u>\$ -</u>	<u>\$ (2,816,741)</u>

The accompanying notes are an integral part of these financial statements.

BAY.ORG
Statement of Functional Expenses
For the Year Ended December 31, 2021

	Program	Support Services		Total	
		Management and General	Fundraising		Total Support Services
Salaries & benefits	\$ 3,275,207	\$ 557,843	\$ 186,202	\$ 744,045	\$ 4,019,252
Advertising and promotion	55,773	-	11,440	11,440	67,213
Office expenses	327,834	289,875	103,719	393,594	721,428
IT expenses	91,881	26,269	11,578	37,847	129,728
Occupancy and other administrative expenses	1,933,328	13,471	218,395	231,866	2,165,194
Travel	218,166	2,952	194,411	197,363	415,529
Interest expense	312,836	6,240	-	6,240	319,076
Depreciation	713,656	21,215	-	21,215	734,871
Insurance	164,833	3,433	3,364	6,797	171,630
Aquarium operating expenses	642,883	4,950	11,091	16,041	658,924
Taxes & licenses	4,913	2,193	-	2,193	7,106
Professional fees	-	52,071	5,303	57,374	57,374
	<u>\$ 7,741,310</u>	<u>\$ 980,512</u>	<u>\$ 745,503</u>	<u>\$ 1,726,015</u>	<u>\$ 9,467,325</u>

The accompanying notes are an integral part of these financial statements.

BAY.ORG
Statement of Functional Expenses
For the Year Ended December 31, 2020

	Program	Support Services		Total	
		Management and General	Fundraising		Total Support Services
Salaries & benefits	\$ 3,211,929	\$ 678,497	\$ 107,892	\$ 786,389	\$ 3,998,318
Advertising and promotion	33,908	-	24,340	24,340	58,248
Office expenses	226,486	174,470	22,887	197,357	423,843
IT expenses	67,449	21,462	7,408	28,870	96,319
Occupancy and other administrative expenses	1,439,869	16,722	51,908	68,630	1,508,499
Travel	40,484	1,198	36,195	37,393	77,877
Interest expense	331,279	6,608	-	6,608	337,887
Depreciation	739,376	15,089	-	15,089	754,465
Insurance	155,708	3,242	3,178	6,420	162,128
Aquarium operating expenses	427,614	1,990	28,993	30,983	458,597
Taxes & licenses	3,613	14,860	-	14,860	18,473
Professional fees	-	17,995	-	17,995	17,995
	<u>\$ 6,677,715</u>	<u>\$ 952,133</u>	<u>\$ 282,801</u>	<u>\$ 1,234,934</u>	<u>\$ 7,912,649</u>

The accompanying notes are an integral part of these financial statements.

BAY.ORG
Statements of Cash Flows
For the Years Ended December 31, 2021 and 2020

	<u>2021</u>	<u>2020</u>
Cash flows from operating activities		
Change in net assets	\$ 90,529	\$ (5,015,355)
Adjustments to reconcile change in net assets to net cash used in operating activities		
Depreciation	734,871	754,465
Amortization of debt issuance costs	6,517	123,255
Loss on disposal of property and equipment	-	6,373
Gain on forgiveness of loan payable (Paycheck Protection Program)	(999,018)	-
Changes in operating assets and liabilities		
Accounts and grants receivable	(48,993)	176,275
Inventory	23,118	(10,047)
Prepays and other assets	(38,535)	74,345
Accounts payable	218,582	858,557
Accrued expenses	79,133	(207,959)
Deferred rent	(115,162)	115,162
Net cash used in operating activities	<u>(48,958)</u>	<u>(3,124,929)</u>
Cash flows from investing activities		
Purchases of property and equipment	-	(37,657)
Net cash provided by (used in) investing activities	<u>-</u>	<u>(37,657)</u>
Cash flows from financing activities		
Borrowings under loan payable (Paycheck Protection Program)	999,017	999,018
Borrowings under loan payable (Economic Injury Disaster Loan)	-	150,000
Borrowings under note payable	-	1,704,827
Net cash provided by financing activities	<u>999,017</u>	<u>2,853,845</u>
Net increase (decrease) in cash, cash equivalents and restricted cash	950,059	(308,741)
Cash, cash equivalents and restricted cash, beginning of year	<u>893,849</u>	<u>1,202,590</u>
Cash, cash equivalents and restricted cash, end of year	<u>\$ 1,843,908</u>	<u>\$ 893,849</u>
Cash, cash equivalents and restricted cash consisted of the following:		
Cash and cash equivalents	\$ 1,813,483	\$ 556,363
Cash restricted for loan payments	<u>30,425</u>	<u>337,486</u>
	<u>\$ 1,843,908</u>	<u>\$ 893,849</u>

