SFEI | AQUATIC SCIENCE CENTER

SAN FRANCISCO ESTUARY INSTITUTE & THE AQUATIC SCIENCE CENTER

DRAFT STRATEGIC PLAN

MAY 2018

Contents

Attachments

Vision

We envision resilient ecosystems where people and wildlife thrive.

Mission

We deliver visionary science that empowers people to revitalize nature in our communities.

> ***Visionary science** – Independent, state-of-the-art science focused on the big picture over the long term and at a large scale.*
>
> ***Empowering people** – Through robust, objective science, collaboration, tools, and sharing of ideas.*
>
> ***Revitalizing nature** – Achieving clean water and healthy, resilient ecosystems by working with—rather than against—natural systems.*
>
> ***Our communities** – Cities to rural towns to pristine landscapes.*

Introduction

We in Northern California are fortunate to live in a region and state that leads the nation in prioritizing clean water, clean air, the restoration and protection of our natural resources and access to nature. We understand and value a vibrant, resilient environment is the basis of our strong economy. While many federal leaders are retreating from science-based assessments and solutions, Californians are committed to state-of-the-art science as a foundation for safeguarding public health and the environment.

Our citizens have repeatedly voted to allocate billions of taxpayer dollars to invest in our most pressing resource needs. California's NGO community tirelessly advocates for stronger environmental protection and programs. Our state and local agencies continue to create numerous grant, permit, and fee programs to improve our environmental quality of life. Our local leaders have organized to address the biggest threats of climate change, including drought, flooding, fires and sea level rise. Business leaders have also implemented corporate responsibility strategies to make their communities better places to live and work.

In short, Californians have a proven track-record of investing their money and time in the common good our natural resources provide. But we also need to know that our investment is well spent, and that the most pressing natural resource issues for our quality of life have been prioritized and effectively addressed. In the face of dramatic climate change, this challenge is even more profound.

For over a quarter century, the **San Francisco Estuary Institute-Aquatic Science Center[1] (SFEI/ASC)** has served as a trusted science advisor to local and state agencies charged with implementing natural resource mandates.

Our long history of providing objective, independent science, technical assistance, and scientific support to local decision makers has earned SFEI a platinum reputation as an unbiased science advisor and convener throughout the Bay Area and the state. Our vision, reputation, tools and expertise are looked to nationally and internationally as other regions grapple with similar natural resource challenges and decisions.

SFEI's **Clean Water** program has helped guide the improvement of San Francisco Bay water quality, even as the population of the region has increased by 1.5 million over the past 25 years. Approaches and tools developed for the Bay are now being applied in other regions, including the Sacramento-San Joaquin River Delta and Russian River watersheds.

The **Resilient Landscapes** program has provided broad, holistic visions for designing ecologically resilient landscapes and drilled down into solid assessments and recommendations to implement long-range visions in many Bay Area locales.

Our **Environmental Informatics** program has provided state-of-the-art, science-based data management and mapping tools to monitor, assess and visualize complex environmental issues. These tools, and the peerless datasets they animate, support the assets and extend the influence of SFEI's Clean Water and Resilient Landscape programs to create communities where people and wildlife thrive.

Today, a changing climate, population growth, and aging urban infrastructure create a trifecta of challenges for all Californians. It also provides a unique opportunity for the SFEI Board, staff, and partners to apply our nearly thirty years of experience and strengths to the challenges of our time. We have the potential to provide an international model of how an urban region of eight million people, at the edge of the sea, overcomes these challenges and fosters resilient ecosystems where people and wildlife thrive.

We can leverage our status as trusted advisors and conveners to inform, engage and empower the next generation of environmental leaders. With new funding opportunities, and growing political will, we can provide the essential science to integrate nature-based solutions into the engineering, governance, and fiscal policies needed to renew our built and natural landscapes.

A 2011 San Francisco Estuary Institute Strategic Plan created a blueprint to align the vision and activities of the SFEI and Aquatic Science Center (ASC) Board and staff which was successfully achieved. This updated Strategic Plan builds of those advancements which

[1] The Institute is a union of the San Francisco Estuary Institute (SFEI), a non-profit source of independent science founded through the U.S. Clean Water Act, and the Aquatic Science Center (ASC), a Joint Powers Authority linked directly to the California Water Quality Improvement Act through the State Water Resources Control Board. This union provides us with unique opportunities to work directly and closely with regulatory and management agencies at all levels of government to provide independent, objective, unifying scientific and technological support for policies, programs, and projects that aim to protect the waters of the state and U.S., and the life they should support.

allows SFEI to tackle emerging issues. These times call for more ambitious strategies for SFEI. These requires a parallel augmentation of our traditional funding model and the resources required to attain our goals.