Supplemental disclosure of cash flow information

Cash paid during the year for interest	\$ 312,559	\$ 208,171
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The accompanying notes are an integral part of these financial statements.

BAY.ORG
Notes to Financial Statements
December 31, 2021 and 2020

1. NATURE OF OPERATIONS

BAY.ORG (the "Organization") (dba Bay Ecotarium) is a nonprofit benefit corporation incorporated in 2008 under the laws of the State of California. During 2014 the assets and activities of the Bay Institute of San Francisco were merged into the Bay Institute Aquarium Foundation, which then changed its name to BAY.ORG to reflect the larger scope of its activities.

The mission of the Organization is to protect, restore, and inspire conservation of San Francisco Bay and its watershed, from the Sierra to the sea. The Organization achieves its mission and programs through its five divisions:

Aquarium of the Bay (the "Aquarium") is located at PIER 39 in San Francisco. Throughout its 50,000 square foot building, the Aquarium provides a window to the San Francisco Bay that reveals its distinctive ecosystems and seeks to educate and inspire preservation.

The Bay Institute is the leader in protecting and restoring the watershed which drains into San Francisco Bay. The Bay Institute develops and leads research, education, and advocacy programs to preserve the watershed which includes Suisun Bay, San Pablo Bay, San Francisco Bay, and the Sacramento and San Joaquin rivers and their tributaries.

Sea Lion Center is located on PIER 39 in San Francisco. It provides free interpretive and educational programs about the sea lions and their history at PIER 39 and in the San Francisco Bay.

Bay Model Alliance provides a comprehensive learning center by showcasing a working hydriodic model of the San Francisco Bay and Sacramento - San Joaquin river delta system.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting and financial statement presentation

The Organization uses the accrual basis of accounting in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and reports information regarding its financial position and activities according to two classes of net assets:

- *Net assets without donor restrictions* - represents the portion of net assets that is neither subject to time or donor-imposed restrictions. Net assets without donor restrictions may be designated for use by the Board of Directors.
- *Net assets with donor restrictions* - represents the portion of net assets subject to donor-imposed stipulations. These stipulations may expire with time or may be satisfied by the actions of the Organization according to the intention of the donor. When a restriction expires, net assets with donor restrictions are reclassified to net assets without donor restrictions and are reported in the statement of activities as net assets released from restriction.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Basis of accounting and financial statement presentation (continued)

Revenues are reported as increases in net assets without donor restrictions unless use of the related assets is limited by donor-imposed restrictions. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on assets and liabilities are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor restriction or by law. Expirations of restrictions on net assets (i.e., the donor-stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as transfers between the applicable classes of net assets. Contributions with donor-imposed restrictions whose restriction are satisfied in the same reporting period as received are reported as net assets without donor restrictions.

Change in accounting principle

In September 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-07, Presentation and Disclosures by Not-for-Profit Entities for Contributed Nonfinancial Assets. The standard requires nonprofits to expand their financial statement presentation and disclosure of contributed nonfinancial assets, including in-kind contributions. The standard includes disclosure of information on an entity's policies on contributed nonfinancial assets about monetization and utilization during the reporting period, information on donor-imposed restrictions, and valuation techniques. The Organization adopted ASU 2020-07 with a date of the initial application of January 1, 2021, using the full retrospective method.

The adoption of ASU 2020-07 did not have a significant impact on the Organization's financial position, result of operations, or cash flows.

Revenue recognition

The management of the Organization estimates that the cost of memberships equals the fair value of goods and services received by members. Accordingly, the Organization recognizes membership sales as revenue over the membership period, using the straight-line basis. Virtually all memberships sold cover a period of one year.

The Organization recognizes revenue from admissions and discounted admissions coupons upon the visit to the Organization. The Organization participates in various combined ticket packages with other local attractions. The Organization recognizes as revenue only its portion of these combined packages.

The Organization earns revenue from its various programs, including school and community partnerships, a variety of experience enrichment classes and camps. The Organization recognizes program revenue when the related activity occurs.

The Organization recognizes retail revenue upon sale of the merchandise. Estimated returns are not material.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Cash and cash equivalents

The Organization maintains cash and cash equivalents with major financial institutions. The Organization considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash restricted for long-term purposes consists of cash required to be held for future loan payments.

Accounts and grant receivables

Accounts and grant receivables, all due within one year, consist principally of amounts due for various entertainment partnerships. An allowance for doubtful accounts and grants receivable is provided based upon management's judgment including such factors as prior collection history, type of receivable and current aging of receivable. The allowance for doubtful accounts at December 31, 2021 amounted to \$77,158. There was no allowance for doubtful accounts at December 31, 2020.

Contributions and promises to give

Contributions received are reported as without donor restrictions or with donor restrictions, depending upon donor restrictions, if any.

Contributions, including unconditional promises to give, are recognized as revenues in the period the promise is received. Conditional promises to give, which contain donor-imposed conditions that represent a barrier that must be overcome as well as a right of release from obligation, shall be recognized when the condition or conditions on which they depend are substantially met; that is, when the conditional promise becomes unconditional. There are no outstanding promises to give at December 31, 2021 and 2020.

Contributed goods and services

Contributions of donated noncash assets are recorded at fair value in the period received. Contributions of donated services are recognized if the services received (a) create or enhance long-lived assets, or (b) require specialized skills provided by individuals possessing those skills, and would typically need to be purchased if not provided by donation.

The Organization receives a significant amount of donated services from unpaid volunteers who assist in fund-raising and special projects. No donated services from unpaid volunteers have been recognized in the statements of activities because the criteria for recognition have not been satisfied.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Property and equipment

Property and equipment are stated at cost, if purchased or at fair value at the date of donation. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets. Asset lives range from three years to forty years. Leasehold improvements are amortized over the life of the lease or the useful life of the asset, whichever is shorter. Expenditures for maintenance and repairs are charged to expense as incurred.

Inventory

Inventory consists of products such as educational books, toys, crafts, and branded merchandise. Inventory is valued at the lower of cost or net realizable value. The Organization utilizes the first in, first out method of inventory valuation.

Advertising costs

Advertising costs are charged to operations when incurred. The Organization incurred advertising costs of \$67,213 and \$58,248 for the years ended December 31, 2021 and 2020, respectively.

Functional expenses

The direct costs of providing the Organization's programs and other activities have been presented in the statements of functional expenses. During the year such costs are accumulated into separate groupings as either direct or indirect. Direct costs are recorded as program or supporting services based on the nature of the expense. Indirect or shared costs are allocated among program and support services by a method that measures the relative degree of benefit. Expenses, such as payroll and benefits, have been allocated among program services and supporting services based upon the employees' estimated time spent by function. Facility related costs such as depreciation and maintenance have been allocated based on estimated square footage used by various departments.

Income tax status

The Organization is a qualified charitable organization exempt from federal income and California franchise taxes under the provisions of Sections 501(c)(3) of the Internal Revenue Code and 23701(d) of the California Revenue and Taxation Code, respectively.

The Organization has evaluated its current tax positions and has concluded that as of December 31, 2021 and 2020, the Organization does not have any significant uncertain tax positions for which a reserve would be necessary.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Organization's management to make estimates and assumptions that affect certain reported amounts and disclosures. Uses of estimates include, but are not limited to, the allocation of functional expenses, the allowance for doubtful accounts, and depreciation. Actual results could differ from those estimates.

3. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consisted of the following:

	<u>2021</u>	<u>2020</u>
Buildings	\$ 7,999,173	\$ 7,999,173
Leasehold improvements	1,539,298	1,539,298
Exhibits	1,547,209	1,547,209
Computer equipment	431,870	431,870
Furniture and fixtures	475,017	475,017
Automobiles	220,360	220,360
Construction in progress	160,715	166,568
Other	<u>596,711</u>	<u>590,858</u>
	12,970,353	12,970,353
Accumulated depreciation and amortization	<u>(8,960,398)</u>	<u>(8,225,528)</u>
	<u>\$ 4,009,955</u>	<u>\$ 4,744,825</u>

Depreciation expense for the years ended December 31, 2021 and 2020 was \$734,871 and \$754,465, respectively.