Over the next five years:

- SFEI will build on the success of our three program areas (Clean Water, Resilient Landscapes and Environmental Informatics), to implement a coordinated partnership with Northern California's leading decision makers to address the most significant environmental challenges of our region.

- The **Clean Water** Program will continue to lead the Bay Area, Delta, and Russian River water quality monitoring programs. We will assess pollutants of high concern, including mercury, selenium, and PCBs. We will lead intensive study of nutrients in San Francisco Bay with major implications for infrastructure investment. We will also look ahead at newly identified contaminants or toxicity concerns, including microplastics and pharmaceuticals. This will foster development of cutting-edge data to inform and evaluate proactive policy measures and actions to reduce harm and increase ecosystem resilience.

- The **Resilient Landscapes** Program will apply cutting-edge science to provide better nature for cities, and better cities for nature. We'll support bold efforts by local leaders to work with nature to restore wetlands, reduce flooding, increase urban forestry, and green our urban communities to improve the quality of life. Our science will improve water quality, reduce water demand, and help shoreline communities adapt to sea-level rise. Our studies and technical advice will empower communities to secure high-quality green space to support human health and well-being and urban habitat to provide more equitable access to nature.

  We will launch a Center for Resilient Landscapes to develop and share the lessons from successful projects. The Center will push the envelope and "think big" in ways that local change agents need, but often cannot support alone.

- The **Environmental Informatics** Program will advance both its practices to promote innovative technologies as applied to environmental science challenges and its measures to protect data integrity supporting credible natural resource decisions. The Program will significantly increase its stored and distributed data records while engaging local and remote users in cutting-edge mapping and analytical tools to integrate scientific data and information into assessment, planning, and management models. We will investigate the applications of emerging technologies--such as unmanned aerial vehicles and big data analytics -- to address some of the most pressing natural resource issues.

- Enhanced **Communications** strategies will be developed and implemented to inform, inspire, and empower community leaders, stakeholders and donors to envision new solutions and to diversify and democratize environmental stewardship.

- The implementation of a **Development Program** will create a culture of philanthropy at SFEI. This will result in a more diverse funding portfolio and a better business model to advance opportunities to solve large-scale environmental challenges and provide financial stability to support our ongoing mission.

The following pages further detail:

1) **Who We Are** --The history of the San Francisco Estuary Institute and our key accomplishments,
2) **A Call to Action** --The challenges and opportunities in the critical decade before us and how we will move forward, and
3) **Goals, Strategies and Objectives** – The specific vision and actions we will seize the moment with a strategic, detailed five-year blueprint for action.
4) **Performance Metrics** – The performance metrics to be assessed on a regular basis.

This updated strategic plan will be useful to the SFEI/ASC board and staff, as well as our project and funding partners, and all in the community who love and care for the place we call home. We will facilitate a paradigm shift to a model where planners, engineers, community and policy leaders work with—rather than against—natural systems, to solve critical climate adaptation challenges. Our 60 scientific and technical professionals will support leaders to provide greater access to nature for all citizens, by constructing the necessary conditions for ongoing resilience of those natural systems.

Who We Are

The San Francisco Estuary Institute is a center of independent environmental science. We were established in 1993 to provide public, resource management agencies and policy makers at all levels of government, with sound, objective scientific knowledge for decision-making and communications around water quality and San Francisco Estuary management. The founders of SFEI intended it to grow into a source of sound science for a broad array of environmental issues in Northern California.

We have achieved that vision. Today the Institute has become a center of excellence that engages citizens and government in innovative science and technology to define and resolve complex local and regional issues between nature and people. We provide technical assistance and scientific support related to water management, urban sustainability, and ecological resilience to those agencies as well as to NGOs, communities, and business leaders. Thus, the investment in SFEI has produced long lasting synergies and cost effective partnerships among these leaders to produce long range ecological solutions.

Select Accomplishments

Leading Collaborative Science to Improve Bay Water Quality

- In 1993 dozens of industries and water agencies began funding the Regional Monitoring Program (RMP) for Water Quality in San Francisco Bay, which was and is still led by SFEI. This Program has made the Bay one of the best-monitored estuaries in the world. Through the RMP, SFEI scientists have set nationally recognized standards for using data to detect unexpected changes requiring swift adaptive

strategies, and more broadly, to identify top priorities for public investment in water quality management. By having our finger on the pulse of the Bay, we enable key decision makers to quickly act, and save money by avoiding more costly, long-term policies and actions.

- RMP's collaborative regional monitoring has reduced the collective cost of monitoring to address an ever-changing array of high-priority information needs. Participants, reaping the benefits of decision-making based on solid SFEI science and long-term planning, remain committed to funding this valuable Program.
- Over the past twenty-five years, the population of the Bay Area has increased by 25% (1.5 million people), placing higher demands on the environment. Thanks to the vigilance of water quality managers and careful monitoring provided by SFEI scientists with the RMP, Bay water quality has continued to improve despite this population growth.
- SFEI quickly expanded the focus of monitoring from toxic substances in water to bioaccumulation of contaminants such as mercury and PCBs in fish. SFEI completed a major study in 2000 with the California Department of Public Health to determine consumption rates of highly contaminated fish species for different ethnic groups and inform communication and educational outreach to these groups.
- Over the years, SFEI has launched spinoffs using the successful RMP model, including a Nutrient Management Strategy regional science program, the Delta Regional Monitoring Program, and a new Russian River Regional Monitoring Program.
- In one notable success story, the RMP was able to document the overwhelmingly successful impact of 2004 state legislation banning a type of toxic flame retardant; by 2017, this chemical threat to water quality was reclassified as a "low concern" in the Bay.

Working with Nature and Partners to Foster Ecological Resilience

- SFEI worked with Google's Ecology Program and others in Silicon Valley over several years to create a shared vision top simultaneously enhance a community's unique sense of place while adapting to a changing climate.
- Our research and strategy to reintroduce components of oak woodlands to the Silicon Valley is seen as an essential tool to address the multiple challenges of drought, urban forestry and urban heat islands.
- We are also leading a project, utilizing our tools and expertise support eight mult-benefit urban greening and tidal wetland restoration projects across Silicon Valley. SFEI and sixteen government, private and NGO partners successfully obtained 2016 federal EPA funding to launch this multi-year effort.
- After the devastating 2017 Northern California wildfires, we quickly responded by partnering with the North Coast Regional Water Board to re-design an SFEI web-

based mapping and data management tool, to enable the Russian River community of environmental agencies and NGOs to target, coordinate, track, and evaluate response and recovery efforts, especially regarding drinking water quality and stormwater runoff.

- In Napa, we created a watershed profile for local officials to address agricultural management changes related to improving the health of the Napa River ecosystem.
- In the Sacramento-San Joaquin Delta, we are supporting a collaboration between state agency and major water users with science-based options and a vision to restore up to 30,000 acres of Delta wetlands habitat. These options are the platform for major negotiations to resolve decades of conflict over policies and funding to restore critical Delta habitat.
- SFEI staff played significant leadership roles in CA Coastal Conservancy's Baylands Ecosystem Habitat Goals 2015 Science Update, ***"The Baylands and Climate Change: What We Can Do."*** This collaborative report updated a blueprint to accelerate the restoration of tidal marsh in San Francisco Bay toward a goal of 100,000 acres
- We have also served as science advisors to the 2017-18 Bay Area ***Resilient by Design Challenge***, where nine community-based teams of local residents, public officials, and international experts collaborated to create innovative, community-based solutions to the shoreline threats posed by climate change and rising seas.

Unlocking, Disseminating, and Applying Data: A key to communal success

- A core tenet of SFEI's commitment to transparent, open sources data and science-based tools is our Environmental Informatics Program. We maintain that community access to shared environmental data leads to novel and innovative solutions and cost effective strategies to solve complex problems.
- The SFEI Environmental Informatics Program is the state designated repository of environmental data for the San Francisco Bay-Delta region. We've utilized the latest technology and design concepts to deliver accessible scientific data management and mapping tools to a wide range of policy leaders, agencies and stakeholders in dynamic, expressive, and cogent ways.
- The Institute collects world-class environmental data to support and inform natural resource management, which it makes freely available through transparent, open-source systems.
- Over 2.1 million environmental data records are maintained in our database, which is in turn fed into state and federal systems to support a wide range of statewide, government-mandated assessment and monitoring programs. Our science-based tools visualize data in innovative ways to transform them into useable knowledge to track habitat restoration projects, to model solutions and to design policies that address complex water-related issues. SFEI tools are regularly solicited and relied

upon to achieve the goals of voter-approved funding bond measures.[2] For example, our ***GreenPlan-It*** tool helps planners to locate and determine the most cost-effective, watershed-scale Green Infrastructure implementation scenarios to inform watershed master plans funded under Proposition 84.