4. PAYCHECK PROTECTION PROGRAM

On April 24, 2020, the Organization received loan proceeds of \$999,018 from a promissory note issued by City National Bank, under the Paycheck Protection Program ("PPP") which was established under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and is administered by the U.S. Small Business Administration ("SBA"). The term of the loan was two years and the annual interest rate was 1.00%. Under the terms of the CARES Act, PPP loan recipients could apply for and be granted forgiveness for all or a portion of the loans granted under PPP. Such forgiveness was determined based on the use of the loan proceeds for payroll costs, rent, and utility expenses and the maintenance of workforce and compensation levels within certain limitations. The Organization applied for and was granted full forgiveness of the first PPP loan in 2021. A gain on forgiveness of loan payable (Paycheck Protection Program) in the amount of \$999,018 is reflected in the statement of activities for the year ended December 31, 2021.

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Notes to Financial Statements
December 31, 2021 and 2020

4. PAYCHECK PROTECTION PROGRAM (continued)

On January 29, 2021, the Organization obtained a second draw PPP loan in the amount of \$999,017 from a promissory note issued by City National Bank under comparable terms as the first draw PPP loan. The Organization was granted full forgiveness of the second draw PPP loan on April 7, 2022.

5. LOAN PAYABLE (ECONOMIC INJURY DISASTER LOAN)

On November 16, 2020, the Organization executed the standard loan documents required for securing a Economic Injury Disaster Loan from the SBA under its assistance program in light of the impact of the COVID-19 pandemic on the Organization's business. The principal amount of the loan is up to \$150,000, with proceeds to be used for working capital purposes. As of December 31, 2020, the Organization had requested and received the full \$150,000 disbursement under the loan. Interest accrues at the rate of 2.75% per annum and will accrue only on funds actually advanced from the date of each advance. Installment payments, including principal and interest, are due monthly beginning November 16, 2021 (twelve months from the date of the advance) in the amount of \$641. Each payment will be applied first to interest accrued through the date of receipt of each payment, and then the balance, if any will be applied to principal. The balance of principal and interest is due and payable thirty years from the date of the advance. Interest expense for the years ended December 31, 2021 and 2020 was \$4,099 and \$516, respectively.

The future maturities of the loan payable (Economic Injury Disaster Loan) are as follows:

<u>Year ending December 31,</u>	
2022	\$ 584
2023	3,629
2024	3,730
2025	3,833
2026	3,940
Thereafter	<u>134,284</u>
	<u>\$ 150,000</u>

6. NOTES PAYABLE

In connection with the purchase of the assets of the Aquarium in 2014, the California Infrastructure and Economic Development Bank (the "Bank") issued variable rate revenue bonds in the aggregate amount of \$6,500,000. The proceeds from these bonds were loaned to the Organization.

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Notes to Financial Statements
December 31, 2021 and 2020

6. NOTES PAYABLE (continued)

Under the terms of the agreement with the Bank, the Organization was required to make annual payments to a custodial bank through 2025 which was to be used to retire the bonds, as well as maintain required segregated cash reserves and other specified levels of current and total net assets. During the period the bonds were outstanding the Organization also paid interest at a variable rate and other loan fees to the custodial bank which administered the loan on behalf of the Bank. Interest expense on this note payable amounted to \$235,374 during the year ended December 31, 2020.

In July 2020, the Organization paid off the aforementioned note payable agreement in full through a refinancing with Clearinghouse Community Development Financial Institution. The amount borrowed under the new note payable agreement amounted to \$5,500,000. Interest only payments at 5.50% per annum are payable monthly through March 2022, at which time payments of principal and interest are required to be made monthly through the maturity date of August 1, 2030. The note payable agreement is secured by a leasehold deed of trust on the Organization's leased property and related leasehold improvements.

The agreement requires the Organization to be in compliance with certain covenants. At December 31, 2021 and 2020, management believes the Organization to be in compliance with all covenants or has obtained a waiver to remedy any instances of noncompliance. Interest expense on this note payable amounted to \$306,701 and \$102,513 during the years ended December 31, 2021 and 2020, respectively. The agreement also required a certain portion of cash received at loan funding to be restricted for future loan payments. The cash restricted for future loan payments under this agreement amounted to \$30,425 and \$337,486 at December 31, 2021 and 2020, respectively.