- Likewise, our California Aquatic Resource Inventory is a wetland and riparian Geographic Information System (GIS), base map used to identify and prioritize Proposition 50 opportunities for ecological restoration and enhancement of wetlands and watersheds. Our EcoAtlas tool provides robust, timely, and accurate reporting on multiple, statewide aquatic habitat restoration projects under Proposition 1.

A Call to Action

The Pivotal Decade

This is a critical moment for the natural and built systems that California's communities will rely upon to maintain our quality of life for the rest of this century. Changing weather patterns, rising sea levels, pollution, and population growth are major threats to our water quality, supply, and security; to fish, wildlife, and biodiversity; and to human habitation, transportation, and economic prosperity.

Consider this suite of challenges and opportunities for the San Francisco Bay Area and Delta:

Sea Level Rise – Over the next decade, sea level rise will accelerate culminating in an increase of over 5 feet by 2100. That requires an immediate and almost "revolutionary" strategy for wetlands restoration and sediment management to buffer our shoreline communities against rising seas.

Extreme Weather - In the past decade, California has experienced the worst drought, floods, and wildfires in recorded history. What were formerly extremes will become the norm.

Population and Water Supply - By 2040, in just over two decades, the San Francisco Bay Area must accommodate an estimated 25% population growth and a likely 20-30% loss of Sierra snowpack that provides most of our water supply.

Aging Infrastructure – The Bay Area's entire urban infrastructure is reaching the end of its 75-100 year life cycle. Extreme weather and sea level rise will put our $50 billion in shoreline infrastructure at risk from flood events. We will need to dramatically renew and reinvent our transportation and water systems.

[2] Since 2000, these include: The Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Act of 2002 (Proposition 40; the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50); the Safe Drinking Water, Water Quality, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84); and the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1.) In June 2018 voters will have the opportunity to support the Clean, Safe Water for Families, Farms, and Future Generations Act of 2018 (Proposition 60) and others are expected on the November 2018 ballot.

Water Pollution – The Bay now faces a greater risk of toxic algal blooms and hypoxia (dead zones). In addition to the continuing vigilance regarding pollutants of high concern in the Bay such as mercury and PCBs, regional water agencies are now tracking new contaminants of emerging concern, including microplastic and pharmaceuticals.

Critical, science-based decisions must be made to determine the most cost-effective, multibillion-dollar investments needed to retool our aging wastewater and stormwater management systems to address multiple issues of toxic pollutants, nutrients, declining water supply, and to implement future, multi-benefit water policy.

Regional Planning and Permitting Strategies – Given the pace and scope of climate change, Northern California must devise new, regional governance, finance and permitting solutions to advance comprehensive approaches to watershed management, fire prevention and to accelerate green infrastructure and urban greening.

Environmental Justice - All of these efforts must also include and address the social and environmental justice needs of disadvantaged communities who will be hit the hardest by climate change impacts.

In California, our leaders have a unique, opportunity to address climate change and to transform our aging infrastructure for the 21st century. Over the next 10-20 years, vast investments by the region and state will be required to adapt to climate change by replacing shoreline protections, transportation and water infrastructure, and supporting wetlands and other natural systems. Policy makers will require support in four key areas: science, engineering, governance, and economics. To help California's leader to address these mounting challenges, the San Francisco Estuary Institute is perfectly positioned to provide the essential science and scientific tools to help ensure that these decisions work with nature and lead to optimal resilience.

Hope and Resilience

Resilience is inherent in natural landscapes. For most of the past 10,000 years in the San Francisco Bay and Delta region, geology, biology, and native culture all came together to shape environmental settings miraculously favorable for life and abundance.

Over the past two centuries, however, intense modifications of the landscape by people have disrupted the natural resilience of the Bay and its ecosystems. Only in the past fifty years have visionary public/private partnerships funded pilot projects to restore wetlands and initiate nature-based resilience and adaptation strategies, with promising early results.