The future maturities of the note payable are as follows:

Year ending December 31,

2023	\$ 61,607
2024	76,680
2025	80,214
2026	85,656
Thereafter	<u>5,195,843</u>
	5,500,000
Less: unamortized debt issuance costs	<u>(55,940)</u>
	<u><u>\$ 5,444,060</u></u>

Amortization of debt issuance costs for the years ended December 31, 2021 and 2020 were \$- and \$-, respectively.

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December 31, 2021 and 2020

7. NET ASSETS WITH DONOR RESTRICTIONS

Net assets with donor restrictions consisted of the following:

	<u>2021</u>	<u>2020</u>
Purpose restricted	<u>\$ 1,000</u>	<u>\$ -</u>
	<u>\$ 1,000</u>	<u>\$ -</u>

In 2021 and 2020, the Organization had releases of donor-restricted contributions amounting to \$58,500 and \$122,024, respectively due to purpose restrictions being met.

8. COMMITMENTS AND CONTINGENCIES

The Organization leases the site on which it operates the Aquarium from unrelated parties under operating leases. Under the principal lease agreement, rent is payable to the Port of San Francisco annually, calculated as 4% of adjusted gross revenues or \$150,000, whichever is greater.

A sublease agreement with PIER 39 provides for a base rental charge of \$250,000 per year plus 2% of gross earned revenue above \$11,850,000.

Concurrent with the sublease arrangement with PIER 39, the Organization also leases the Sea Lion Center at PIER 39. The lease does not provide for separate rent payments.

The current term of these leases expires in March 2034. The Organization has the option to renew the leases for various periods through December 2042, and the leases may be subject to further renewals.

In November 2019, the Organization entered into a lease agreement for office space that expired in November 2029. This lease required escalating monthly lease payments ranging from approximately \$55,000 to \$73,000 over the term of the lease agreement. Due to escalating payments under this lease, the Organization had recognized a deferred rent liability of \$115,162 at December 31, 2020.

In October 2021, the Organization amended the original lease and relocated to a smaller office space expiring in October 2029. The amended lease included a rent waiver for the first two months of the lease. Additionally, as part of the amended lease agreement, delinquent rent payments in the aggregate amount of \$542,719 would be forgiven, provided that the Organization does not default under the terms of the amended lease during the first eighteen full calendar months following the relocation date. The Organization recorded the amount as a component of the accounts payable in the accompanying statement of financial position as of December 31, 2021. A gain on rental payment forgiveness will be recognized in future years if the terms of that forgiveness is met.

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Notes to Financial Statements
December 31, 2021 and 2020

8. COMMITMENTS AND CONTINGENCIES (continued)

The amended lease requires escalating monthly lease payments ranging from approximately \$42,000 to \$52,000 over the term of the lease agreement. The Organization has recorded lease payments on a straight-line basis and accordingly has a deferred rent asset amounting to \$23,450 as of December 31, 2021 that is recorded as a component of prepaids and other assets on the statements of financial position.

The scheduled minimum lease payments under the lease terms are as follows:

<u>Year ending December 31,</u>	
2022	\$ 414,287
2023	524,758
2024	540,501
2025	556,716
2026	573,417
Thereafter	<u>1,718,519</u>
	<u>\$ 4,328,198</u>

Lease expense amounted to \$1,169,424 and \$803,056 for the years ended December 31, 2021 and 2020, respectively.

9. RETIREMENT PLANS

The Organization allows its employees to defer a portion of their salary into a defined contribution plan under section 403(b) of the Internal Revenue Code. The Organization does not make any contributions to this plan.

10. LIQUIDITY AND FUNDS AVAILABLE

The Organization's financial assets are available to meet its general expenditures, liabilities, and other obligations as they come due. Accounts and grants receivable will be collected within one year and are available for general expenditure. Monthly, management reviews the Organization's financial position and ensures that a reasonable cash position is being maintained.