Fortunately, the present moment offers a once-in-a-century opportunity for SFEI-ASC and its partners to redesign—with a far broader brush—the Bay-Delta landscapes for resilience, working with, rather than against, natural systems. The necessary conditions for this change, funding and political will, are present to allow us to be successful.

Funding for Resilience – Remaking our infrastructure is extremely costly and relies on public funding. Fortunately, the Bay Area is responsive to the challenge. The overwhelming

passage of a 2016 nine-county regional ballot measure[3] for a parcel tax will raise approximately $25 million annually--$500 million over twenty years--to fund shoreline projects that will protect and restore San Francisco Bay. There is also state funding available from various bond measures as noted previously.

Agency and Government Engagement - Numerous collaborative agency planning efforts around adaptation and resilience are expressions of a strong political will in the Bay Area. SFEI is a trusted science leader in many of these efforts to empower local communities to plan from the perspective of "nature's jurisdictions" instead of the current lines on a map.

Community Engagement - Various targeted initiatives including the "Resilient by Design Bay Area Challenge," for which SFEI serves as science advisor, and our collaborative efforts with the tech community to create a resilient Silicon Valley are evidence of the strong support of both local communities and business.

Moving Forward

The history of the San Francisco Estuary Institute parallels the evolution of thinking about adaptation to climate change and ecological resilience. Both require a more holistic approach, with the recognition that there is no single solution, and everything is interconnected by law—both natural and human. Over the years, therefore, our work has expanded beyond the San Francisco estuary to the Delta, and from more natural settings to urban areas. Recognizing, too, that no single organization can effect change at scale, we work in concert with government, communities, other nonprofits, and business. We also operate in a singular niche where we aim to enhance and extend, but never duplicate, the efforts of others.

The sixty brilliant scientists and technologists of SFEI-ASC are guided by a set of values that are grounded in scientific rigor, a spirit of innovation, and the pursuit of excellence. We continue to strive to cultivate a healthy and thriving work environment that empowers our team members. [See **Appendix A**—Our Values]

Due to the nature of the Institute's founding and contract-based funding model, the visionary capacity of the SFEI staff and systems is often confined to short-term, siloed projects. This model has resulted in the following challenges: we are often asked for short or mid-term thinking, when long-term thinking is needed; project work does not let us more broadly address root drivers nor broadly communicate results; and truly interdisciplinary work is challenging and cannot be rushed.

Achieving ecological resilience requires long-range and large-scale thinking, which the current funding model does not fully support. Consequently, after careful consideration, the Institute is expanding its business model beyond short-term, geographically-limited projects inherent to our original mission to a longer-term, regionally-based vision necessary for

[3] The 2016 San Francisco Bay Restoration Authority "Clean and Healthy Bay" Parcel Tax (Measure AA)

today's challenges. We are investing in building a Development Program to supplement our contract-based core services and to realize our broader goals.

(insert “Climate AdaptationPlanning” graphic here)

The organization’s evolution is reflected in the need to also expand the focus of the Board’s role and responsibilities. It has historically exercised its fiduciary duties by monitoring finances, advising on policy, strategy, and planning, and ensuring that the organization is well managed by hiring, supporting, and evaluating the executive officer. With the broadening of our ambition, the Board must ensure the Institute has adequate resources to advance its mission by working with the Development program on fundraising.

The Board's role in fundraising is to provide leadership, financial support, and connection to donors and potential donors. Every board member must be a donor as a well as a volunteer, giving financially in the way that they can afford, and participating in fundraising. Board members should look for opportunities to introduce others to the organization and to educate them about the importance of the mission. As advocates, board members should always be ready to tell the story of SFEI and articulate their passion for the organization and the main points of the case for support.

Goals, Strategies, and Objectives 2018-23

Seizing the Moment

The lessons and knowledge we gain in the laboratory of the San Francisco Bay and Delta region over the next, pivotal decade can provide a model for other regions in California, the nation, and even globally.

Over the next five years, SFEI will:

Continue to lead the regional collaboration and provide the essential science that managers need to protect and improve water quality in diverse and complex ecosystems. We will continue status and trends monitoring of priority contaminants such as mercury and PCBs in water, bird eggs, sediment, sport fish, and bivalves and extend this monitoring to other regions where it is needed. We will measure inputs of priority contaminants to the Bay and continue development of tools to track the effectiveness of efforts to remove them from wastewater and urban stormwater, including consideration of wastewater treatment plant upgrades and construction of green infrastructure. We will develop approaches to assess the current and projected impacts of nutrients in the Bay and Delta. We will expand this successful program to near-shore settings where contamination may be higher.

We will seek to answer critical questions in regard to contaminants of emerging concern, including new pesticides, pharmaceuticals, industrial chemicals, and the new issue of microplastic. We will determine the extent of microplastic pollution in the Bay, how it gets there, the risks associated with it, and whether concentrations have increased or decreased. We are also in a position to evaluate the impact of newly implemented policies including the state ban on plastic bags, regional bans on foam packaging materials, the federal ban on microbeads, new trash regulations, and the potential for public outreach and education.

The outcomes we seek are that:

- The water quality data needs of policy-makers, resource managers, and the public are anticipated and met.
- The public, regulators, and water agencies use our science to allocate funds wisely and create more effective policies to ensure the health of our waters.

Move from piecemeal ecological planning to create resilient landscapes by applying advanced tools to assess and track landscape change in a creative setting that links scientists, resource managers, and the public. Our geographic areas include the San Francisco Bay shoreline, Bay Area watersheds, Sacramento-San Joaquin Delta, and other California regions with major population centers including Southern California, the Central Valley, and possibly, nationally.

After years of demonstrated success in a variety of projects undertaken by the Resilient Landscapes program, there has been rising demand for our approach and growing requests for its application to landscape-scale planning. To meet this demand, we will launch a Center for Resilient Landscapes (CRL). Drawing on SFEI's unparalleled applied science expertise, extensive network of regional partnerships, and pioneering research in historical ecology and landscape resilience, CRL will advance science that is independent from specific interests and funders. It will push the envelope and "think big" in ways that local change agents need, but often cannot support alone. We expect our approach and framework to be applicable and scalable both nationally and internationally as demand for landscape level planning and design continues to grow. Over the next five years the CRL will execute and disseminate knowledge and best practices from our projects that will eventually culminate in the following outcomes:

- Cities and their surrounding landscapes are better equipped for sea-level rise increased temperatures, drought, flooding, and other climate-related threats.
- Cities are integrated with a mosaic of habitats, land use types, and ecosystems that span the whole landscape, providing connectivity for wildlife and contributing to regional ecological function.
- Green space in cities contributes to ecosystem services that improve human health and quality of life for all residents.
- Cities and their surrounding landscapes support native biodiversity and regionally appropriate ecosystems.

Specific actions – **Goals, Strategies and Objectives** – we will take over the next **five years** toward realization of our vision of resilient ecosystems where people and wildlife thrive are detailed below. Indicators of progress, over the next **one to two years**, follow.

Goal 1: Advance Visionary Science

Produce visionary science that informs management decisions through collaborative science, monitoring, and partnerships.

Strategy 1.1: Produce reliable and influential science

Objective 1.1.1 Conduct collaborative science that anticipates and responds to information needs for environmental management.

Objective 1.1.2 Develop new and innovative approaches for comprehensive stewardship of ecosystems at the landscape level and in a watershed context.

Objective 1.1.3 Participate in multidisciplinary science that results in multi-benefit solutions.

Objective 1.1.4 Assure rigorous peer review of science products.

Strategy 1.2: Maintain and expand environmental monitoring and assessment programs

Objective 1.2.1 Provide relevant and reliable monitoring data and assessments to the public and decision-makers.

Strategy 1.3: Convene teams of leading scientists and technologists

Objective 1.3.1 Recruit and retain leading scientists and technologists.

Objective 1.3.2 Build and maintain partnerships with other scientists and technologists.

Goal 2: Apply Innovative Technology

Empower people in communities to visualize and solve environmental challenges with data and information technology tools.

Strategies to implement this goal:

Strategy 2.1: Promote data utility, integrity, and centrality in the course of decision making.

Objective 2.1.1 Provide a reliable environmental data center and information management systems with associated client services.

Objective 2.1.2 Integrate scientific data and information into the process of problem formulation, policy development, and evaluation of management options.

Objective 2.1.3 Enhance SFEI-ASC's reputation as an environmental technology partner.

Objective 2.1.4 Expand user base for SFEI-ASC tools via outreach and technical support to extend services to other regions of the state and beyond.