The following is a quantitative disclosure which describes financial assets that are available within one year of December 31 to fund general expenditures and other obligations when they become due:

	<u>2021</u>	<u>2020</u>
Cash and cash equivalents	\$ 1,813,483	\$ 556,363
Accounts and grants receivable	<u>201,466</u>	<u>152,473</u>
	<u>\$ 2,014,949</u>	<u>\$ 708,836</u>

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10. LIQUIDITY AND FUNDS AVAILABLE (continued)
11. GOING CONCERN AND IMPLICATIONS OF COVID-19 ON THE ORGANIZATION'S FINANCIAL STATEMENTS

On March 11, 2020, the World Health Organization declared the novel strain of coronavirus ("COVID-19") a global pandemic and recommended containment and mitigation measures worldwide. The COVID-19 outbreak in the United States has caused business disruption through mandated and voluntary closings of businesses and shelter in place orders. While the business disruption is currently expected to be temporary, there is still considerable uncertainty. The Organization closed to the general public beginning March 12, 2020 to comply with mandated shelter in place orders and did not reopen until March 2021. While the Organization was able to reopen, it was required to do so at a reduced capacity to comply with state and local governmental authorities until July 2021. As a result of the shutdown in 2020, the Organization was forced to reduce or furlough a portion of its staff and program related revenues dropped significantly to approximately 75% of 2019 program related revenues. As noted in Notes 4 and 5, the Organization took advantage of the government relief programs available and has actively explored various liquidity options.

While the length and severity of the effects of COVID-19 are still uncertain, the Organization's business operations remained impacted throughout 2021. The Organization conducted a complete and objective evaluation of its operations based on all information and expertise available to it and took aggressive action to mitigate the financial effect of COVID-19. Among those actions were: significantly reducing staff, program services, general and administrative, and fundraising expenses, including reducing payroll costs, restructuring staff assignments, and furloughing employees. As a result, operating expenses for the year ended December 31, 2021, were significantly reduced as compared to historical operating expenses.

In an effort to weather this moment of uncertainty, management instituted a number of strategies to maximize cash flow. A new financing arrangement was entered into with a more favorable payment structure that does not require principal payments until March 2022. The Organization received two draws under the PPP that amounted to approximately \$2,000,000 of which has all since been forgiven. The Organization also received an Economic Injury Disaster Loan in the amount of \$150,000 that has favorable repayment terms. As a result of the reopening in 2021 and combined with a reduction in historical operating expenses as discussed above, the Organization recognized a positive change in net assets of approximately \$90,000 during 2021. Additional increases in revenues have occurred during 2022 and the Organization is projecting a surplus of approximately \$XXX,XXX (unaudited) in 2022.

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Notes to Financial Statements
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11. GOING CONCERN AND IMPLICATIONS OF COVID-19 ON THE ORGANIZATION'S FINANCIAL STATEMENTS (continued)

COVID-19 has and could continue to adversely affect the economies and financial markets of many countries, namely the U.S., resulting in an economic downturn that could affect the Organization in a variety of ways. The Organization cannot anticipate all of the ways in which COVID-19 could still adversely impact its operations. Although the Organization is continuing to monitor and assess the effects of the COVID-19 pandemic on its operations, the ultimate impact of the COVID-19 outbreak, the CARES Act and other governmental initiatives is highly uncertain and subject to change.

The financial statements were prepared on a going concern basis in accordance with U.S. GAAP. The going concern basis assumes the Organization will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of operations. Based on indicators outlined within U.S. GAAP, the COVID-19 pandemic's limitation on the Organization's ability to operate in the normal course of business created substantial doubt about its ability to continue as a going concern, in response to which the Organization developed multiple strategies to support its operation, as previously discussed. Although there can be no assurance all of these strategies will be successful, management believes the actions outlined above have successfully alleviated doubts about the Organization's ability to continue as a going concern for at least one year as of the date the financial statements were available to be issued.

12. SUBSEQUENT EVENTS

The Organization has evaluated subsequent events through December 15, 2022, the date the financial statements were available to be issued and has determined that there were no material subsequent events that required recognition or additional disclosure in these financial statements except as discussed below.

On April 7, 2022, the Organization was granted a full forgiveness on the second round PPP loan in the amount of \$999,017. (see Note 4).





The Bay Institute



Aquarium of the Bay



Sea Lion Center



Bay Model Alliance



Bay Academy



Studio Aqua