Strategy 2.2: Integrate with other regional, state, federal, and local data networks

Objective 2.2.1 Expand data access through the integration of additional monitoring information, assembling data from disparate and novel sources.

Strategy 2.3: Invest in promising new technologies

Objective 2.3.1 Advance applied technology within the environmental sector through effective research and development.

Goal 3: Communicate Science to Inform, Inspire, and Empower

Deliver the necessary science used by people to revitalize nature in their communities through collaborative forums and mass communication channels.

Strategies to implement this goal:

Strategy 3.1: Develop and implement a communications plan using multiple tools to increase awareness and build trust of SFEI as an objective science partner among stakeholders, decision-makers, and the media

Objective 3.1.1 Ensure staff communications committee serves as messenger, champion, and facilitator of news delivery to stakeholders and donors.

Objective 3.1.2 Create activities and functions to increase public awareness and community engagement.

Objective 3.1.3 Utilize the full range of social and news media and web platforms to inform, inspire and empower the public and community leaders.

Strategy 3.2: Facilitate constructive exchanges between scientists, managers, policy makers, and stakeholders

Objective 3.2.1 Provide inter-agency coordination services among a broad range of stakeholders to identify sources of problems, align common goals and suggest solutions.

Objective 3.2.2 Leverage proven technology to promote interactive engagement and tell stories that animate scientific materials developed by SFEI's scientists.

Strategy 3.3: Convene high-profile regional forums and workshops to increase the access, understanding and use of new science as applied to major environmental policy challenges

Objective 3.3.1 Present regional workshops, forums, and related platforms to increase the collaboration of scientific experts with environmental policy makers and decision makers.

Objective 3.3.2 Focus on complex, long range challenges to environmental health of aquatic ecosystems and urban and rural landscapes, encouraging the integration of goals, data needs, and adaptive management.

Goal 4: Augment Funding Resources

Develop a diverse portfolio of funding that leverages our existing partnerships and expands our philanthropic opportunities to help solve large-scale environmental challenges and provide financial stability to SFEI's ongoing mission.

Strategies to implement this goal:

Strategy 4.1: Establish a development program that engages foundations, corporations, individual donors and agencies to attract increased philanthropic support.

Objective 4.1.1 Create a comprehensive fundraising strategy anchored in the strategic plan, developing principal, major, and annual gift prospects from an array of sources.

Objective 4.1.2 Grow the development staff appropriately and train key SFEI staff to integrate infrastructure and foster a highly collaborative philanthropic enterprise.

Strategy 4.2: Continue to pursue contracts through long-established sources and collaborate with the development office to explore opportunities for expanded project support.

Objective 4.2.1 Implement processes to review RFPs in advance of submission, and identify budget needs that can be supplemented through development proposals.

Objective 4.2.2 Present the SFEI brand consistently to existing and new funders.

Strategy 4.3: Focus development efforts toward unrestricted support yet remain open to securing project-specific commitments, both expendable and endowed.

Objective 4.3.1 Use the Development Priorities Process to identify and prioritize gift opportunities in support of the strategic plan.

Objective 4.3.2 Seek gifts that name and endow positions, programs or projects – consistent with the approved gift opportunities – to provide perpetual operating support.

Strategy 4.4: Build a culture of philanthropy that will produce loyalty, commitment and engagement among internal and external stakeholders.

Objective 4.4.1 Engage the Development Committee of the board of directors as integral partners in securing additional resources.

Objective 4.4.2 Facilitate meaningful relationships with influential individuals and organizations that align with and amplify SFEI's vision.

Objective 4.4.3 Administer a constituent relationship management (CRM) system to support fundraising and moves management.

Objective 4.4.4 Create a thoughtful stewardship process (highly customized for major and principal level donors) to increase donor engagement, continued giving, and long-term donor relationships.

Attachment A

Our Values

The People of the Estuary Institute and the Aquatic Science Center are guided by a set of values that are grounded in scientific rigor, a spirit of innovation, and the pursuit of excellence. We support environmental stewardship for the achievement of a sustainable future. We strive to create a healthy and thriving work environment that empowers our team members and collaborators alike.

Work Content

Environmental Stewardship

We seek to ensure our research is relevant, accessible and applied by our stakeholders so that our ecosystems and communities thrive.

Excellence

We dedicate ourselves to deliver the highest quality information that is objective and adheres to scientific standards, so that we remain trusted, leading experts in our field.

Innovation

We pride ourselves in the exploration of original, effective and engaging ways of designing scientific studies, synthesizing data, and presenting our findings so as to increase the value of our work to the stakeholders we serve.

Work Process

Staff Well-being

We believe in maintaining reasonable workloads and an enjoyable and flexible work environment that incorporates thoughtful planning and efficiencies, so we can maintain personal well-being, job satisfaction, and achieve professional results.

Collaboration

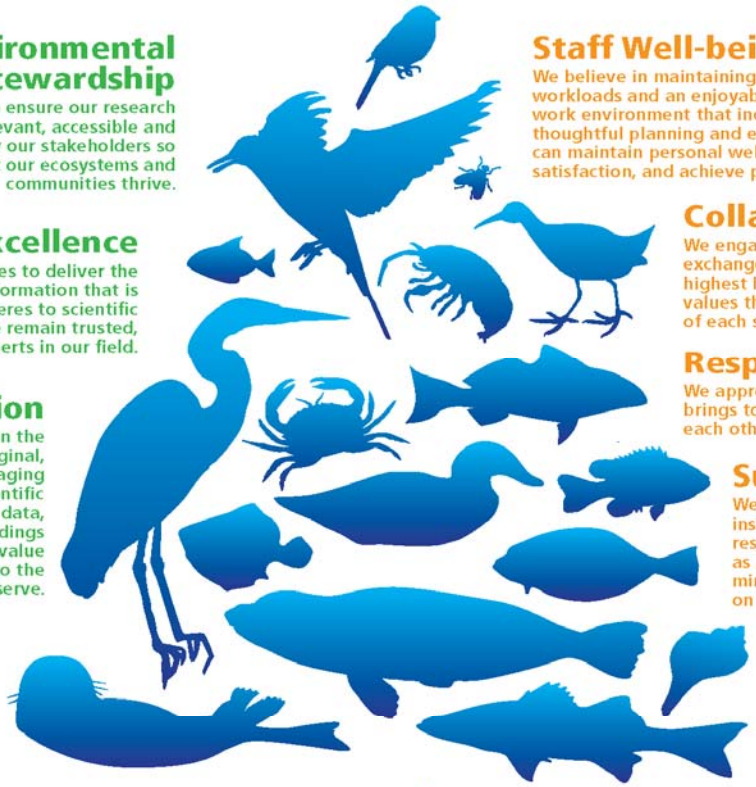
We engage in an open exchange of ideas and the highest level of teamwork that values the unique contribution of each staff person.

Respect

We appreciate what each person brings to an interaction and treat each other with consideration.

Sustainability

We strive to promote institutional ecological responsibility and serve as a role model for minimizing negative impact on the environment.



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SAN FRANCISCO ESTUARY INSTITUTE & THE AQUATIC SCIENCE CENTER

ALTERNATIVE PERFORMANCE MEASURES

THE PROPOSED INDICATORS WILL BE REVIEWED EVERY 12 MONTHS TO ENSURE WE ARE MOVING FORWARD SUCCESSFULLY AND EFFECTIVELY.

Goals	Indicators
Goal 1: Advance Visionary Science *Produce visionary science that informs management decisions through collaborative science, monitoring, and partnerships.*	Annual update to a chronology of impactful results of SFEI's work. Impactful results are cases where our science has been used by managers or decision makers to support environmental planning, regulation, stewardship or policy regulation or policy.
Goal 2: Apply Innovative Technology *Empower people in communities to visualize and solve environmental challenges with data and information technology tools.*	Yearly survey of our stakeholders to asses SFEI's performance relative to Goals 1, 2, and 3. The survey should be mutually beneficial to SFEI and the people who we serve. It is a way for stakeholders to help us to help them.
Goal 3: Communicate Science to Inform, Inspire, and Empower *Deliver the necessary science used by people to revitalize nature in their communities through collaborative forums and mass communication channels.*	Number of institutions and programs that utilize and publicly credit the SFEI brand in their efforts.
Goal 4: Augment Funding Resources *Develop a diverse portfolio of funding that leverages our existing partnerships and expands our philanthropic opportunities to help solve large-scale environmental challenges and provide financial stability to SFEI's ongoing mission.*	1. An annual increase in number of private philanthropic funders and amount of funding to support SFEI projects and programs. 2. Total annual dollars raised from government and private philanthropy to support the Institute's Core functions.